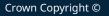


# Government Data Strategy and Roadmap 2021







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TE KĀWANATANGA O AOTEAROA GOVERNMENT DATA STRATEGY AND ROADMAP · AUGUST 2021

#### **Foreword**



Welcome to the 2021 Government Data Strategy and Roadmap Refresh

Data has the power to improve our lives – by making Aotearoa New Zealand a better place to live, work, visit and do business. From the Beehive to the whare, good data can help all New Zealanders make informed choices about the things that matter most in our homes, workplaces, and communities.

Today government agencies hold vast amounts of data about and on behalf of Aotearoa New Zealand. Information that has the potential to drive innovation, and contribute to social, environmental, and economic progress.

But we can only fully realise that value if we take a joinedup, strategic approach to the way data is collected, shared, and used. And we must never forget that everything we do with that data is underpinned by the trust and confidence of the public.

New Zealanders are right to demand their data is stored safely and used ethically. And they are right to expect government will take an efficient, value-minded approach to investment in new and emerging uses of data.

If we are to meet those expectations, we must continue to build and maintain an innovative, adaptable, and robust government data system that will be up to the challenge. And that is what this refreshed strategy and roadmap is all about

In the wake of COVID-19, the world feels like rather a different place than it did in 2018, when the first data strategy was published. Recent events have only served to underline the necessity for an adaptive, responsive data system.

What you will find in this document is an ambitious, enthusiastic, work programme for delivery over the next three years. There are big challenges ahead. Challenges we can only meet with collective action.

Progress, more than anything else, will require collaboration. Collaboration across agencies, collaboration with Māori and iwi partners, and with a range of experts, specialists, and interested groups.

For many Māori, data is a Taonga. In honouring Te Tiriti, we must work in genuine partnership with iwi and Māori, taking a consensus view on our direction of travel and pace of change.

Success is a data system that is both inclusive and integrated. A system where anyone who wants to base their decisions on credible information can do so with ease. A system that generates the deepest insights and the best services, at the least effort to the people and organisations behind the data.

As the COVID-19 pandemic has shown only too well, good decisions rest on good data. Looking to the future, it is our responsibility to ensure New Zealand is equipped to meet whatever challenges lie ahead on a bedrock of data-driven insights and analysis.

As the functional lead of the data system, my role is to encourage and enable a spirit of collective advancement. I believe our data system can be among the most effective and responsive in the world. And I believe this strategy and roadmap puts us on course to make it happen.

Mark Sowden

**Government Chief Data Steward** 

MMNZ



TE KĀWANATANGA O AOTEAROA GOVERNMENT DATA STRATEGY AND ROADMAP · AUGUST 2021

# What is the Government Data Strategy and Roadmap?

The Government Data Strategy and Roadmap provides a shared direction and plan for Aotearoa New Zealand's government data system. The first Data Strategy and Roadmap was commissioned by the Government Chief Data Steward and published in 2018.

# Why are we refreshing the Government Data Strategy and Roadmap?

The first Data Strategy and Roadmap was published more than three years ago. Agencies worked hard to realise the ambitions of that strategy, which were:

- · making the right data available
- · building capability and good practice
- · growing effective partnerships
- implementing open and transparent practices.

However, the data landscape is rapidly changing. Since the first Data Strategy and Roadmap was published, agencies have been working together on a 10-year Data Investment Plan. Stats NZ and the Data Iwi Leaders Group have signed a Mana Ōrite Relationship Agreement to realise iwi data aspirations. A range of initiatives have been developed to increase trust in the data system, including the Data Protection and Use Policy and the Algorithm Charter for Aotearoa New Zealand. In addition, the COVID-19 pandemic has completely changed the context in which data is collected, managed and used.

#### Where are we now?

Despite the progress made since 2018, there are some fundamental system issues to be resolved:

- Data about and for some important topics and communities does not exist.
- Settings to realise the rights and interests of Māori and iwi do not exist.
- Many agencies lack capability to take advantage of the power of data.
- It is difficult to find, retrieve and re-use data across the system.

Throughout the process of refreshing the Strategy, key stakeholders – from central and local government, business, community organisations, and NGOs – have participated in workshops and interviews, providing independent technical guidance and expertise. They have tested the Strategy and Roadmap's direction to ensure it is future-focused, robust, practical, and able to be adapted to different data sources and uses.

# What does the Government Data Strategy and Roadmap mean for Aotearoa New Zealand?

Currently, a lack of integration between government services means New Zealanders may be required to provide the same information to multiple agencies in order to access services. There is limited visibility of what information agencies hold about New Zealanders and how it is used.

Where data is visible and usable, it can contain gaps - making it harder to access information or insights about important topics and communities. This lack of visibility and coverage, combined with current data system settings, also means the rights and interests of Māori and iwi are not realised.

The activities prioritised by the Government Data Strategy and Roadmap will give effect to the following objectives:

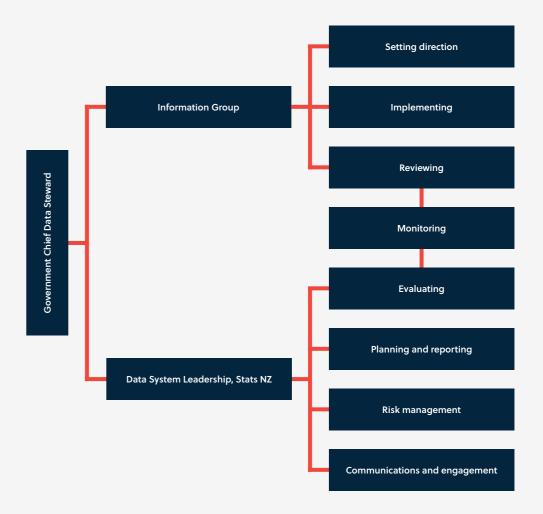
- People trust the data they share with government will be collected, managed, and used safely and responsibly
- Māori and iwi have the data system they need to fulfil their aspirations
- People and organisations have access to efficient, effective government services
- Government decisions are informed by the right data at the right time
- Government is held to account through a robust and transparent data system.

#### Governance

The Information Group are the key governance body for the Government Data Strategy and Roadmap - responsible for setting, implementing, monitoring, and reviewing the progress made against the Strategy.

The Government Chief Data Steward is responsible for supporting the Information Group, through delivery of implementation planning, progress reporting, identification of risks and facilitating engagements and communications.

### Governance diagram



TE KĀWANATANGA O AOTEAROA GOVERNMENT DATA STRATEGY AND ROADMAP · AUGUST 2021

#### What do we want to achieve?

The refreshed Government Data Strategy and Roadmap is designed to create an inclusive and integrated data system that supports innovation safely.

An **inclusive data system** means anyone who wants to access data to inform decision-making can do so in a way that works for them. Inclusivity ensures that the people of Aotearoa New Zealand see themselves reflected in the data the system produces.

An **integrated data system** creates maximum insight with minimum burden for providers of data. Standards, guidance and protocols ensure data can be found, managed, shared, combined, and re-used. An integrated data system means data can be shared easily while also protecting privacy, security, and confidentiality.

As a living document, the Roadmap will lay a responsive and flexible foundation for agencies to work together and align their data initiatives, ultimately leading to more effective and efficient use of data, reducing costs and supporting innovation. It will be reviewed and updated regularly.

Where we lack the knowledge to make a firm commitment to a particular approach immediately, we will use experiments and trials first to improve our understanding.

#### Who does the Strategy apply to?

The Government Data Strategy and Roadmap will be led by the Government Chief Data Steward. To succeed, collaboration between agencies, Māori and iwi will be vital. The ongoing contribution of a range of experts and specialists will also be required.

The Government Data Strategy and Roadmap does not include responsibilities for regional and local government, private sector, or the public. These groups and organisations play an important role in New Zealand's data system (the Government Data Strategy and Roadmap may inform their directions). Narrowing the scope will make a higher level of accountability for the New Zealand government possible.

# How will we work?

The Government Data Strategy and Roadmap will be brought to life through principles adapted from the Data Protection and Use Policy, the Mana Ōrite Relationship Agreement between Stats NZ and the Data Iwi Leaders Group, and the Public Service Act.

The use of these principles will ensure:

- official decisions are politically neutral
- · Ministers receive free and frank advice
- appointments are merit based
- Aotearoa New Zealand works toward an open government
- $\bullet\,$  stewardship of the Government Data System is effective.

#### Manaakitanga

Respect and uphold the mana and dignity of the people, whānau, communities and groups who share their data and information.

#### Mana Whakahaere

Empower people by giving them a choice and enabling their access to, and the use of, their data and information.

#### Kaitiakitanga

A shared culture of respect, guardianship, care and protection for data as a strategic and valued resource, recognising that for some Māori, Māori data is a taonga and iwi-Māori are kaitiaki over their taonga.

#### Rangatiratanga

Leadership that focuses on common purpose whilst also respecting the autonomy and independence of individuals, groups and agencies.

#### Whanaungatanga

Strong transparent relationships through respect, integrity, empathy and commitment to the kaupapa.

# Focus areas of the Government Data Strategy and Roadmap

The four fundamental components of an inclusive and integrated government data system are data, capability, infrastructure, and leadership. These are the focus areas of the Government Data Strategy and Roadmap. Each initiative in the Roadmap falls under one or more of these focus areas.

Importantly, all of the activity outlined in the Government Data Strategy and Roadmap is underpinned by a responsibility to uphold Te Tiriti and a commitment to maintaining and enhancing Public Trust and Confidence.

#### Te Tiriti

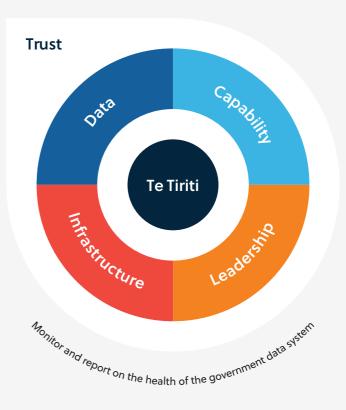
The Data System is committed to upholding the principles of Te Tiriti.

Authentic partnership with Māori and an understanding of Te Ao Māori will play a fundamental role in the activity outlined in the Strategy and Roadmap.

#### **Trust**

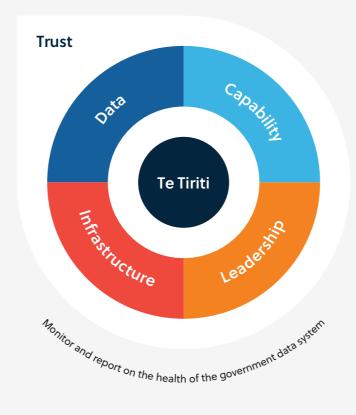
Public trust and confidence are fundamental to unlocking the value of data for all New Zealanders. The data system relies on a high trust environment, where the public enables agencies and organisations to use and share data for individual and collective benefit.

The Government Data Strategy and Roadmap is designed to build and maintain trust and confidence in the data system.





#### Focus areas and outcomes



#### **TE TIRITI**

# Work together with iwi and Māori partners, fulfil responsibilities of Te Tiriti through support of Māori and iwi data and needs

#### Outcomes

- The government data system gives effect to the expectations of Te Tiriti o Waitangi
- Co-design processes with iwi and Māori are in use
- Māori data sovereignty is recognised and understood across the system
- Ngā Tikanga Paihere guidelines are implemented across the data system
- A reciprocal relationship exists between Crown, Māori, and iwi

#### **DATA**

# Provide the right data at the right time

#### Outcomes

- Current and future data needs across the data system are captured and understood
- The right decisions and investments are being made to improve the data system
- Data is open, inclusive, accessible, and findable
- · Data quality is fit for purpose
- Iwi and Māori have the data they need for governance

#### **CAPABILITY**

## Develop capability and skills within our people to create, collect, manage, and use data

#### Outcomes

- Workforce capabilities and career opportunities meet needs across the data system
- The importance of data and what is being represented through the data is understood and respected
- Iwi and Māori have the data capability they need
- Upskilling opportunities, qualifications and credentials exist to continue to build capability

#### **LEADERSHIP**

## Ensure leadership, clear rules, and system settings are in place and are well understood

#### Outcomes

- Approach to managing and mandating standards is fit for purpose
- Māori data governance is embedded in the data system
- Legislation, regulations, and rules are aligned across the data system
- Design principles, protocols, and frameworks exist across the data system
- Aotearoa New Zealand complies with international agreements for data collection, management, and use
- Ethics and practices relating to data collection, management, and use are aligned across the data system

#### **INFRASTRUCTURE**

# Build the infrastructure that enables effective data management and reuse

#### Outcomes

- Data can be integrated across government and with other holders of data
- Data is shared safely with those who need it (and are authorised to use it)
- Data is published and easily accessed where appropriate
- The right metadata (contextual information) exists to manage and use the data effectively
- A system-wide architecture exists to optimise the creation, holding and use of data
- Infrastructure and support exists for iwi and Māori
- Partnerships exist between the Government Chief Digital Officer and the Government Chief Data Steward

#### **TRUST**

# People trust the data they share with government will be collected, managed, and used safely and responsibly

#### Outcomes

- Public trust in how government agencies use their personal information will be high and maintained over time
- Guidance and regulatory settings for data to be used safely and ethically exist
- Government sets a strong example through consistent use of data practices
- Mechanisms for testing and understanding new and emerging uses of data are in use



Roadmap	Year 1 Foundations Year one will set the government data system's strategic direction. Tools, guidance, and mechanisms will be developed to support maturity across the data system. A baseline understanding of the health of the data system will also be established.	Year 2 Investment Year two will embed a system-wide approach to investing in data content, capability and infrastructure. In line with the maturity assessment findings, the Government Chief Data Steward will establish services to improve capability across the data system.	Year 3 onwards  Maturity  Year three will focus on implementation of new frameworks and approaches. There will be a strong understanding of the system maturity, including where future investment is required to create a more integrated and inclusive data system.
DATA Provide the right data at the right time	<ul> <li>Data Investment Plan</li> <li>Open Data Charter Implementation Plan</li> <li>Initial delivery of iwi affiliation data</li> </ul>	<ul><li> Update the Data Investment Plan (DIP)</li><li> Published data quality framework</li><li> Māori data stocktake</li></ul>	<ul> <li>Establish quality stamps on government data releases</li> <li>Establish an easy-to-use mechanism for anyone to identify a data need</li> </ul>
CAPABILITY  Develop capability and skills within our people to create, collect, manage, and use data	<ul> <li>Grow data capability through partnership with iwi and Māori</li> <li>Review Algorithm Charter and offer support to the system</li> <li>Provide implementation support for using Ngā Tikanga Paihere</li> <li>Design and deliver a data system maturity assessment</li> <li>Implement Government Chief Data Steward agency partnering model</li> <li>Continue Analytics and Research in Government (ARG) Intern Programme</li> </ul>	<ul> <li>Develop Analytics and Research in Government (ARG) Graduate Programme pilot</li> <li>Create a microcredential for data ethics</li> <li>Ensure consistent job families and descriptions used across the system</li> <li>Review data capability framework</li> </ul>	<ul> <li>Roll out initiatives based on the data capability framework</li> <li>Develop a data profession – Communities of Practice, training, evaluation and monitoring</li> </ul>
Ensure leadership, clear rules, and system settings are in place and are well understood	<ul> <li>Revise system governance including advisory gaps</li> <li>Introduce Data and Statistics Act</li> <li>Implement new suite of trust proposals in support of the Digital Strategy</li> <li>Develop guidance for agencies on Te Ao Māori perspectives on cloud storage</li> <li>Finalise and implement Māori Data Governance Model</li> <li>Establish an updated approach to mandating and managing standards</li> <li>Develop Health of the Data System report</li> <li>Develop the Trust Framework for Digital Identity Services</li> </ul>	<ul> <li>Implement changes aligned to the new Data and Statistics Bill</li> <li>Co-develop with Māori guidance for Māori Data Sovereignty</li> <li>Establish inclusive data working group</li> <li>Review Official Statistics System design principles and protocols</li> <li>Deliver next suite of mandated standards</li> </ul>	Implement the system settings for trust and data driven technologies
INFRASTRUCTURE  Build the infrastructure that enables effective data management and reuse	<ul> <li>Develop strategic response and seek investment for future of integrated data</li> <li>Develop system architecture</li> <li>Confirm feasibility of a joint property data source</li> <li>Development of a joint data and analytics platform</li> <li>Review Data Lab access requirements</li> <li>Further develop and maintain innovative Māori data platforms</li> </ul>	<ul> <li>Establish the Integrated Data Infrastructure (IDI) Commons</li> <li>Establish consistent approach to release protocols across the system</li> <li>Begin implementation of integrated data strategic response</li> <li>Review and agree on consistent data sharing principles and protocols</li> <li>Implement against agreed system architecture</li> </ul>	Scope system-wide data integration requirements
Key changes	<ul> <li>Develop a system-wide plan for government investment in data content, capability, and infrastructure</li> <li>Develop a framework to benchmark agency maturity and develop Government Chief Data Steward (GCDS) services to lift agency capability</li> <li>Review system settings for trust and data driven technologies</li> <li>Develop Health of the Data System report</li> <li>Prepare an investment bid to improve data equity through access to integrated data services and products.</li> <li>Establish the system architecture required for a connected and inclusive data system</li> </ul>	<ul> <li>Use the Data Investment Plan (DIP) to inform The Budget and agency planning</li> <li>Align agency capability to maturity assessment findings and build capability using Government Chief Data Steward (GCDS) services</li> <li>Complete the next suite of mandated standards</li> <li>Align system architecture change across agencies</li> <li>Begin implementation of integrated data initiatives should funding be secured</li> </ul>	<ul> <li>Create a public mechanism to identify data needs and embed a quality stamp which is consistently used by agencies</li> <li>Build data capability to extend into collection, stewardship, and use of the data cycle</li> <li>Implement system settings for trust and data driven technologies</li> </ul>

#### **DATA**

# Provide the right data at the right time

#### **Outcomes**

- · Current and future data needs across the data system are captured and understood
- The right decisions and investments are being made to improve the data system
- · Data is open, inclusive, accessible, and findable
- · Data quality is fit for purpose
- Iwi and Māori have the data they need for governance



#### **Initiatives and deliverables**





#### YEAR 1

#### **Data Investment Plan**

· Deliver a Data Investment Plan identifying data gaps across the system to enable government to invest in data strategically, by setting out a long-term view of the investment needs across the government data





#### Open Data Charter Implementation Plan

• Open data is data that anyone can use or share. The Government Chief Data Steward will create an Open Data Charter Implementation Plan and report on progress and encourage agencies to participate with tasks in the plan.

GOVERNMENT CHIEF DATA STEWARD ALL AGENCIES



#### Initial delivery of iwi affiliation data

· Support the collection and initial delivery of iwi affiliation data, including supporting the implementation of the Māori Descent and Iwi Affiliation Data Statistical Standards.

GOVERNMENT CHIEF DATA STEWARD MINISTRY OF HEALTH



#### YEAR 2

#### **Update the Data Investment Plan**

· Updating the Data Investment Plan including a reviewed list of data gaps for investment as well as identifying potential gaps in capability and infrastructure across the system.

GOVERNMENT CHIEF DATA STEWARD ALL AGENCIES



#### Data quality assessment framework

· A data quality assessment framework will set forth an exemplar process to assess data quality along with useful tools and templates. This approach seeks to increase understanding of relevant data requirements and improve compatibility of data quality evaluation and reporting across the data system.

GOVERNMENT CHIEF DATA STEWARD

#### Māori data stocktake

• A Māori Data Stocktake includes an assessment and record of government Māori data collections and holdings to identify gaps for potential investment across the system.

GOVERNMENT CHIEF DATA STEWARD ALL AGENCIES

#### YEAR 3 onwards

#### Establish quality stamps on government data releases

· Quality stamps will indicate quality level of the data used in any government data releases. Data quality will be assessed using the data quality assessment framework, which will assure transparency and consistency.

GOVERNMENT CHIEF DATA STEWARD ALL AGENCIES

#### Establish an easy-to-use mechanism for anyone to identify a data need

• An easy-to-use, online, mechanism to identify new data needs. Assessment of the requests will determine emerging data needs and inform the Data Investment Plan.

GOVERNMENT CHIEF DATA STEWARD ALL AGENCIES



#### **CAPABILITY**

# Develop capability and skills within our people to create, collect, manage, and use data

#### **Outcomes**

- · Workforce capabilities and career opportunities meet needs across the data system
- The importance of data and what is being represented through the data is understood and respected
- · Iwi and Māori have the data capability they need
- Upskilling opportunities, qualifications and credentials exist to continue to build capability



#### Initiatives and deliverables





#### YEAR 1

#### Grow data capability through partnership with iwi and Māori

· Provide data capability training and support through iwi and Māori partnerships; co-create products that are beneficial to iwi and Māori.

#### Review Algorithm Charter and offer support to the system

· Review the initial performance of the Algorithm Charter to inform work to refine and strengthen support to Charter signatories.

GOVERNMENT CHIEF DATA STEWARD



#### Provide implementation support for using Ngā Tikanga Paihere

• Ngā Tikanga Paihere is a principles-based framework that guides thinking and actions to encourage a mindful, people-centred approach in how data is collected, managed, and used. The Government Chief Data Steward will support agencies to implementation this framework.

GOVERNMENT CHIEF DATA STEWARD ALL AGENCIES



#### Design and deliver a data system maturity assessment

· Develop and implement the Data System Maturity Assessment for use at agency and system level.

GOVERNMENT CHIEF DATA STEWARD



#### Implement Government Chief Data Steward agency partnering model

• The Government Chief Data Steward will develop an approach to assist agencies with data-related issues of high value to the data system to which a lack of expert capability and/or capacity has been identified as a barrier.

#### Continue Analytics and Research in Government Intern Programme

· Continue the summer internship programme, placing interns within government departments to prepare them for a career working in data analytics.

MINISTRY OF SOCIAL DEVELOPMENT GOVERNMENT CHIEF DATA STEWARD

#### YEAR 2

#### Develop Analytics and Research in Government Graduate Programme pilot

• Establishment of the pilot Analysis and Research in Government Graduate Programme.

STATS NZ GOVERNMENT CHIEF DATA STEWARD

#### Create a microcredential for data ethics

· Develop a data ethics accreditation or short courses for data scientists working in partnership with tertiary education institutions.

ALL AGENCIES

#### Ensure consistent job families and descriptions used across the system

• Improve clarity of roles and responsibilities across the data system including standardisation of job descriptions.

GOVERNMENT CHIEF DATA STEWARD

MINISTRY OF BUSINESS, INNOVATION AND EMPLOYMENT

#### Review data capability framework

· Review data capability framework to assist with capability uplift. This review will include an implementation approach, benchmarking, tools and good data capability practice.

GOVERNMENT CHIEF DATA STEWARD ALL AGENCIES

#### YEAR 3 onwards

#### Roll out initiatives based on the data capability framework

· After completing the review of the data capability framework we will implement the approach to achieving good data capability practices.

GOVERNMENT CHIEF DATA STEWARD ALL AGENCIES

#### Develop a data profession - Communities of Practice, training, evaluation and monitoring

· Scope development of a professional body.

GOVERNMENT CHIEF DATA STEWARD MINISTRY OF BUSINESS, INNOVATION AND EMPLOYMENT

#### **LEADERSHIP**

# Ensure leadership, clear rules, and system settings are in place and are well understood

#### **Outcomes**

- · Approach to managing and mandating standards is fit for
- Māori data governance is embedded in the data system
- Legislation, regulations, and rules are aligned across the data system
- Design principles, protocols, and frameworks exist across the data system
- Aotearoa New Zealand complies with international agreements for data collection, management, and use
- Ethics and practices relating to data collection, management, and use are aligned across the data system



#### Initiatives and deliverables





#### YEAR 1

#### Revise system governance including advisory gaps

 System governance reflects the processes and institutions that exist at all levels of decision-making. A review of the existing landscape and recommendations for greater alignment and effectiveness will be

GOVERNMENT CHIEF DATA STEWARD



#### **Introduce Data and Statistics Act**

• Deliver modernised data and statistics legislation to replace the Statistics Act.

#### Implement new suite of trust proposals in support of the Digital Strategy

• To contribute towards the Trust Pillar of the Digital Strategy for Aotearoa New Zealand, the Government Chief Data Steward will implement a complimentary suite of trust proposals - such as a consistent approach to assess public acceptability of emerging data use cases, and exploring and defining a data ethics advisory function for the system.

#### Develop guidance for agencies on Te Ao Māori perspectives on cloud storage

· Work is underway to finalise a paper outlining the benefits, risks, and mitigations of storing iwi and Māori data in the Cloud, through a Te Ao Māori lens. The paper will guide the co-design and development of a Te Ao Māori framework that will be utilised by government agencies when considering offshore data

GOVERNMENT CHIEF DATA STEWARD ALL AGENCIES

#### Finalise and implement Māori Data Governance Model

• Work is underway to develop an operational Model for Māori Data Governance. Work will be initiated to embed this Model across the system.

GOVERNMENT CHIEF DATA STEWARD ALL AGENCIES

#### Establish an updated approach to mandating and managing standards

· Consistent standards are fundamental to effectively managing and sharing data between government agencies. An updated approach has been developed with the aim of making more data standards mandatory for agencies in how they collect, format, record or store data across the system.

#### Develop Health of the Data System report

• The Government Chief Data Steward will lead the development of the Health of the Data System report which brings together maturity assessments and Government Data Strategy and Roadmap initiative progress.

**GOVERNMENT CHIEF DATA STEWARD** 

#### Develop the Trust Framework for Digital Identity Services

• The Government Chief Digital Officer will lead the development of a digital identity regulatory framework and legislation.

GOVERNMENT CHIEF DIGITAL OFFICER GOVERNMENT CHIEF DATA STEWARD

#### YEAR 2 Implement changes aligned to the new Data and Statistics Bill

• Implement the Data and Statistics Act within Stats NZ and across agencies.

STATS NZ GOVERNMENT CHIEF DATA STEWARD

#### Co-develop with Māori guidance for Māori Data Sovereignty

 Māori data sovereignty refers to the rights and interests that Māori have in relation to the collection, ownership, and application of Māori data. Guidance will be developed on Māori Data Sovereignty that is recognised across the system to help support decisions around governance and use of Māori data.

GOVERNMENT CHIEF DATA STEWARD ALL AGENCIES

#### Establish inclusive data working group

· Establish an inclusive data working group with members from communities of interest. The group will inform how engage appropriately and efficiently as well as providing a resource for specific questions.

GOVERNMENT CHIEF DATA STEWARD ALL AGENCIES

#### Review Official Statistics System design principles and protocols

· Assess and review the Official Statistics Systems principles and protocols on the collection, use, management, and sharing of data.

#### Deliver next suite of mandated standards

• The next suite of topics to mandate include: sex and gender, iwi affiliation, Māori business definition, Ethnicity and Māori descent.

GOVERNMENT CHIEF DATA STEWARD ALL AGENCIES

#### YEAR 3 onwards

#### Implement the system settings for trust and data driven technologies

· Look into what gaps need to be filled to support the uptake of new technologies through enhancing trust in order to support data ethics.

GOVERNMENT CHIEF DATA STEWARD

#### **INFRASTRUCTURE**

# Build the infrastructure that enables effective data management and reuse

#### **Outcomes**

- · Data can be integrated across government and with other holders of data
- Data is shared safely with those who need it (and are authorised to use it)
- Data is published and easily accessed where appropriate
- The right metadata (contextual information) exists to manage and use the data effectively
- · A system-wide architecture exists to optimise the creation, holding and use of data
- Infrastructure and support exists for iwi and Māori
- · Partnerships exist between the Government Chief Digital Officer and the Government Chief Data Steward



#### Initiatives and deliverables





#### YEAR 1

#### Develop strategic response and seek investment for future of integrated data

• To respond to evolving system needs and to improve data equity through inclusive access to existing integrated data services, investment priorities for integrated data products, like the Integrated Data Infrastructure (IDI) and data lab service, will be developed.

GOVERNMENT CHIEF DATA STEWARD ALL AGENCIES



#### Develop system architecture

• System architecture defines the structure and behaviours of a system and how these align to an inclusive set of design and operational principles. Work is underway to co-design and develop a data system architecture supporting interoperability and appropriate sharing and use of data, information, and analytics across government and Te Ao Māori perspectives.

GOVERNMENT CHIEF DATA STEWARD

#### Confirm feasibility of a joint property data source

• Research into development of an authoritative property data source between Stats NZ and Toitū Te Whenua to assist with the move to a more administrative data source for statistical production and research.

TOITŪ TE WHENUA

GOVERNMENT CHIEF DATA STEWARD

#### Development of a joint data and analytics platform

· Social Wellbeing Agency are developing a data and analytics platform to support the needs of a number of agencies with similar needs to provide data and insights at the right time for the right decisions to support the skills and capability of Aotearoa New Zealand.

SOCIAL WELLBEING AGENCY

#### Review Data Lab access requirements

• The Data Lab provides access to the Integrated Data Infrastructure (IDI) for users across the data system. We will review access requirements and settings in order to expand safe access to the IDI.

GOVERNMENT CHIEF DATA STEWARD

#### Further develop and maintain innovative Māori data platforms

• Work is underway to support a sustainable, enabling infrastructure through access to and development of more and better data for, by, and about Māori and iwi.

GOVERNMENT CHIEF DATA STEWARD

#### YEAR 2

#### **Establish the Integrated Data Infrastructure Commons**

• The Integrated Data Infrastructure (IDI) commons will make it easier for IDI users to work together collaboratively and to share insights from their work with non-IDI users.

GOVERNMENT CHIEF DATA STEWARD ALL AGENCIES

#### Establish consistent approach to release protocols across the system

• To support safe data sharing, release protocols will be developed to ensure that the appropriate assessments have been made before data is shared.

GOVERNMENT CHIEF DATA STEWARD

#### Begin implementation of integrated data strategic response

· After development of the integrated data strategic response in Year 1, implementation will occur including securing investment and beginning the planning and delivery of initiatives should funding be secured.

GOVERNMENT CHIEF DATA STEWARD

ALL AGENCIES

#### Review and agree on consistent data sharing principles and protocols

· Rules, principles, and ways to facilitate safe and privacy-conscious data sharing across the data system will be developed.

GOVERNMENT CHIEF DATA STEWARD INLAND REVENUE

#### Implement agreed system architecture

• The data exchange and shared infrastructure joined-up plan will implement a significant core of the co-designed system architecture. Significantly, this facilitates the implementation of an interoperable mechanism for the appropriate, safe sharing of data between agencies and wider data providers including Māori and iwi Te Tiriti partners.

GOVERNMENT CHIEF DATA STEWARD

#### YEAR 3 onwards

#### Scope system-wide data integration requirements

· Work will happen across the system on the requirements for effective integration of data across domains and data ecosystems.

GOVERNMENT CHIEF DATA STEWARD

ALL AGENCIES

#### **TE TIRITI**

# Work together with iwi and Māori partners, fulfil responsibilities of Te Tiriti through support of Māori and iwi data and needs

Authentic partnership with Māori and an understanding of te ao Māori will play a fundamental role in the activity outlined in the Strategy and Roadmap. The outcomes of the initiatives and deliverables below will support the Data System to honour Te

#### **Outcomes**

- The government data system gives effect to the expectations of Te Tiriti o Waitangi
- Co-design processes with iwi and Māori are in use
- Māori data sovereignty is recognised and understood across the system
- Ngā Tikanga Paihere guidelines are implemented across the data system
- · A reciprocal relationship exists between Crown, Māori, and iwi



#### Initiatives and deliverables





#### YEAR 1

#### **DATA**

#### Initial delivery of iwi affiliation data

 Support the collection and initial delivery of iwi affiliation data, including supporting the implementation of the Māori Descent and Iwi Affiliation Data Statistical Standards.

GOVERNMENT CHIEF DATA STEWARD MINISTRY OF HEALTH



#### **CAPABILITY**

#### Grow data capability through partnership with iwi and Māori

· Provide data capability training and support through iwi and Māori partnerships; co-create products that are beneficial to iwi and Māori.

#### GOVERNMENT CHIEF DATA STEWARD

#### Provide implementation support for using Ngā Tikanga Paihere

• Ngā Tikanga Paihere is a principles-based framework that guides thinking and actions to encourage a mindful, people-centred approach in how data is collected, managed, and used. The Government Chief Data Steward will support agencies to implementation this framework.





#### **LEADERSHIP**

#### Develop guidance for agencies on Te Ao Māori perspectives on cloud storage

• Work is underway to finalise a paper outlining the benefits, risks, and mitigations of storing iwi and Māori data in the Cloud, through a Te Ao Māori lens. The paper will quide the co-design and development of a Te Ao Māori framework that will be utilised by government agencies when considering offshore data

GOVERNMENT CHIEF DATA STEWARD ALL AGENCIES

#### Finalise and implement Māori Data Governance Model

· Work is underway to develop an operational Model for Māori Data Governance. Work will be initiated to embed this Model across the system.

GOVERNMENT CHIEF DATA STEWARD ALL AGENCIES

#### **INFRASTRUCTURE**

#### Further develop and maintain innovative Māori data platforms

• Work is underway to support a sustainable, enabling infrastructure through access to and development of more and better data for, by, and about Māori and iwi.

GOVERNMENT CHIEF DATA STEWARD

#### YEAR 2

#### **DATA**

#### Māori data stocktake

• A Māori Data Stocktake includes an assessment and record of government Māori data collections and holdings to identify gaps for potential investment across the system.

GOVERNMENT CHIEF DATA STEWARD ALL AGENCIES

#### **LEADERSHIP**

#### Implement changes aligned to the new Data and Statistics Bill

• Implement the Data and Statistics Act within Stats NZ and across agencies.



STATS NZ GOVERNMENT CHIEF DATA STEWARD

#### Co-develop with Māori guidance for Māori Data Sovereignty

· Māori data sovereignty refers to the rights and interests that Māori have in relation to the collection, ownership, and application of Māori data. Guidance will be developed on Māori Data Sovereignty that is recognised across the system to help support decisions around governance and use of Māori data.

STATS NZ GOVERNMENT CHIEF DATA STEWARD

#### Establish inclusive data working group

• Establish an inclusive data working group with members from communities of interest. The group will inform how engage appropriately and efficiently as well as providing a resource for specific questions.

GOVERNMENT CHIEF DATA STEWARD ALL AGENCIES



#### Deliver next suite of mandated standards

· The next suite of topics to mandate include: sex and gender, iwi affiliation, Māori business definition, Ethnicity and Māori descent.







#### **TRUST**

# People trust the data they share with government will be collected, managed, and used safely and responsibly

A high level of trust is critical to the development and uptake of data and digital technology. The Government Data Strategy and Roadmap fosters trust in the way government uses data and technology to allow for future innovation.

#### **Outcomes**

- Public trust in how government agencies use their personal information will be high and maintained over time
- Guidance and regulatory settings for data to be used safely and ethically exist
- · Government sets a strong example through consistent use of data practices
- · Mechanisms for testing and understanding new and emerging uses of data are in use



#### Initiatives and deliverables





#### YEAR 1

#### **DATA**

#### Open Data Charter Implementation Plan

• Open data is data that anyone can use or share. The Government Chief Data Steward will create an Open Data Charter Implementation Plan and report on progress and encourage agencies to participate with tasks in the plan.

GOVERNMENT CHIEF DATA STEWARD



#### **CAPABILITY**

#### Review Algorithm Charter and offer support to the system

· Review the initial performance of the Algorithm Charter to inform work to refine and strengthen support to Charter signatories.

GOVERNMENT CHIEF DATA STEWARD



#### Provide implementation support for using Ngā Tikanga Paihere

• Ngā Tikanga Paihere is a principles-based framework that guides thinking and actions to encourage a mindful, people-centred approach in how data is collected, managed, and used. The Government Chief Data Steward will support agencies to implementation this framework.

GOVERNMENT CHIEF DATA STEWARD ALL AGENCIES



#### Design and deliver a data system maturity assessment

· Develop and implement the Data System Maturity Assessment for use at agency and system level.





#### **LEADERSHIP**

#### Implement new suite of trust proposals in support of the Digital Strategy

• To contribute towards the Trust Pillar of the Digital Strategy for Aotearoa New Zealand, the Government Chief Data Steward will implement a complimentary suite of trust proposals - such as a consistent approach to assess public acceptability of emerging data use cases, and exploring and defining a data ethics advisory function for the system.

GOVERNMENT CHIEF DATA STEWARD

#### YEAR 2

#### **CAPABILITY**

#### Create a microcredential for data ethics

 Develop a data ethics accreditation or short courses for data scientists working in partnership with tertiary education institutions.

GOVERNMENT CHIEF DATA STEWARD



#### **LEADERSHIP**

#### Establish inclusive data working group

• Establish an inclusive data working group with members from communities of interest. The group will inform how engage appropriately and efficiently as well as providing a resource for specific questions.

GOVERNMENT CHIEF DATA STEWARD ALL AGENCIES



#### **INFRASTRUCTURE**

#### Establish consistent approach to release protocols across the system

• To support safe data sharing, release protocols will be developed to ensure that the appropriate assessments have been made before data is shared.

#### GOVERNMENT CHIEF DATA STEWARD

#### Review and agree on consistent data sharing principles and protocols

· Rules, principles, and ways to facilitate safe and privacy-conscious data sharing across the data system will be developed.

GOVERNMENT CHIEF DATA STEWARD

INLAND REVENUE

#### YEAR 3 onwards

#### Establish quality stamps on government data releases

• Quality stamps will indicate quality level of the data used in any government data releases. Data quality will be assessed using the data quality assessment framework, which will assure transparency and consistency.

GOVERNMENT CHIEF DATA STEWARD ALL AGENCIES

#### **CAPABILITY**

#### Develop a data profession - Communities of Practice, training, evaluation and monitoring

Scope development of a professional body.

GOVERNMENT CHIEF DATA STEWARD MINISTRY OF BUSINESS, INNOVATION AND EMPLOYMENT

#### **LEADERSHIP**

#### Implement the system settings for trust and data driven technologies

· Look into what gaps need to be filled to support the uptake of new technologies through enhancing trust in order to support data ethics.

GOVERNMENT CHIEF DATA STEWARD

# **Appendix: Government Data Strategy and Roadmap framework**

