

Ngā Tūtohu Aotearoa

Indicators Aotearoa New Zealand

Maya Gorbatovsky
Mark Turner



Big story

Exploring what matters to New Zealanders and measuring their wellbeing has been a **successful project**. However, there are many other **alternative ways to communicate** this information to end users. We want to encourage discussion on how this data can benefit New Zealanders and support **more people and organizations using it** in a variety of ways.

Overview

Where it all began...

What is wellbeing

How we measure it

How we communicate

Next steps?...

- **Where it all began:**
 - IANZ vision
- **What is wellbeing after all?**
 - IANZ framework
 - Alignment with SDG
- **How do we measure it?**
 - Developed measures
 - Challenges and data gaps
 - Largest suppliers
 - Workflow and infrastructure
 - Portal functionality
- **How do we communicate the measures?**
 - Users
 - Most popular indicators
 - Feedback
- **What actions do we take from here?**
 - IANZ focus and limitations
 - Pyramid of engagement
 - Potential for collaboration
 - Auditor-General's report

Ngā Tūtohu Aotearoa • Indicators Aotearoa New Zealand



Wellbeing data for New Zealanders

Stats **NZ**

<https://statisticsnz.shinyapps.io/wellbeingindicators/>

Overview

Where it all
began...

What is
wellbeing

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How we
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Next steps?...

... and *why* IANZ came to life

IANZ vision:

- To create an independent picture of progress through a wellbeing and sustainable development lens
- To move beyond an economic view of progress
- To support a wellbeing approach to decision-making
- To be inclusive in our design and development process
- Present indicator data in a way that is easy to understand and use



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... and why IANZ came to life -

Wellbeing
measurement
and monitoring

Information, analysis, advice

Government
decision-making

**Ngā Tutohu
Aotearoa -
Indicators
Aotearoa
New Zealand**

Stats NZ

+ other
existing key
data and
information
sources

Child wellbeing

Oranga Tamariki, SIA, DPMC

Environment

MfE, Stats NZ

Living Standards Framework

The Treasury

Wellbeing dashboard

Social Wellbeing Agency

Outcome-
based
frameworks
and reporting

**Strategic
priority-setting
across sectors,
populations
and policy
levers**

... and *why* IANZ came to life

Transforming our World: The 2030 Agenda for Sustainable Development

Need to ensure there are appropriate indicators and adequate data to regularly measure progress towards the sustainable development goal targets that New Zealand is aiming to achieve by 2030.

- *Quality, accessible, timely and reliable disaggregated data will be needed to help with the measurement of progress and to ensure that no one is left behind.*
- *We are committed to developing broader measures of progress to complement gross domestic product (GDP).*

TRANSFORMING OUR WORLD:



THE 2030 AGENDA FOR
SUSTAINABLE DEVELOPMENT

... and why IANZ came to life

Ngā Tūtohu Aotearoa – Indicators Aotearoa New Zealand contains wellbeing indicators that reflect an internationally growing vision to provide a more holistic view of wellbeing and sustainable development.

- Because wellbeing is multi-dimensional, it cannot easily be expressed in one measure.
- International best practice is to use a dashboard of measures.
- Ngā Tūtohu Aotearoa is not a wellbeing framework, it is an indicator framework, so it can't explain why or how certain things affect wellbeing
- We suggest you take each indicator as a sign of progress in a specific area that contributes to our overall wellbeing.

Enables the public to have a transparent view of New Zealand's progress with visible trade-offs



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... and *how* IANZ came to life

Wellbeing

- New Zealand was the first country in the world to embed wellbeing and sustainable development in its budget decision-making process
 - Wellbeing is more than just GDP
 - We asked 'what does wellbeing mean to you?'
-
- Alignment with SDGs
 - Alignment with The Treasury's Living Standards Framework
 - Alignment with He Arotahi Tatauranga (Stats NZ Māori statistical framework)



Overview

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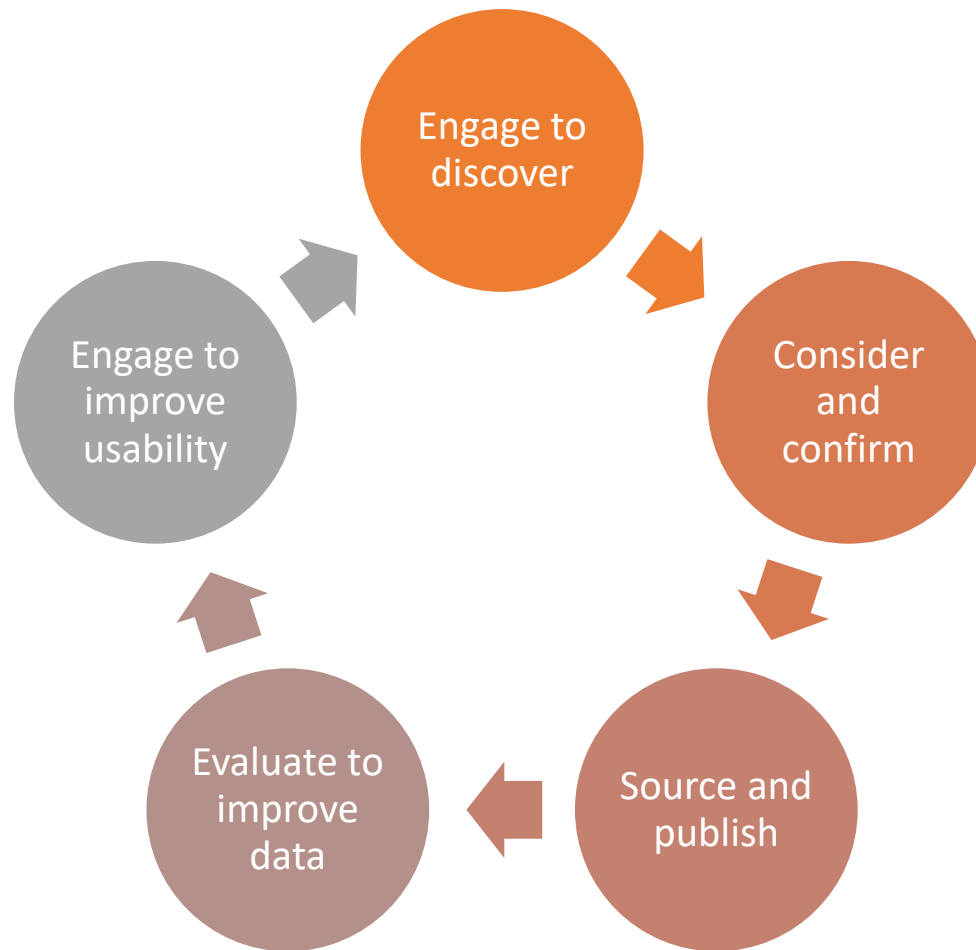
**What is
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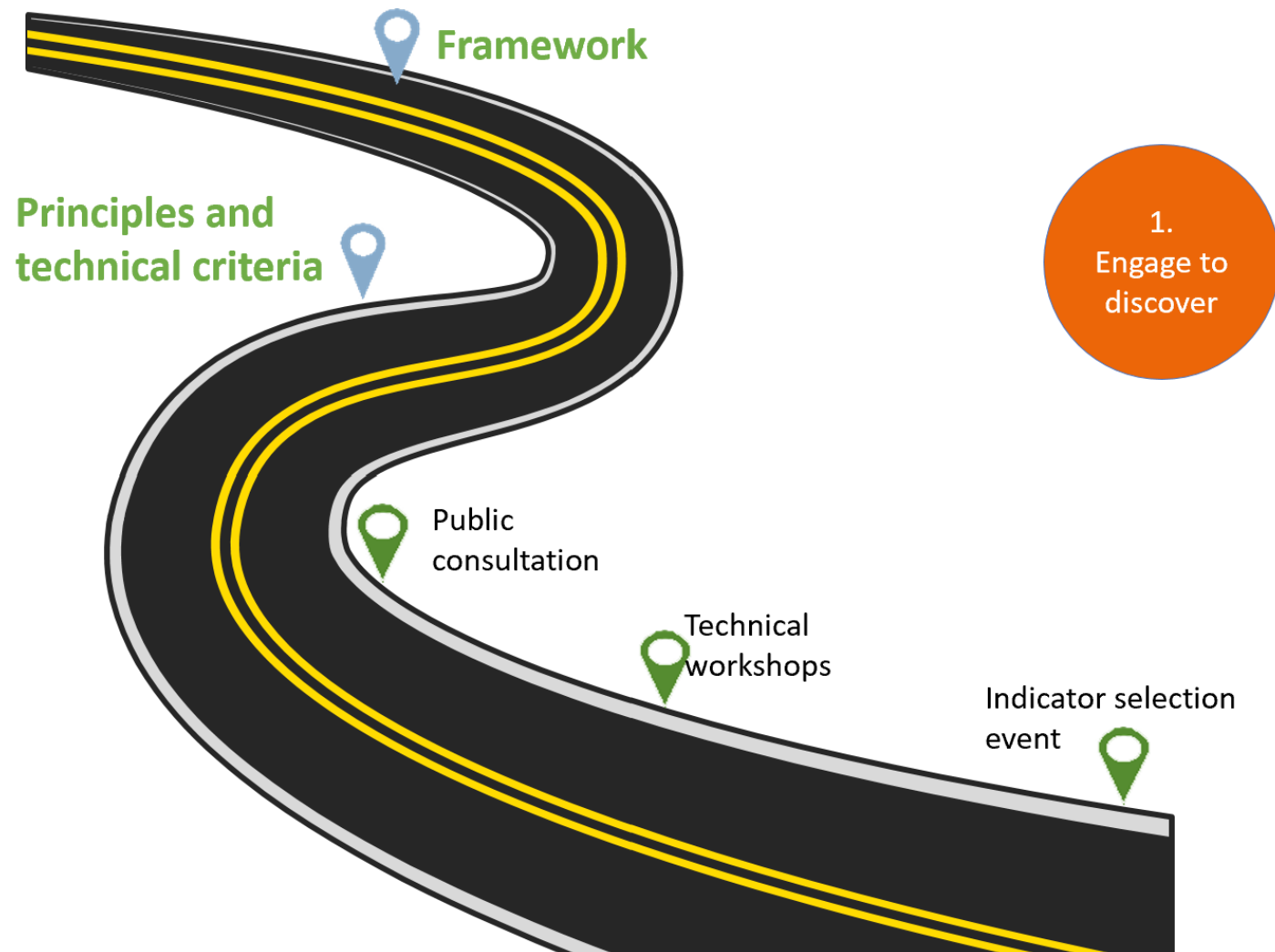
What is
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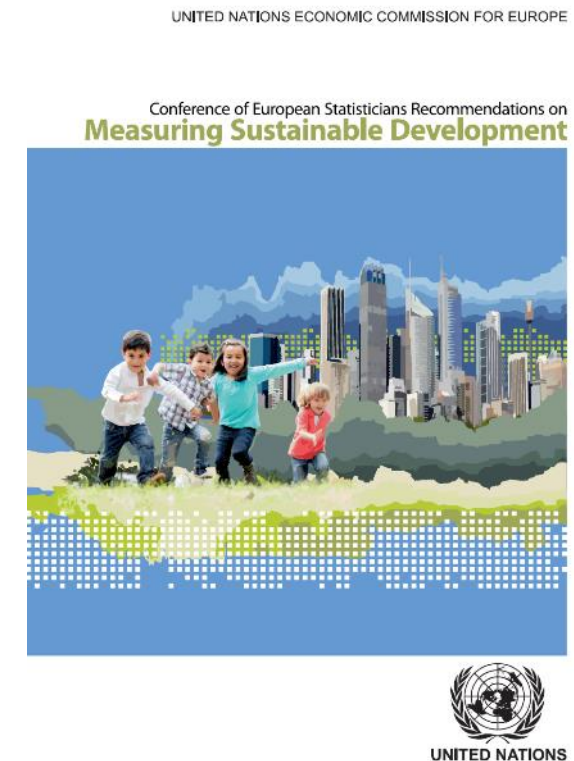
Next steps?...

... and *how* IANZ came to life



... and *how* IANZ came to life

- Starting point was to evaluate existing frameworks
- Conference of European Statisticians Recommendations on Measuring Sustainable Development (CES)
- Represents international best practice and aligns with U.N.'s Sustainable Development Goals (SDGs)
- Examines:
 - i. Current wellbeing
 - ii. Future wellbeing
 - iii. Wellbeing elsewhere (transboundary)



<https://unece.org/statistics/publications/conference-european-statisticians-recommendations-measuring-sustainable>

... and *how* IANZ came to life

Sustainable development has transboundary implications

*“... [Sustainable Development Indicator] sets should reflect the transboundary impacts of sustainable development, by highlighting how a country in the pursuit of the well-being of its citizens **may affect the well-being of citizens of other countries.**”*

UNECE (2014).



<https://unece.org/statistics/publications/conference-european-statisticians-recommendations-measuring-sustainable>

... and *how* IANZ came to life

Guiding principles

- Indicators should be outcome focused
- They should be relevant to New Zealand and incorporate Te Ao Māori
- Movement should be positively or negatively associated with progress
- Objective and subjective indicators should be included
- Parsimony should guide selection process 'less is more'
- Selection should not be data driven
- Indicator set should provide a complete picture



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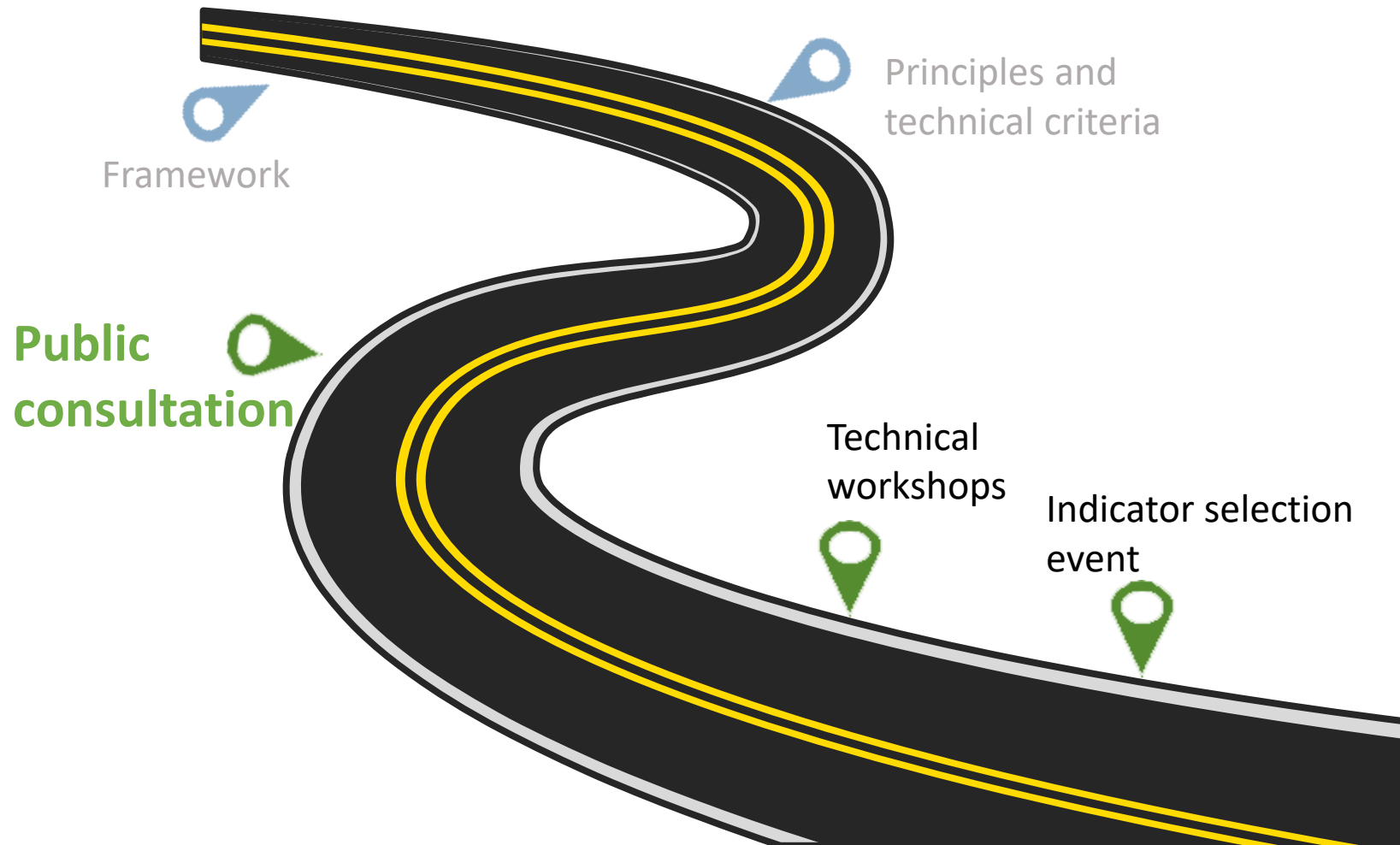
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... and *how* IANZ came to life



1.
Engage to
discover

... and *how* IANZ came to life

What matters most to New Zealand?

Provided a number of channels for people to respond:

- Postcards [for those not online]
- Online survey
- Online poll
- Email submissions



<https://www.stats.govt.nz/reports/indicators-aotearoa-new-zealand-nga-tutohu-aotearoa-key-findings-from-consultation-and-engagement>

... and *how* IANZ came to life

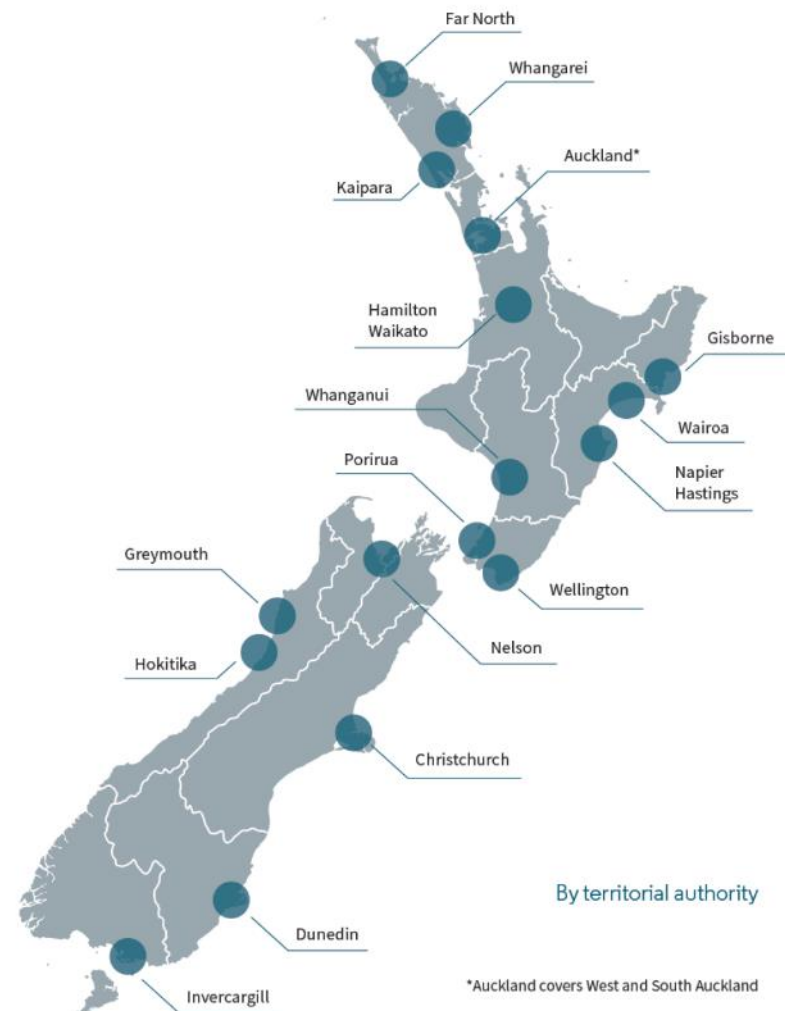
Community engagements across New Zealand

17 August to 4 October 2018

What matters most to New Zealand?

This allowed us to understand what wellbeing meant to different community groups, for example:

- Māori,
- Pasifika,
- school children
- homeless
- the elderly.



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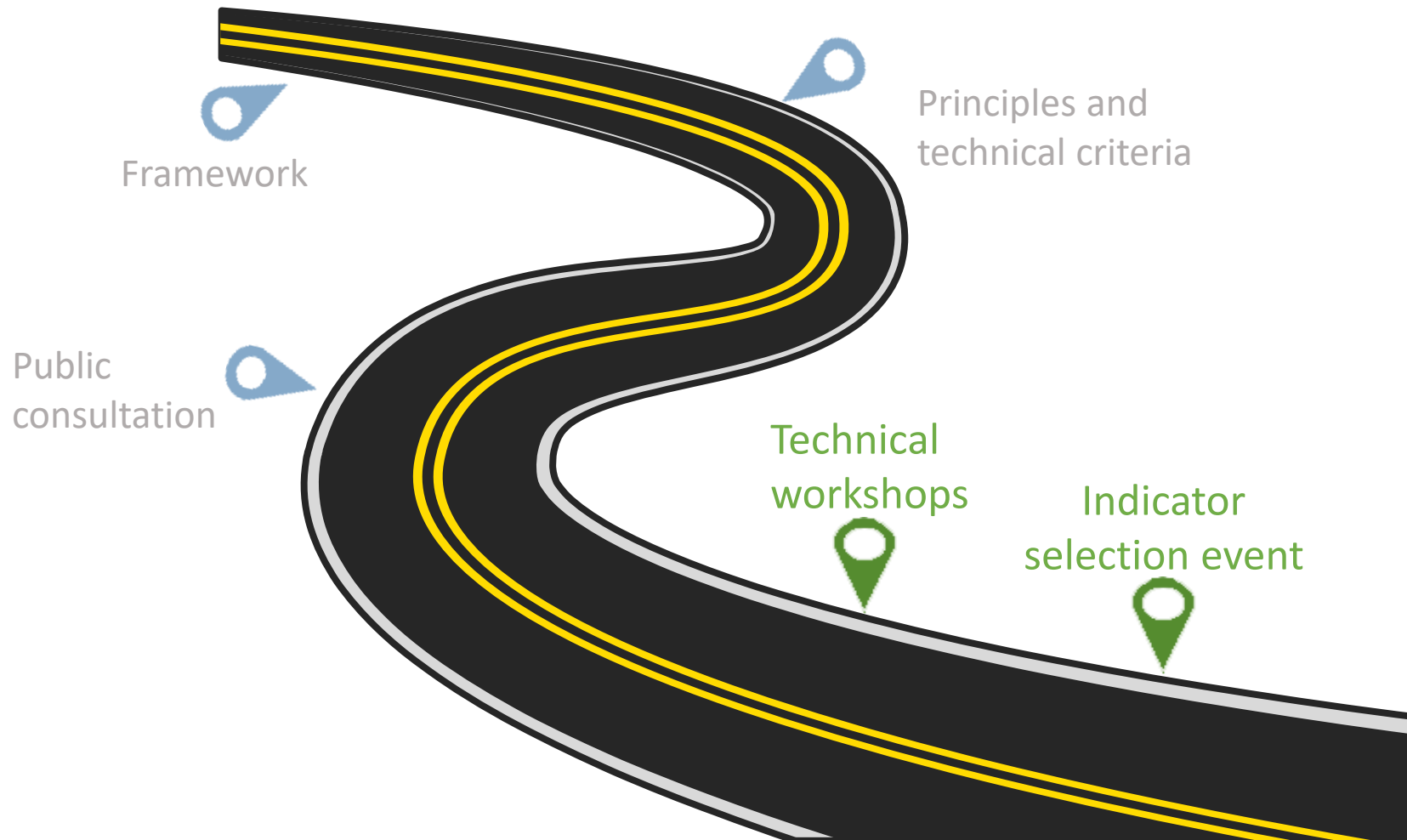
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2.
Consider
and
confirm

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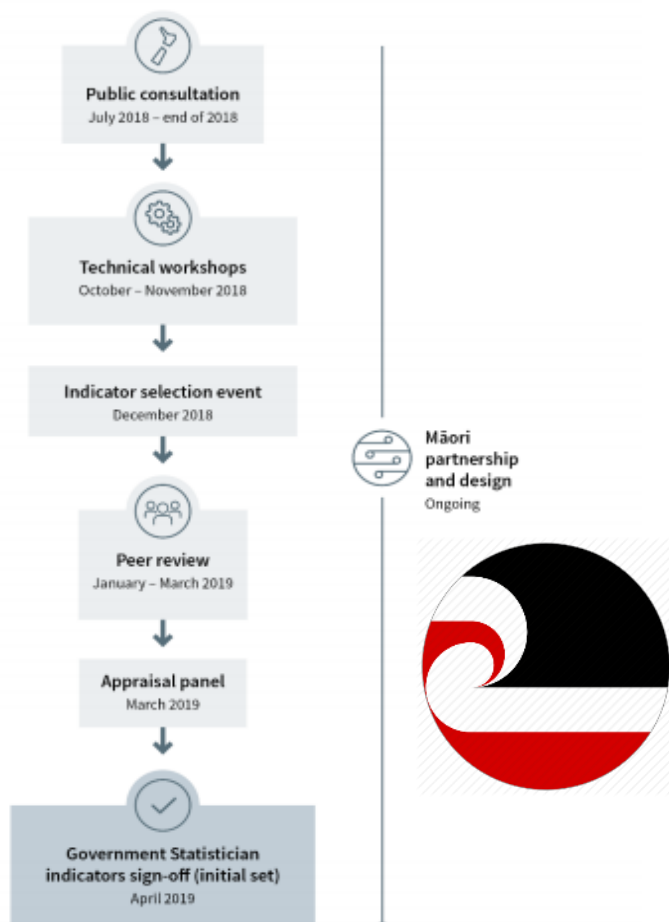
How we
communicate

Next steps?...

... and *how* IANZ came to life

Indicators Aotearoa New Zealand – Ngā Tūtohu Aotearoa:

Indicator sign-off process



Partnering with Māori

Any comprehensive framework for wellbeing in Aotearoa, New Zealand needs to consider both the wellbeing of Māori and Māori conceptions of wellbeing.

Look to leverage off other work currently being done within government to include a suite of te ao Māori wellbeing indicators.

Māori-led and government supported through TPK

... are we there yet?

Current Wellbeing

Here and Now



- | | |
|--------------------------------|--------------------------|
| 1) Air quality | 10) Knowledge and skills |
| 2) Cities and settlements | 11) Land |
| 3) Climate | 12) Leisure |
| 4) Culture | 13) Safety |
| 5) Economic standard of living | 14) Social connections |
| 6) Ecosystems | 15) Subjective wellbeing |
| 7) Governance | 16) Waste |
| 8) Health | 17) Water and sanitation |
| 9) Identity | 18) Work |

Future Wellbeing

Later

- 1) Human Capital
- 2) Social Capital
- 3) Financial & Physical Capital
- 4) Natural Capital



Transboundary Impacts

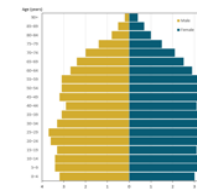
Elsewhere

- | | |
|-----------------------------------|--------------------|
| 1) Climate | 4) Human capital |
| 2) Economic standard of living | 5) Natural capital |
| 3) Financial and Physical Capital | 6) Waste |



Contextual indicators

- 1) Population
- 2) Production



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How do we measure it?

- **Measures so far**
- Challenges and data gaps
- Largest suppliers
- Workflow and infrastructure
- Portal functionality



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How do we measure it?



Governance
5 indicators



Health
8 indicators



Human capital
4 indicators



Knowledge and skills
5 indicators



Leisure
2 indicators



Safety
6 indicators



Social capital
4 indicators



Social connections
3 indicators



Subjective wellbeing
7 indicators

By subject area:

- Social
- Environmental
- Economic
- Cultural
- Contextual

Full list of indicators is downloadable from:

[About Ngā Tūtohu Aotearoa – Indicators Aotearoa New Zealand](#)

Challenges and data gaps

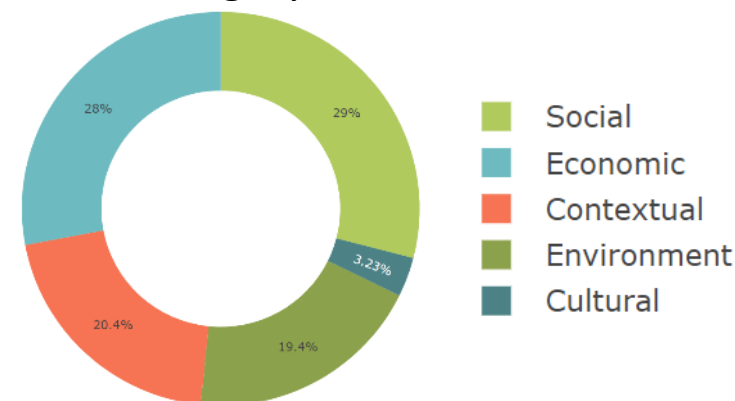
- **109** indicators (plus **19** contextual and **5** double-ups)
- **96** align with SDGs but **34** of these currently have no data
- Most are at least **annual** if not less regular
- Only **33** of 109 indicators are disaggregatable by things like sex, ethnicity or age

The indicators and associated data should be sufficiently disaggregated so they can be used to assess progress for all defined groups, especially those considered the most vulnerable.

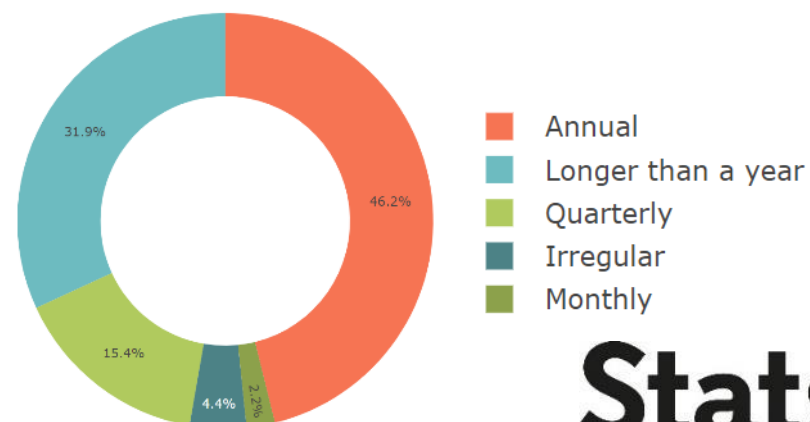
Recommendation 6 from Auditor General's report

<https://oag.parliament.nz/2021/sdgs>

Category



Frequency



Aligning with Sustainable Development Goals

Committing to the United Nations' SDGs

New Zealand has committed to making progress towards sustainable development. It has also committed to measuring and tracking a series of indicators that relate to the 17 international [Sustainable Development Goals \(SDGs\)](#) established by the United Nations in 2015.

The Sustainable Development Goals are a call for action by all countries – poor, rich, and middle-income – to promote prosperity while protecting the planet. They recognise that ending poverty must go hand-in-hand with strategies that build economic growth and address a range of social needs including education, health, social protection, and job opportunities, while tackling climate change and environmental protection.

* This indicates a direct mapping to an SDG indicator



End poverty in all its forms everywhere

- [Child poverty: low income \(after housing costs\)](#) *
- [Child poverty: low income \(before housing costs\)](#) *
- [Child poverty: material hardship](#) *
- [Costs of extreme weather events](#)
- [Homelessness](#)
- [Low income](#)



End hunger, achieve food security and improved nutrition, and promote sustainable agriculture

- [Active stewardship of land](#)
- [Biodiversity/native species](#)
- [Cultural ecosystem services](#)
- [Efficiency of land use](#)
- [Gross greenhouse gas emissions](#)
- [Land assets](#)
- [Net greenhouse gas emissions](#)
- [Productive land](#)
- [Provisioning ecosystem services](#)
- [Safety of water for recreation and food gathering](#)
- [Soil health](#)



https://statisticsnz.shinyapps.io/wellbeingindicators/_w_40a86398/?page=alignment&subpage=aligningSDG

Challenges and data gaps

- Mainly data gaps are
 - environmental- 23
 - Social- 13
- Data investment plan
 - long-term view of the investment needed across the government data system

Indicator status	Number
Data available	58
Proxy data available	15
No data available	41
Total	109



With regard to the monitoring of the SDGs, the Auditor General acknowledges the significant work that has been done through Ngā Tūtohu Aotearoa and the Living Standards Framework in developing indicators of wellbeing. However, he states that these provide only a partial picture and need to be supplemented by additional indicators to allow regular monitoring of progress. He draws attention to the significant data gaps that exist and the need to accelerate efforts to fill them.

<https://oag.parliament.nz/2021/sdgs>

Largest suppliers

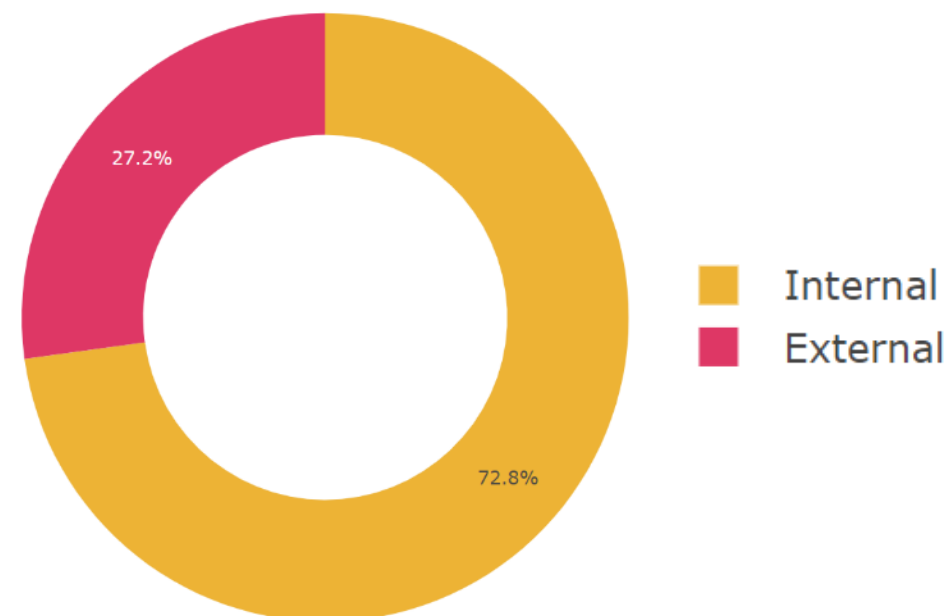
Largest data suppliers are Stats NZ:

- General social survey
- Household economic survey
- Household labour force survey
- Census of Population and Dwellings
- Population estimates

Others:

- Earth System Research Laboratory (ESRL) Global Monitoring Division
- Electoral Commission
- Heritage NZ
- Institute for Health Metrics and Evaluation
- OECD
- Ministry for Primary Industries
- Ministry for the Environment
- Ministry of Business, Innovation and Employment
- Ministry of Education
- Ministry of Health
- Ministry of housing and urban development
- Ministry of Justice
- Transparency International

Sourcing



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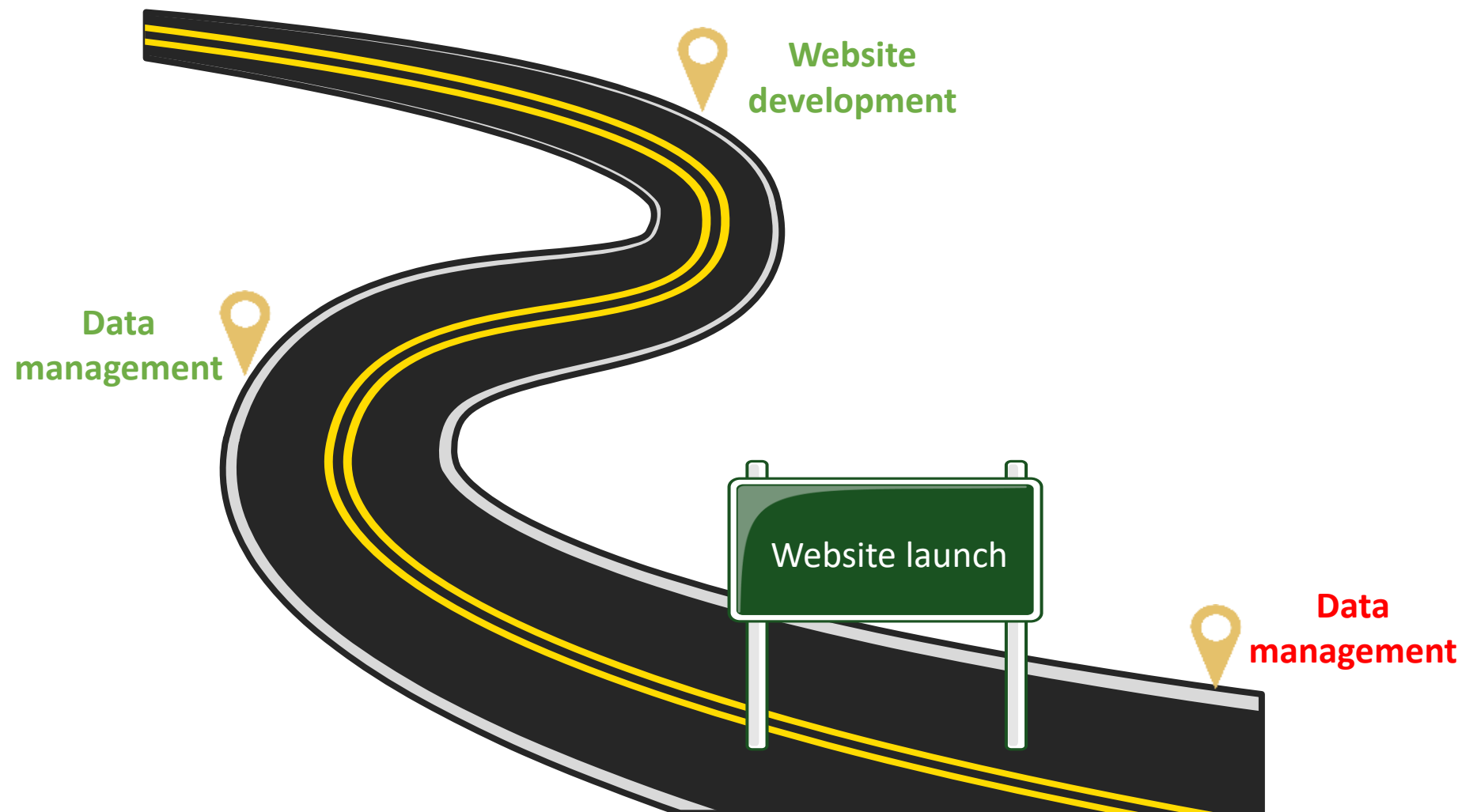
What is
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Workflow and infrastructure

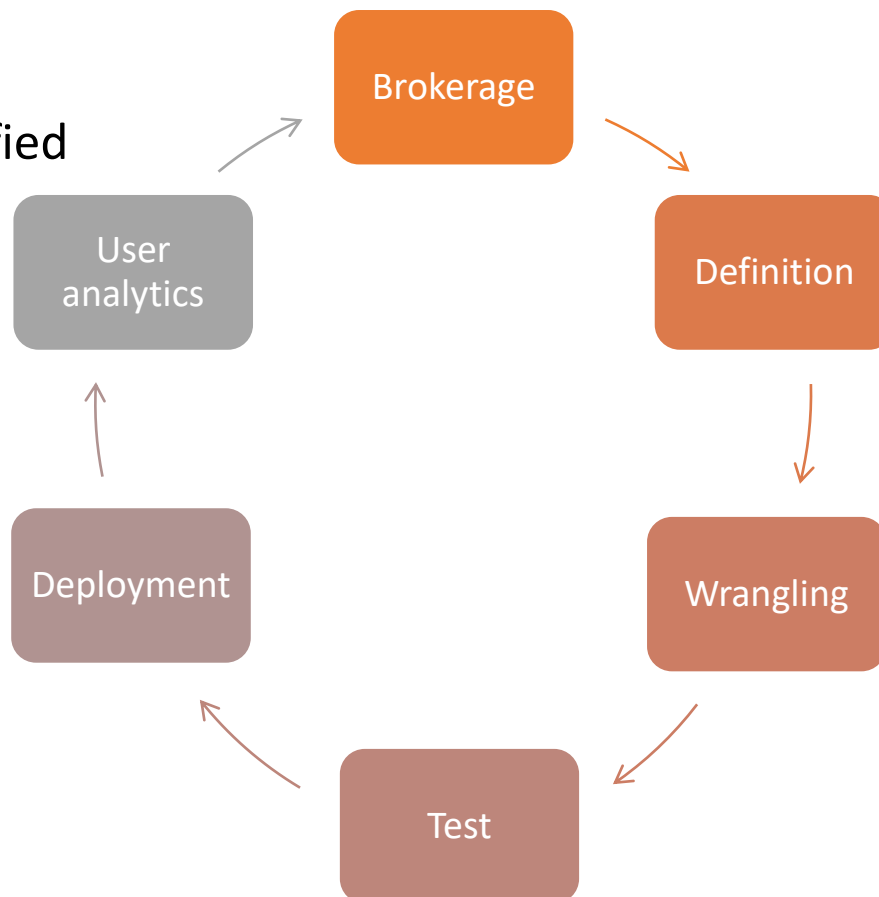


3.
Source
and
publish

... and *what* it takes to keep IANZ living

New indicator:

- New data source identified
- [MoU with supplier](#)
- Define metadata and configuration
- Generate load files
- Deploy in UAT
- [Demo to supplier](#)
- Deploy in PROD
- Google analytics



Update:

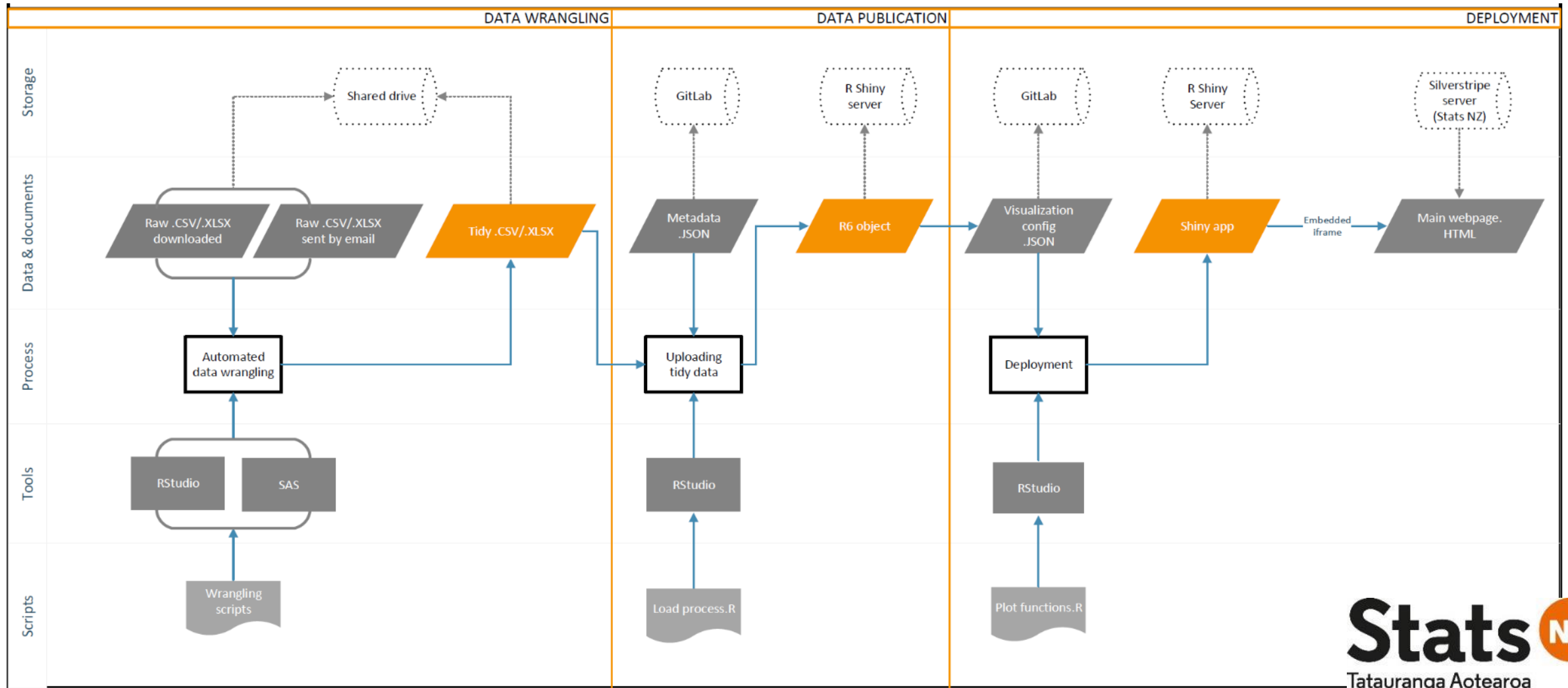
- Updated data available from supplier
- [Check for consistency](#)
- Update metadata and configuration if needed
- Update load files
- Deploy in PROD
- Google analytics

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... and *what* it takes to keep IANZ living

Ngā Tūtohu Aotearoa • Indicators Aotearoa New Zealand

Wellbeing data for New Zealanders

Stats 

About ▾ Framework ▾ Indicators ▾ Search 



Kia ora and welcome

Ngā Tūtohu Aotearoa – Indicators Aotearoa New Zealand presents the big picture of our lives as New Zealanders. More than 100 indicators have been chosen to measure topics. These indicators aim to help all of us monitor progress around our social, cultural, economic, and environmental wellbeing.

The indicators support the government's wellbeing vision to provide a more holistic view of wellbeing and sustainable development than a purely economic measure does.

These measures cover:

- New Zealand's [current wellbeing](#)
- [future wellbeing](#) (what we are leaving behind for future generations)
- the impact New Zealand is having on the rest of the world ([international impacts](#)).

In addition, [contextual indicators](#) are included that provide valuable context to the wellbeing indicators.

[Download data](#)

*He aha te mea nui o te ao?
He tāngata, he tāngata, he tāngata!*




[Chat with Stats NZ now!](#) 

Usability features

- Download data:
 - All indicators
 - Separate indicators
 - By group
- Search:
 - by indicator name
 - by key word
 - by category
- Chat:
 - Information advisor from Customer Support
- **Coming soon:**
 - Te reo Māori version
 - improved accessibility

... and *what* it takes to keep IANZ living

Indicators / Social / Knowledge and skills / Early childhood education participation

Download data



Early childhood education participation

This indicator will show the extent of participation in, and quality of, early childhood education (ECE) in New Zealand. This is associated with positive outcomes in the short and long term.

This measure still needs to be developed.

As a proxy, we have information on the percentage of children in their first year of school who have regularly attended an ECE institution in the six months before starting school.

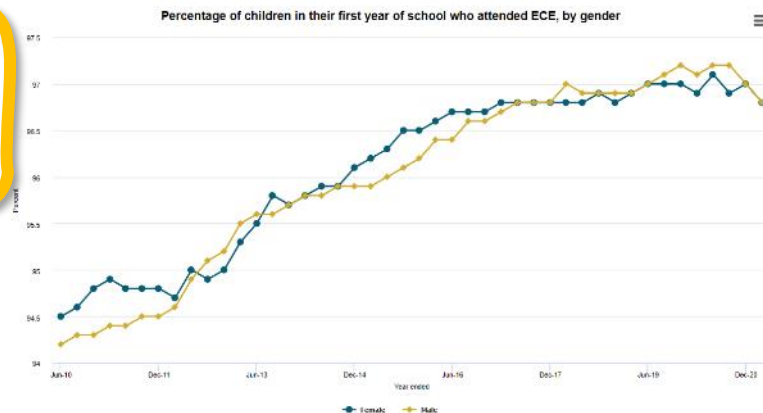
96.8%

of both girls and boys regularly attended an ECE service in the six months before starting school in year ended March 2021.

Select a series

By gender

Total
By ethnic group
By gender



Attended ECE means regularly attended in the six months before starting school.

Source

Ministry of Education, ENROL - the school student enrolment register

Last updated
27 May 2021

Frequency
Quarterly

Usability features

- Description and methodology
- Sub-series:
 - gender/sex
 - age
 - ethnicity
 - region
 - industry
- Link to the source
- Key fact:
 - selects the largest category
- **Coming soon:**
 - next update date

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... and *what* it takes to keep IANZ living



... and *who* is using IANZ

- Major user groups:
 - Decision-makers and consultants
 - Researchers and students
 - NGOs
 - International visitors
 - General public
- Most frequently downloaded indicators:
 - Family wellbeing
 - Life satisfaction
 - Mental health status (psychological distress)
 - Loneliness
 - Ability to be yourself



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... and *who* is using IANZ

The key to IANZ's value is **the alignment with the Sustainable Development Goals** - Many customers are doing work that aligns directly to these, so see this as something that Stats NZ should hold as a **high priority**!



Our customers believe that measuring wellbeing of New Zealand is important and is a **better measure than the GDP for wellness** of the country



... and *who* is using IANZ



Having data gaps was not desirable but allowed our customers to see the **full picture of the framework** and see what we need to build to. They saw the framework as the most valuable part of IANZ. Customers would also **love to help us** fill in the blanks



People look to us for the **gold standard of data**, but they are willing to accept lower than gold standard data as long as we made it clear what **confidence we had in other data**. This would allow them to have *something* to measure.

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... and some use cases

Indicators / Social / Health / Mental health status (psychological distress)

[Download data](#)

Mental health status (psychological distress)

This indicator shows the percentage of people 15 and over who experienced high or very high levels of psychological distress in the past four weeks, using the Kessler psychological distress scale (K10).

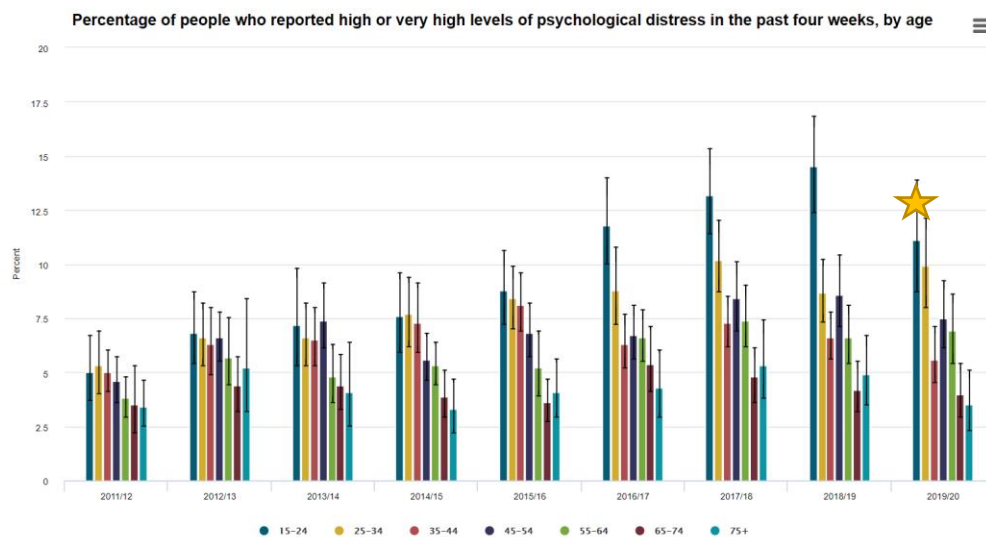
The K10 Scale measures how often a person experiences non-specific psychological distress, such as feeling nervous, depressed, or hopeless in the past four weeks. People who receive a score of 12 or more have a high probability of having an anxiety or depressive disorder.

11.1%

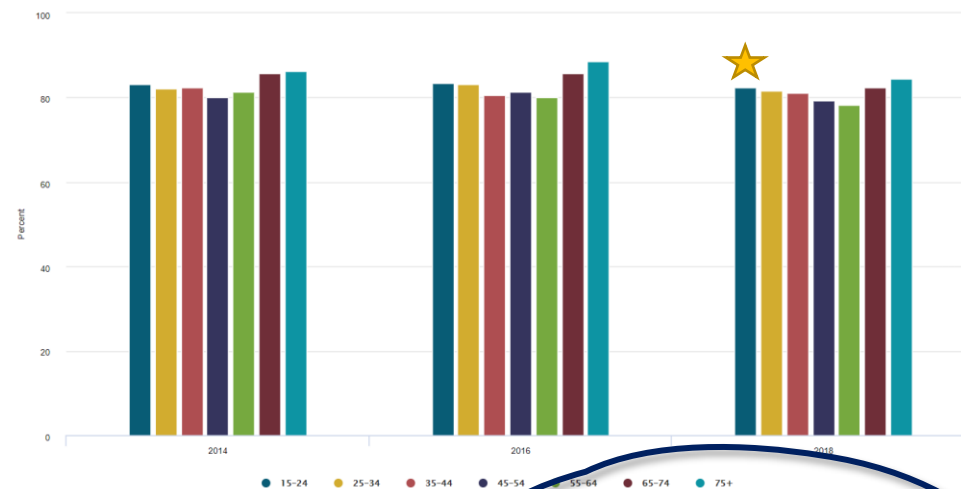
of people aged 15–24 had experienced high or very high levels of psychological distress in the past four weeks in 2019/20.

Select a series

By age



Percentage of people who rated their life satisfaction highly, by age



What's going on across
the age groups?...

24%

of people aged 15–24 reported feeling lonely at least some of the time in the last four weeks in 2018.

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... and some use cases



Hourly earnings

This indicator shows the median hourly earnings for wage and salary workers aged 15 years and over in New Zealand.

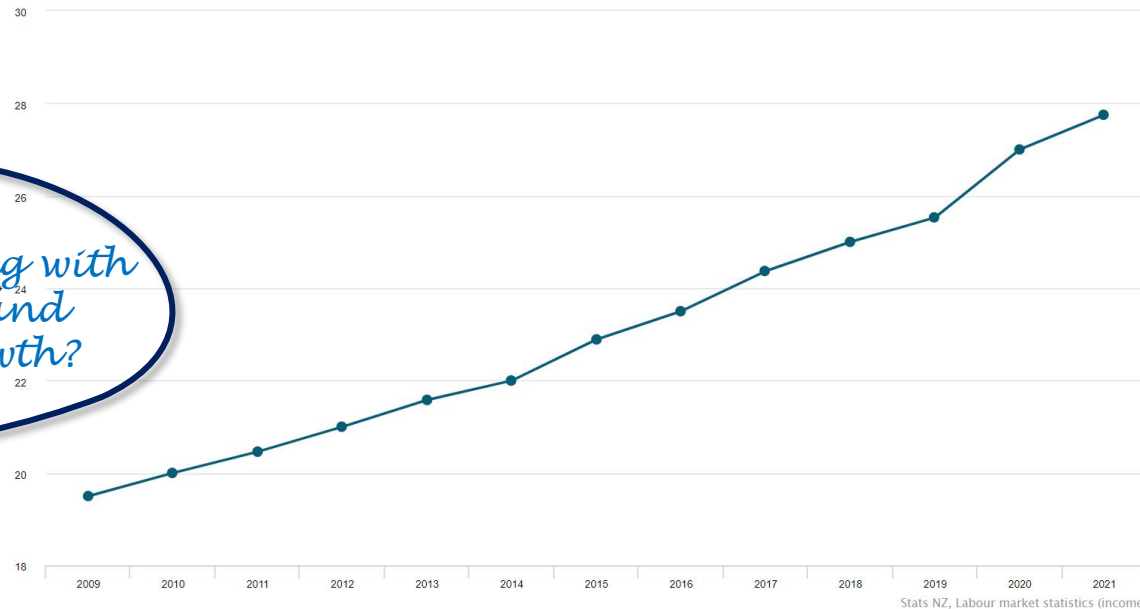
\$27.75

was the median hourly earnings for wage and salary workers in the June quarter of 2021.

Select a series

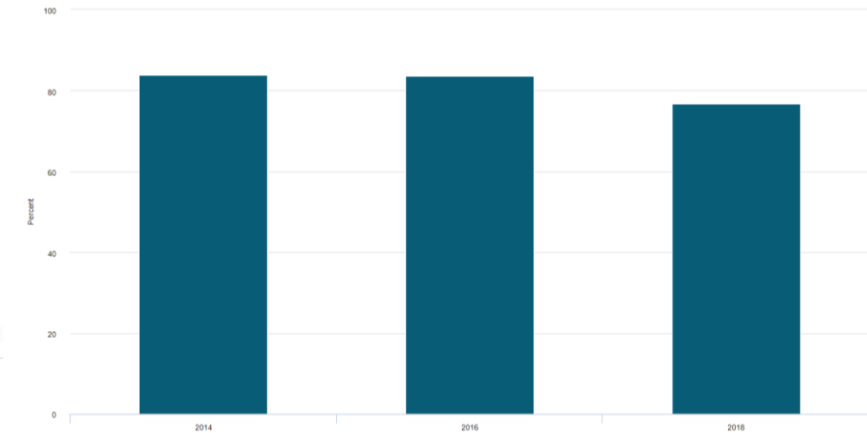
Total

Median hourly earnings for wage and salary workers aged 15 years and over, June quarters

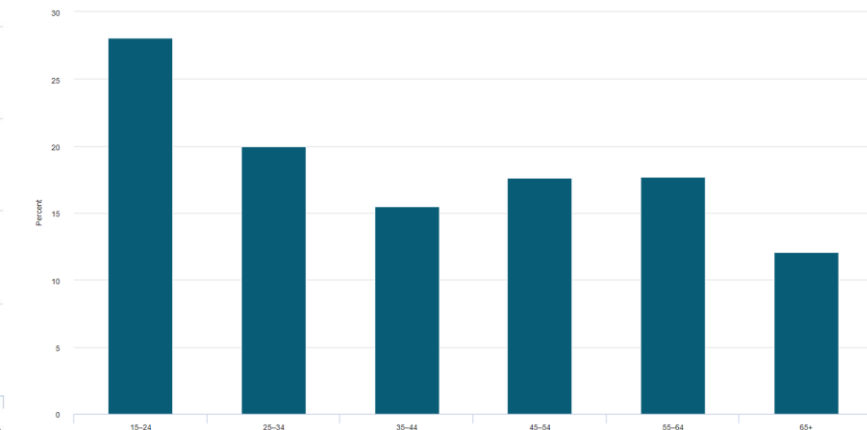


How are we doing with
decent work and
economic growth?

Percentage of employed people who felt satisfied or very satisfied with their job

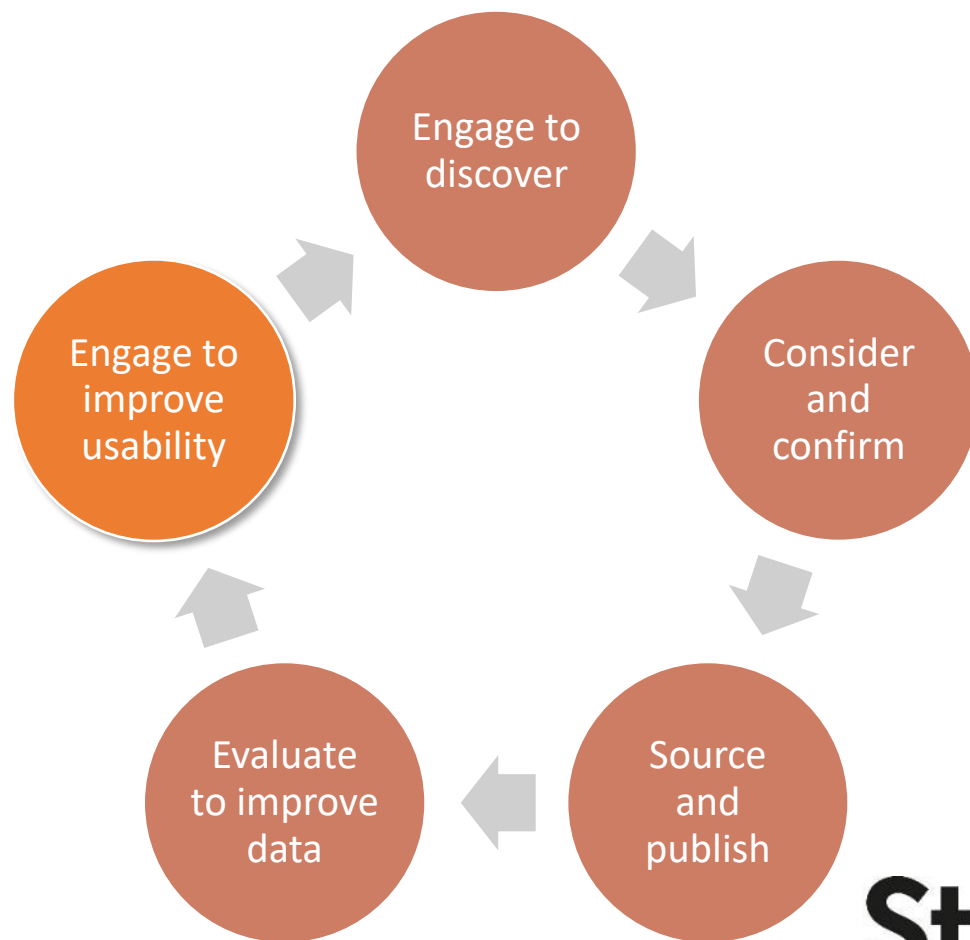


Percentage of employees with job strain, by age group, December 2018 quarter



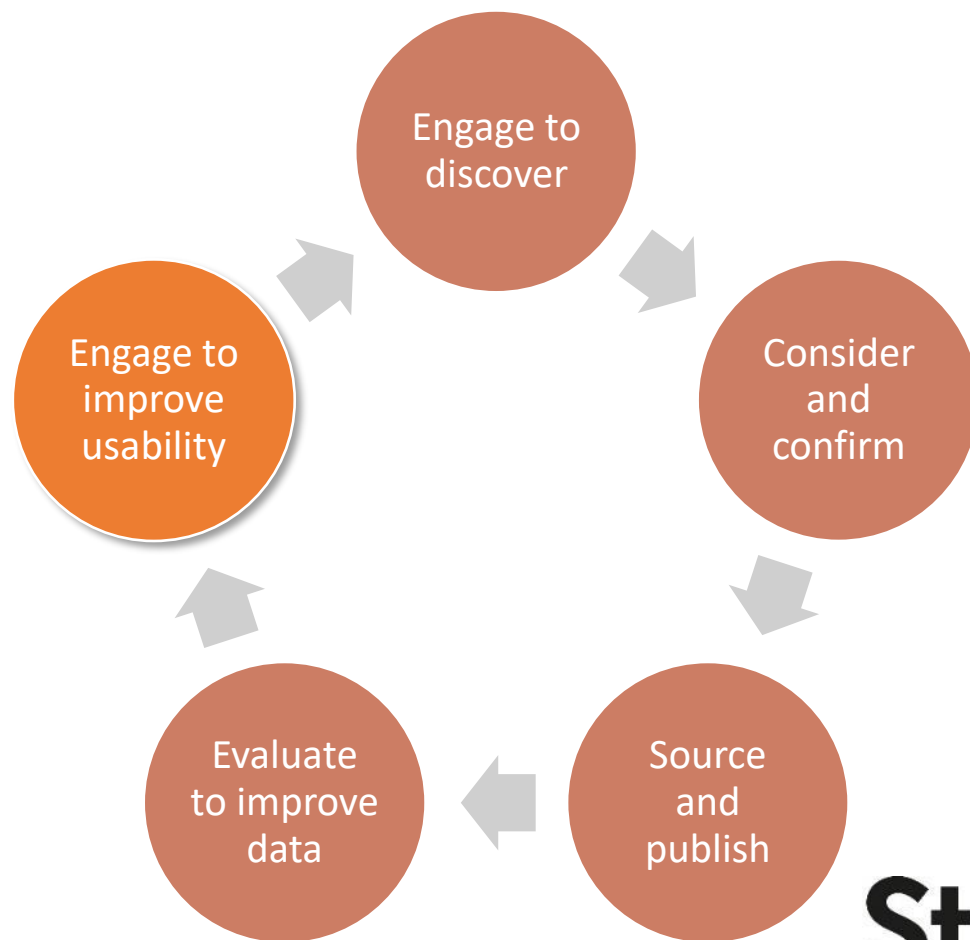
... and *what* is IANZ focus

- Ngā Tūtohu Aotearoa is trying to be all things to all people;
 - Datasets for experienced data users
 - Simple graphs for less experienced with descriptions of each indicator and key facts
- Need to adhere to **strict data standards** that can make the data less interpretable
- Why addressing general public needs is also **important**:
 - Promote change in behaviour and attitude
 - Educate people about the data that influences their lives and who is responsible for it



... and *what* is IANZ focus

- What Ngā Tūtohu Aotearoa **isn't**:
 - A wellbeing framework that can show how different indicators can affect wellbeing
- What Ngā Tūtohu Aotearoa **can do**:
 - Show **changes in individual indicators** that contribute to our overall wellbeing
 - Show a selection of wellbeing indicators that have been rigorously **reviewed** that can be used by others
- What's next?



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... and the pyramid of engagement

Further engagement



Delivered by IANZ



Am I doing enough?

What I can do better?

Where am I?

Are we there yet?

What is in it for me?

Usable by general public

We disseminate the data

We collected the data

We know how to measure it

We know what is important

Need for data recognized

Useful for decision-makers

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... **TOGETHER**

What is in it for me?



- relate
- tell a story

Where am I?



- help users find themselves in data
- make it personal
- **increase granularity**

Are we there yet?



- **measure progress**
- **show the whole picture**

What can I do better?



- give advice and guidance
- define responsibility

Am I doing enough?



- help users monitor their individual contribution

*disability
migration
parent status
sexual identity...*

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... GET IN TOUCH!

Email:

indicators@stats.govt.nz
mark.turner@stats.govt.nz
Maya.Gorbatovsky@stats.govt.nz

*Join our mailing list
to get timely updates!*

GitHub repository:

https://github.com/StatisticsNZ/data_portal

IANZ portal:

<https://statisticsnz.shinyapps.io/wellbeingindicators/>

... *where to from here?*

Auditor-General's report on the **Government's preparedness to implement the sustainable development goals** (31 August, 2021)

<https://oag.parliament.nz/2021/sdgs>.

1. Government needs to **clarify its commitment to the Agenda 2030**, and identify which SDG targets it will aim to achieve.
2. Government should **build on Ngā Tūtohu Aotearoa** and the Living Standards Framework, to ensure they include appropriate indicators and disaggregated data, for monitoring the progress of SDG targets in NZ.
3. Government needs to develop a stakeholder engagement strategy, **to raise awareness of the SDGs**, and set out how government will engage with local government, NGOs, human rights institutions and the private sector about the SDGs.



Overview

Where it all
began...

What is
wellbeing

How we
measure it

How we
communicate

Next steps?...

... Discussion

1 NO
POVERTY



Child poverty

6 CLEAN WATER
AND SANITATION



Drinking-water quality

11 SUSTAINABLE CITIES
AND COMMUNITIES



Levels of pollutants

Victimisation

3 GOOD HEALTH
AND WELL-BEING



Suicide

7 AFFORDABLE AND
CLEAN ENERGY



Energy intensity

Renewable energy

14 LIFE
BELOW WATER



Fish stocks

Ocean acidification

4 QUALITY
EDUCATION



Early childhood education
participation

Literacy, numeracy and
science skills of 15-year-olds

8 DECENT WORK AND
ECONOMIC GROWTH



Hourly earnings

NEET

Workplace accidents

Unemployment

16 PEACE, JUSTICE
AND STRONG
INSTITUTIONS



Feelings of safety

5 GENDER
EQUALITY



Experience of discrimination
Family violence

10 REDUCED
INEQUALITIES



Low income

17 PARTNERSHIPS
FOR THE GOALS



Official development
assistance