# Government management and use of data





Image: © tOrange.biz 2004-2018, licenced CC-BY 4.0, https://torange.biz

IPANZ, 5 & 18 April 2019

Paul Stone, NZ Open Government Data Programme, Stats NZ



# Every time data is reused, more value is realised



#### **Shared Data**

(limited potential reuse between limited parties)

Closed Data
(limited potential reuse within organisation)

#### Open Data (unlimited potential reuse)

Government agencies are custodians of a public data asset, and therefore have a responsibility to maximise the value generated from it.



## NZGOAL



Copyright - is about ownership

Licensing – is the owner giving permission to reuse

Creative Commons – internationally standard licence

NZGOAL – guidance in applying CC licences



Get datasets

Manage data

Use data

Open data

Blog





#### Discover and use data

Search for: 

Website content Datasets

E.g. environment

Q Search

datasets

158 organisations

38 groups



#### Open Data Day 2019 - a New Zealand-wide event

This year, groups from around the country took part in International Open Data Day, working on everything from writing tutorials and feedback, to building front ends, to sharing knowledge and discussing books.



#### Help improve NZ's 12 key datasets for resilience and climate change

As emergency response agencies sift through the embers of the recent Pigeon Valley Fire, the lessons are again clear: reliable information, consistent communication and open data are critical.



#### Our content strategy – why we're here, and what we want to do

In January 2019, we published the content strategy and style guide for data.govt.nz. We'd love to get your feedback.

Guidance

By aimee whitcroft on 1 Mar 2019

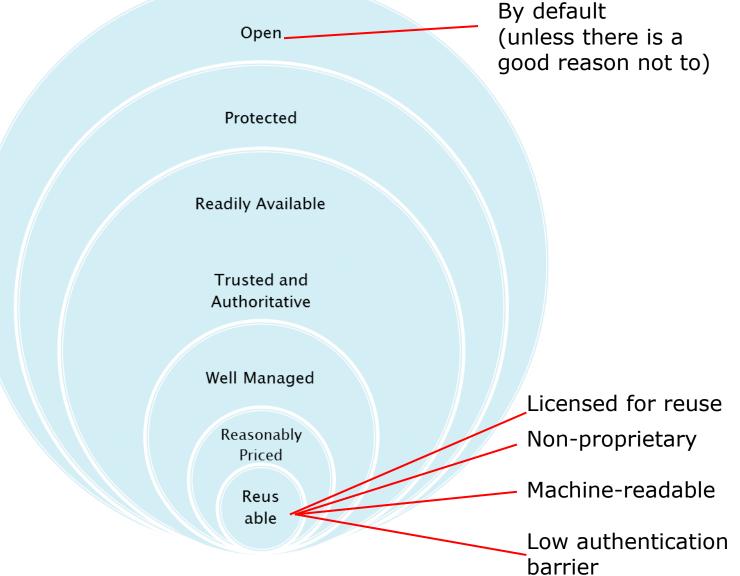


Tatauranga Aotearoa

NZ Data and Information Management

Stats NZ Tatauranga Aotearoa

Principles, 2011





# Foundations for Open Government Data and Information





# NZ Declaration on Open and Transparent Government, 2011



Government agencies to proactively release all publicly funded data that is:

- non-personal and unclassified
- high potential value for re-use
- managed according to the Principles
- licensed for re-use (NZGOAL)
- published on Data.govt.nz



#### open data charter









#### The Charter Principles:

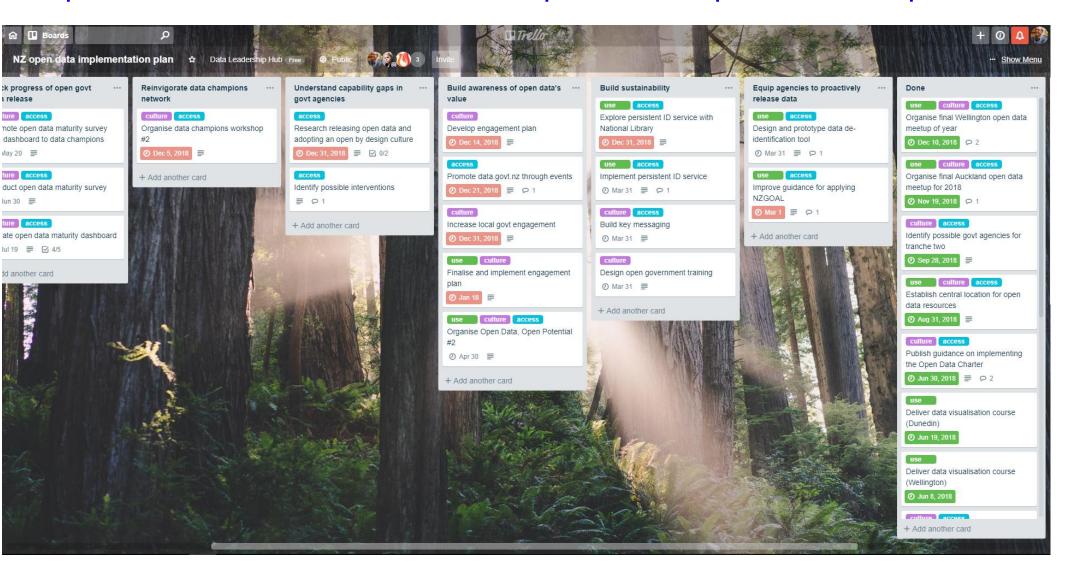
- 1. Open by Default
- 2. Timely and Comprehensive
- 3. Accessible and Usable
- 4. Comparable and interoperable
- 5. For Improved Governance and Citizen Engagement
- 6. For Inclusive Development and Innovation



## Open Data Action Plan



https://trello.com/b/xWQGkQ94/nz-open-data-implementation-plan





#### Government Chief Data Steward



#### The GCDS is:

- Setting the strategic direction for government's data management
- Leading New Zealand's state sector's response to new and emerging data issues
- Co-developing a Data Stewardship Framework to enable agencies to manage data as a strategic asset and benchmark their data maturity
- Leading the government's commitment to accelerating the release of open data.

https://www.data.govt.nz/about/government-chief-data-steward-





#### GCDS: What's a happening?...



- developing a Data Stewardship Framework
- setting up a cost recovery Data & Analytics
   Consultancy
- developing an Operational Data Governance
   Framework
- developing a Data Capability Framework



### GCDS: What's a happening?...



- accelerating Data Inventories across government
- publishing guidance on data.govt.nz
- establishing an Advisory Group on Trusted Data
   Use
- Data Confidentiality as a Service (DCaaS)





# So what open data has been released?...





The Census

**Statistics** on business; economic indicators; education & training; environment; government finance; health; income & work; People & communities

Land – titles; parcels; roads; elevation & other topographic layers

Vegetation cover

Soil types





Traffic counts

Pedestrian counts

River flow

Water quality, air quality

Capture of seabird, marine mammal & turtle bycatch in trawl fisheries

Family services directory





Location of facilities and infrastructure – like sewer pipes; water pipes; storm water; broadband; wi-fi; libraries; public toilets; bus stops; train stations; bus routes and schedules; parks and reserves; campsites; recreation centres; community halls

Resource consents

district plan zones

locations of hazardous substances





Discharge to land & air

Human effluent discharge

Mudfish habitat

Water use

#### Legislation

walking tracks

Cycle tracks





Tsunami zones

Fault lines

Earthquake occurrences

Floodways

Water catchments

Road assets such as bridges, signage, carparks, speed zones

Historic places



Stats NZ

Digital archive and museum collections

Location of schools & school zones

Location of animal species

Aerial imagery

Sunshine hours, rainfall & wind statistics

**UV** index

Melanoma rates

Ocean acidification





Lightning strikes

Ozone concentrations

Sea surface temperatures

Greenhouse gas emissions

Glacier ice volumes

Fishery observations

Predicted capture of fish species





Company details

Register of Charities and their financial returns

Government policy consultations

Mineral and coal permits

Government grants to social services, arts and cultural organisations

Lotteries revenue and allocation





Marine mammal sanctuaries

Seafood export values

Tourist volumes and spend

Soil moisture

Dog registrations

Liquor ban areas

Property Sales data





Cemetery plots

Defence Force service and medals

Building outlines

Alcohol licences

Building consents

Property revaluations

Plant pest surveillance





Crime statistics

Tax statistics

State sector remuneration

Public service capability

Gender stocktake of sector boards and committees

Electricity market information

prison statistics



Stats NZ

Public perceptions towards cyber crime

Electoral enrolment and voting statistics

Budget and fiscal updates from Treasury

Social housing register

Vehicles registration

Women's suffrage petition

Most popular male and female names

Market rents...

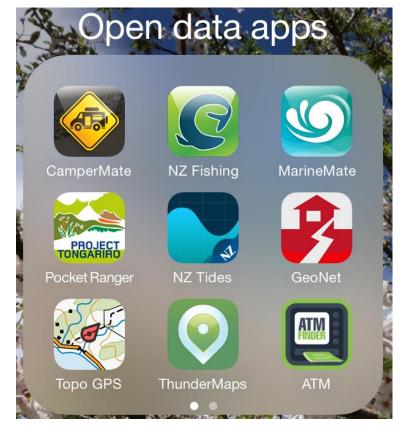




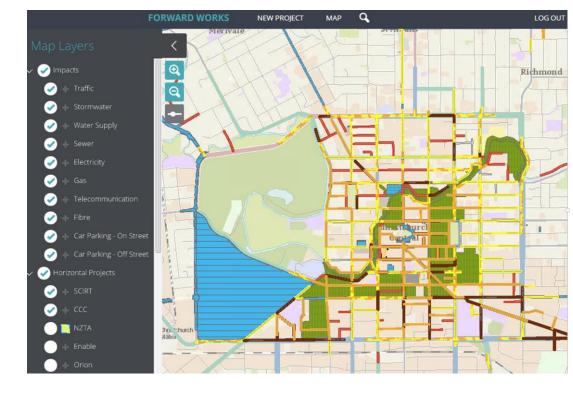
# So how is open data being used?...



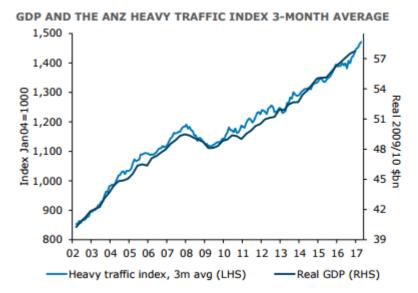
## New products and services Interaction



#### Interactive - How NCEA has evolved Achievement rate since 2008 in 20 subjects for all deciles and NCEA levels. Externally Assessed Internally Assessed Circle size shows number of entries' Unit Standard Select Subject NCEA Level 1 ▼ Overall % achieving 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% 2012 **TOMTOM**



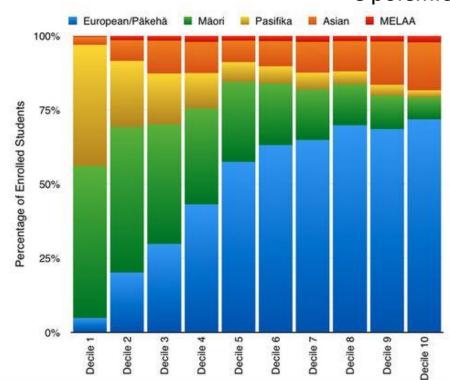
#### ANZ TRUCKOMETER

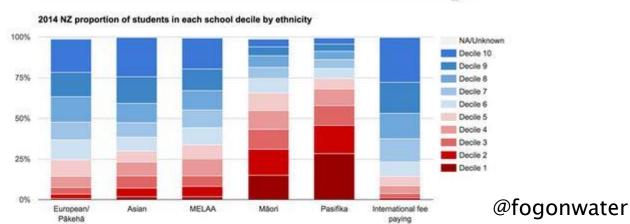


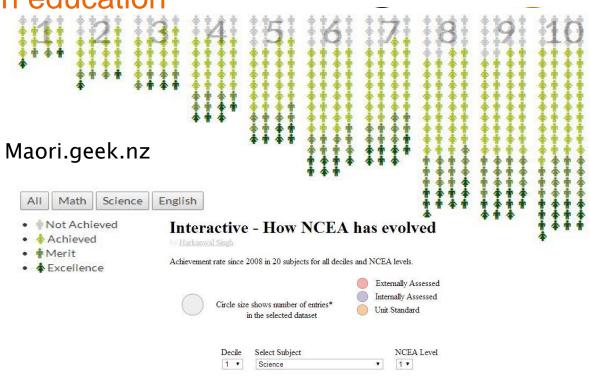


Visualisation and public debate in the media on education

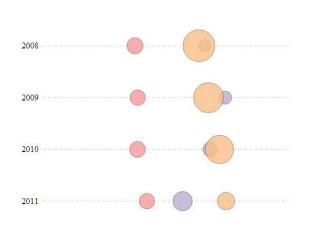










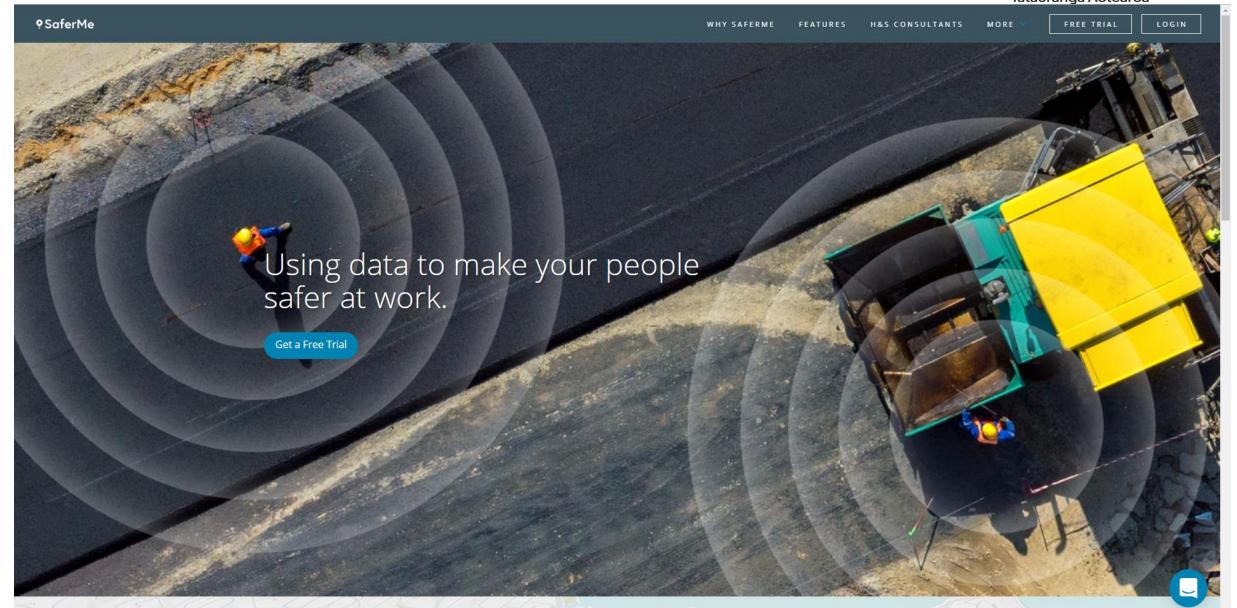






## Health & Safety (SaferMe)





### Supporting communities (CCS Disability)





HOME > MOBILITY PARKING > ACCESS AWARE

## The FREE Access Aware app is now live in Christchurch and Wellington!

The Access Aware app was developed in partnership with <u>ThunderMaps</u> and is a world first initiative set to revolutionise the reporting and enforcement of mobility parking abuse.

#### 



#### Help build a more accessible Aotearoa

Start by reporting mobility parking misuse **Download Access Aware today** 





#### Pixar: The Good Dinosaur





Open data from the US Geological Survey (topographical and landcover data) used to more efficiently render large landscapes

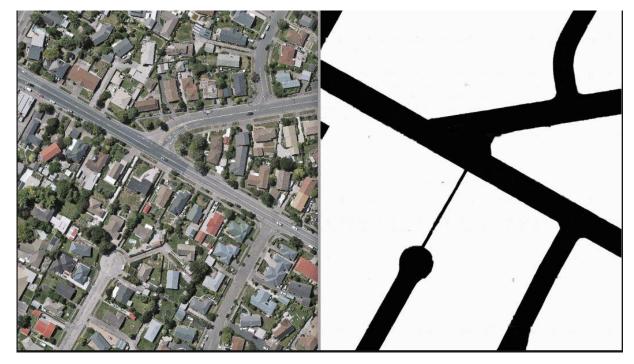
# Using AI on open data to generate more data





From aerial photography data to lean building and road outline data



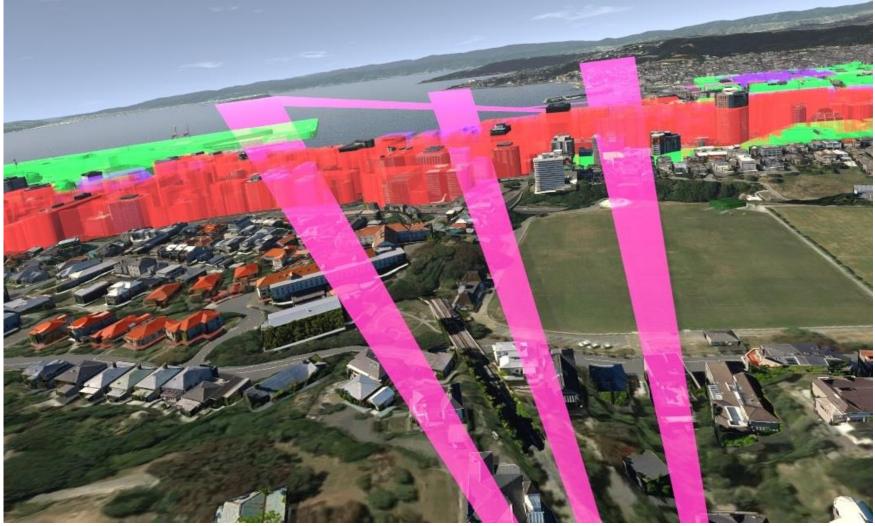




## 3D Virtual reality data (Wellington City

Council)





Wellington's District Plan controls for the central area seen from the top of the Kelburn Cable Car



## 3D Virtual reality data (Wellington City

Council)





Visualise the impact of sea level rise (using the land elevation)



## Contact



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