




Starting soon...

# Aotearoa Property Data Network

*hosted by Toitū Te Whenua LINZ*

Second Meeting; 1-3pm, Thursday 4th August 2022

**Facilitator: Ben Reilly**  
Customer Relationship Manager – Property Data



**Whatungarongaro te tangata  
toitū te whenua.**

**People come and go,  
but the land remains.**

## Te Whenua karakia

It is traditional in Māori culture to end or begin hui with a karakia. While not mandatory, the Toitū Te Whenua karakia can be used in any meeting, especially when you have guests or external visitors as participants.

# Karakia: Toitū Te Whenua

**Whāia te mātauranga kia mārama, kia  
tupu, kia tiaki ngā whenua, ngā moana,  
ngā arawai**

Pursue knowledge for understanding,  
developing and caring for the lands, bodies of  
water and waterways

**Kia whai take ngā mahi katoa**

Seek purpose in all that we do

**Aroha atu aroha mai, tātou i a tātou**

Let us show respect for each other

**Toi te kupu**

Hold fast to our language

**Toi te mana**

Hold fast to our spiritual strength

**Toitū te whenua**

Sustain the land

**Haumi ē, hui ē, tāiki ē!**

Gather and go forward together

# Agenda

## Proposed discussion items

1pm-1:10	Welcome & opening remarks
1:10-1:35	LINZ News & Updates
1:35-1:55	Property Spine: Stats NZ Pilot
1:55-2:15	Pātaka Whenua: replacement for Māori Land Information System and Māori Landonline
2:15-2:35	Geospatial Data in Response & Recovery, Edgecumbe Flood Case Study
2:35-2:55	LINZ Data Review & Data Strategy
2:55-3pm	Closing remarks



# LINZ News & Product Updates

# Section Contents

- **NZ Addresses** update (*Trent Gulliver*)
- **NZ Localities** survey results and next steps (*Susan Shaw*)
- **NZ Property Titles including Owners** – update (*Susan Shaw*)
- **Notice of Change** update, XML working group, API roadmap (*Mike Webster*)
- **NZ Properties Hybrid** our best representation of a property boundary (*Greg Byrom*)
- **Property Data Management Framework** (*Mike Judd*)

# NZ Addresses

**A more comprehensive national address dataset for New Zealand.**

Comprises AIMS addresses

plus

allocated addresses  
previously missing from AIMS.



# NZ Addresses

	NZ Street Address	NZ Addresses
Address Count	2,148,920	2,283,830
NZ Localities – NZGB Compliant Names	No	Yes
Territorial Authority	No	Yes



# NZ Addresses

To become the national, authoritative dataset for physical addresses, replacing NZ Street Address.

Launch date to be confirmed.

NZ Street Address to remain available for a time.

# NZ Addresses

Watch this space...

# NZ Localities



**NZ Localities**

**Customer Survey  
Results**



# Response





# Feedback

**Majority of users  
trust NZ Localities**

**Top issues:**

- **discoverability**
- **ease of use**
- **data structure**

**Current data  
structure is not  
intuitive**

**Less is more**

**Support the move  
to LINZ**



## Data Improvements

**88%**

Support for single name  
and Territorial Authority

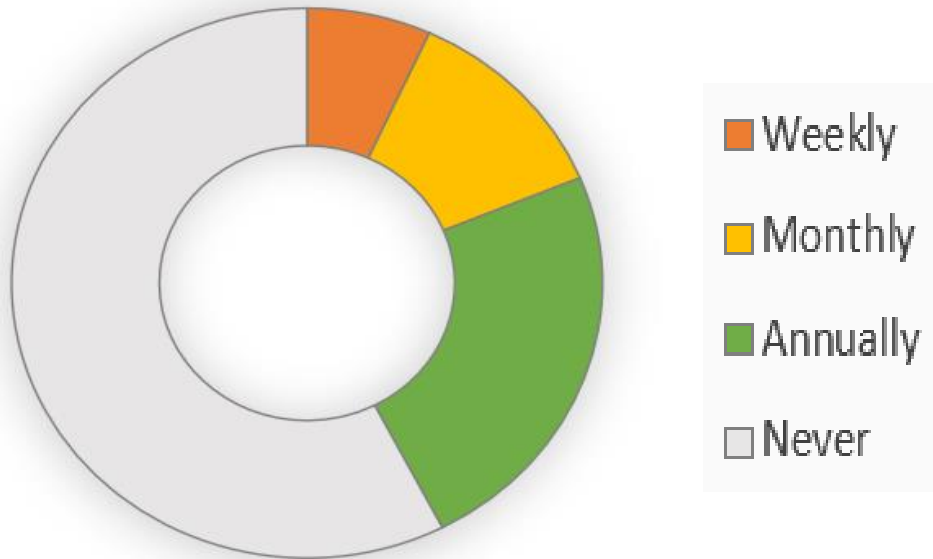
**68%**

Support for official place  
names and macrons



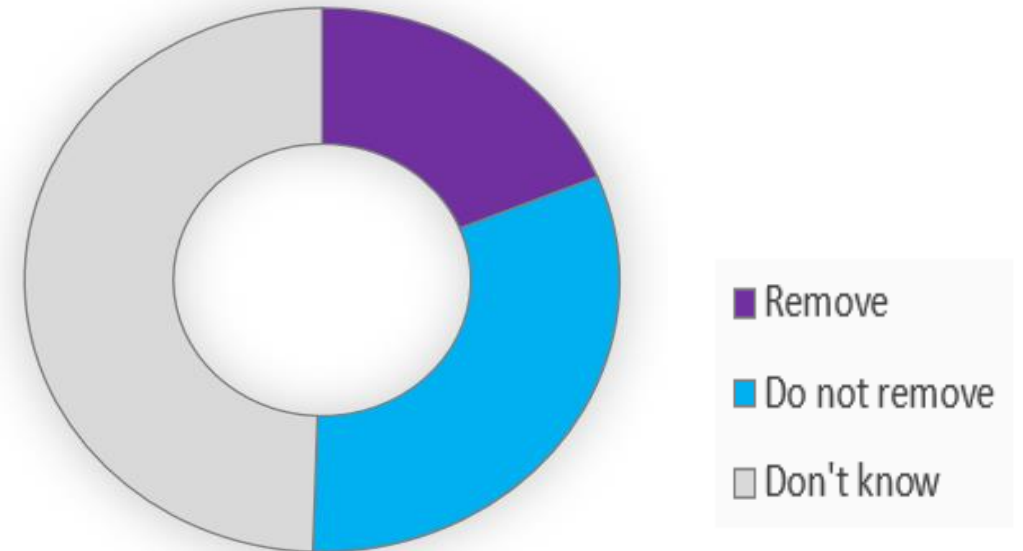
# Related Tables

Related tables are regularly used by 20% of users



How often do you use related tables?

30% of users do not want to remove related tables



Should related tables be removed?





# Suggestions

**Make it easier to  
request a boundary  
change**

**Show official and  
common in use  
names**

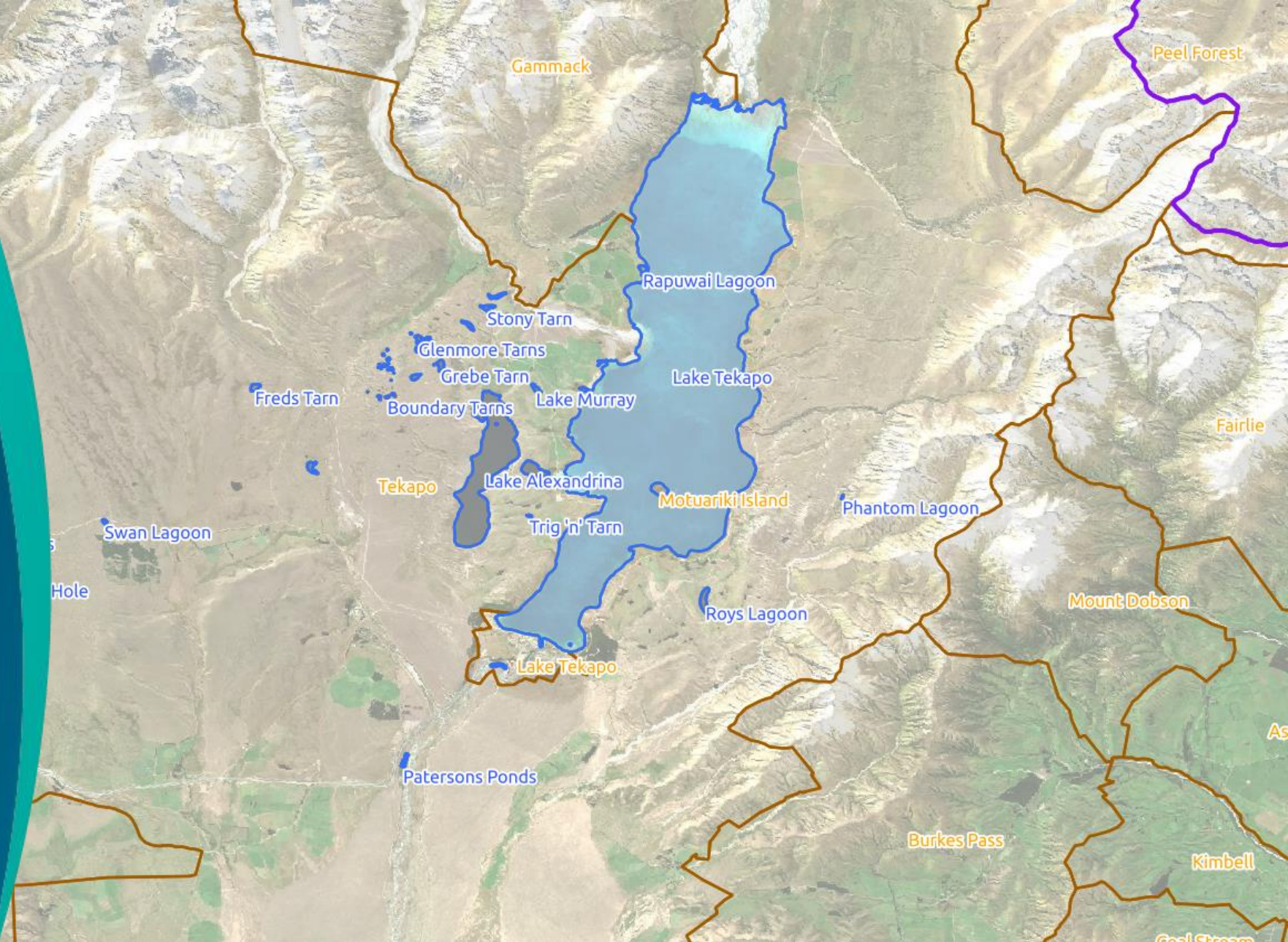
**Align with other admin  
boundaries**

**Involve Councils in  
change process**

**Remove lakes**




# Lakes & Tarns



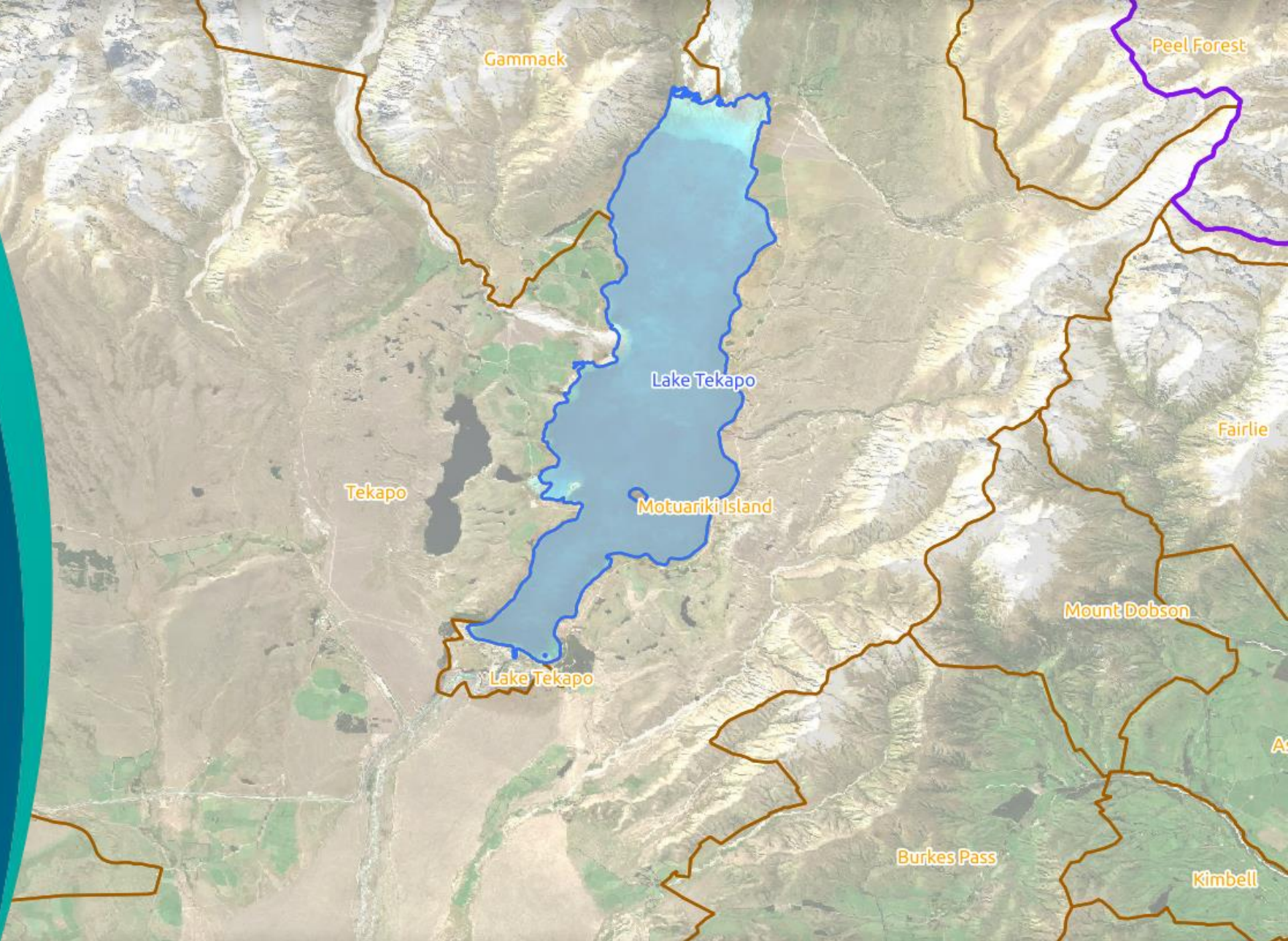


# Lakes & Tarns

 NZ Lake Polygons (Topo, 1:50k)  
National Topographic Office

+

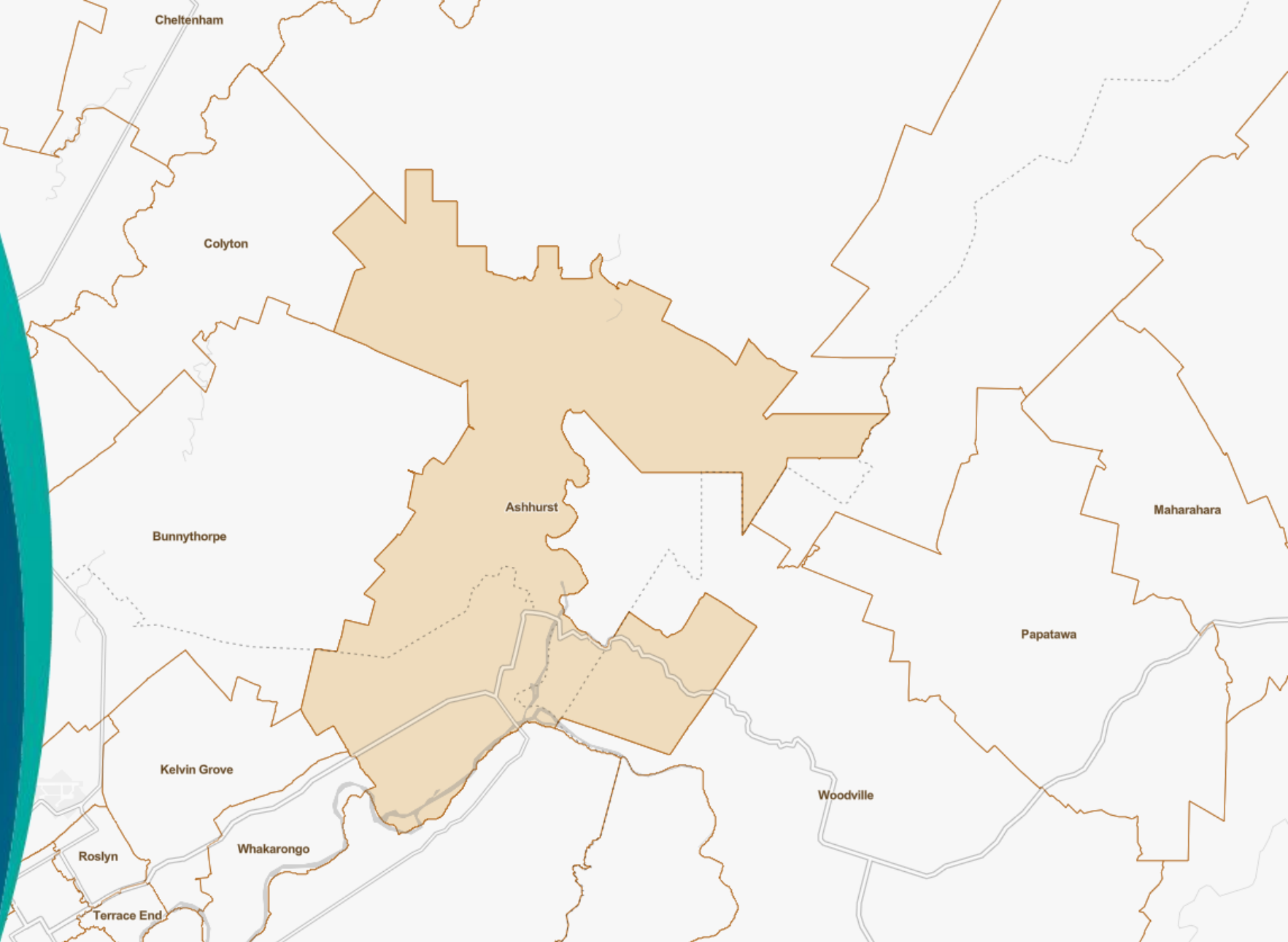
Licence 40151 9045 Updated 04 May 2022





# Territorial Authority

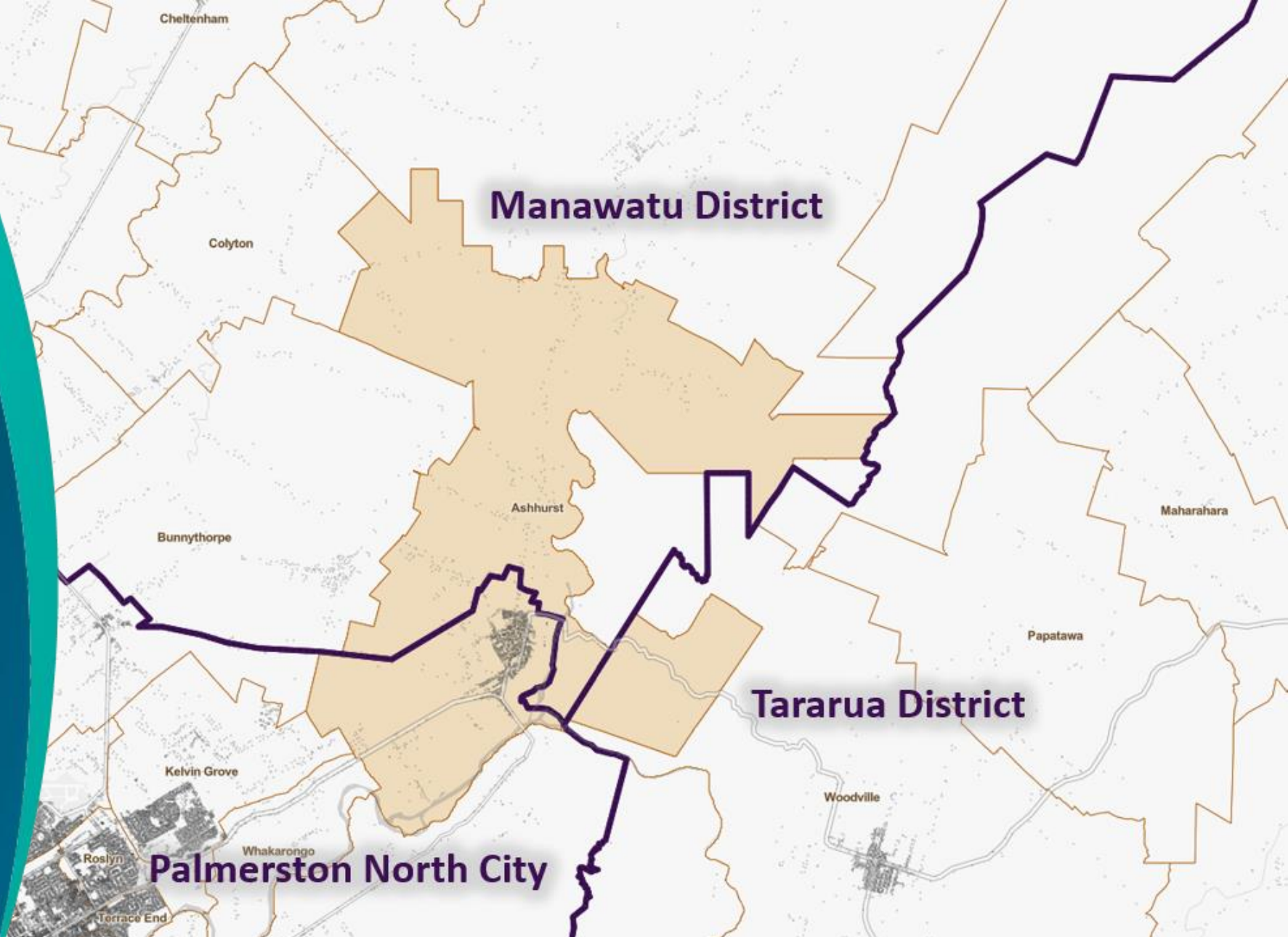
Ashhurst Suburb





# Territorial Authority

Ashhurst Suburb



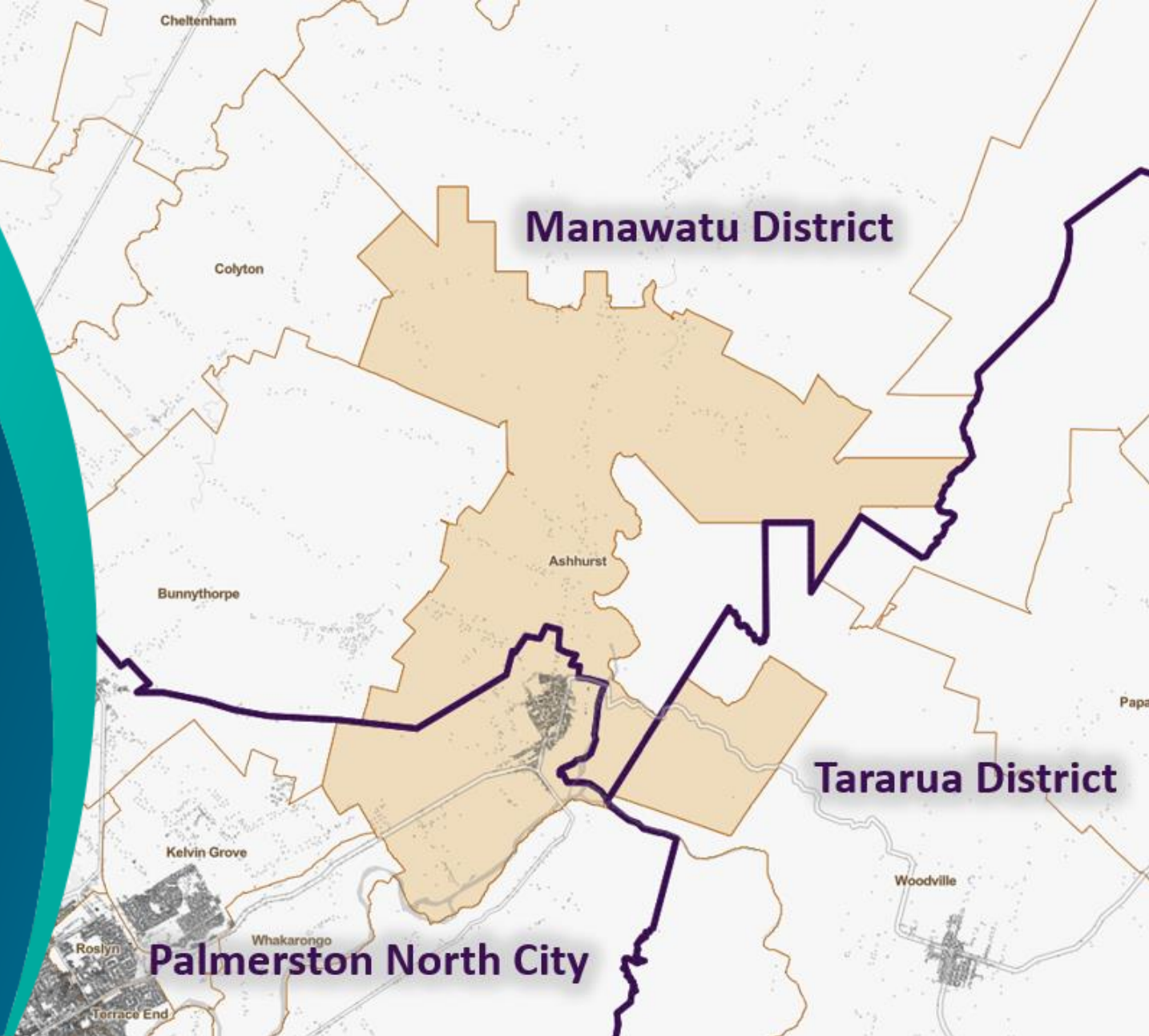
## Ashhurst Suburb

**Largest Area:**  
Manawatu District

**Highest Population:**  
Palmerston North District

**List all TAs:**  
Manawatu District, Palmerston North District, Tararua District

**Create a related table for TAs**



# NZ Property Titles Including Owners



- ✓ Layer is in ArcGIS Online
- ✓ Agreed restricted access process
  - Registrar General of Land to approve
  - User testing



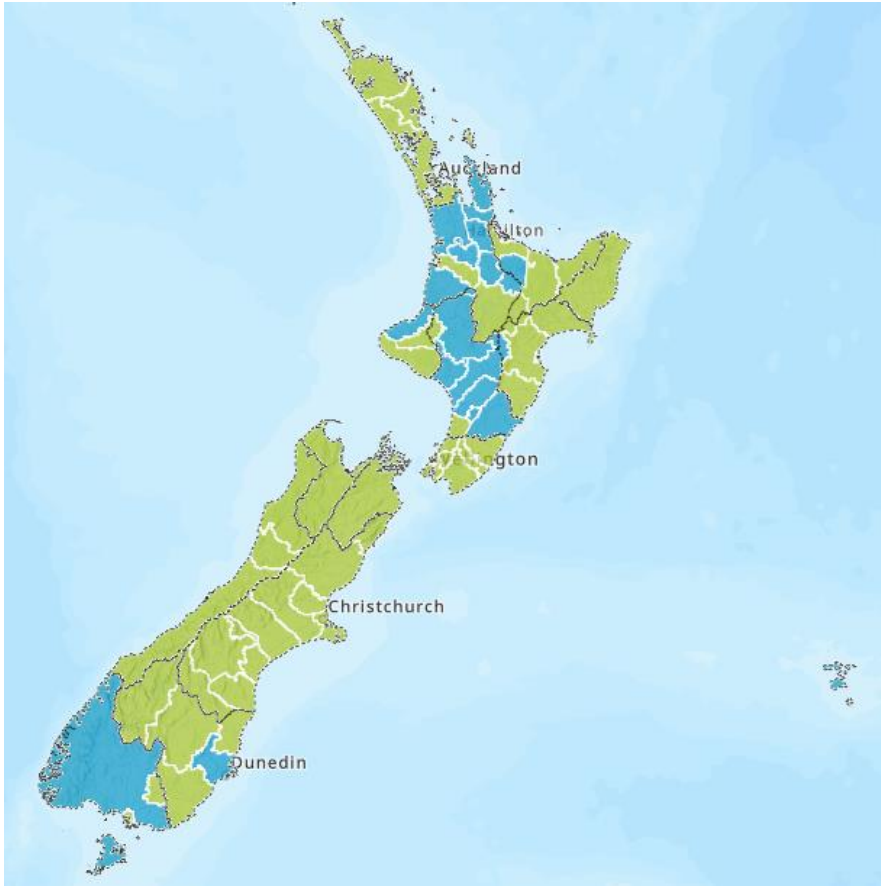
## Summary

- NZ Suburbs and Localities (Pilot) in progress
- NZ Localities will remain in place for a time
- Please share your feedback during pilot
- Property Tiles including Owners as ArcGIS REST service coming soon



# Notice of Change

## By the numbers



- **70,000+** NOC created so far
- **79%** of NZ by population able to benefit from the service as at 30/7
- **10** minutes average time saving per transaction for conveyancers using NOC
- **4,540** Solicitors using the service

# Notice of Change

## XML Working Group progress



Several TAs are meeting to discuss use of XML and in the future APIs for data sharing:

- Auckland
- Central Otago DC
- Christchurch CC
- Tauranga CC
- Wellington CC

API development is still some way off given there are still some Councils yet to come onboard with the service

# Property IDs – NZ Properties

- NZ Properties Pilot on the LINZ Data Service, introduces a property ID called "Unit of Property ID".
- Applied to properties in the layer "NZ Properties - Unit of Property".
  - Current properties are a representation of rating units, derived from the District Valuation Roll data from councils.
  - In future this will be expanded to include other perspectives of property.
  - The ID is separate from the Valuation Reference to allow for this.
  - We have applied this ID also to the National District Valuation Roll table in NZ Properties Pilot

Toitū Te Whenua  
Land Information  
New Zealand  
LINZ DATA SERVICE

Search for data & maps Search Help Greg Byrom

NZ Properties: Unit of Property  
NZ Properties

Updated 28 Jul 2022  
Licence 765 43

About Metadata Data Table Analytics History Services Comments (0)

This pilot dataset provides a representation of the boundaries of all known properties in New Zealand. It consists of a unique identifier for a property, with spatial property boundaries, but no additional attribution. Each spatial object in this table has an assigned unit\_of\_property\_id, and is created using land parcels and the Landonline: Title Parcel Associations table. This dataset delivers spatial representations of property boundaries for use in mapping products where only a boundary needs to be displayed.

Initially this table is derived using rating units, as defined by the Rating Unit table. Other property perspectives, as listed in the table, are also available.

The table is updated on a weekly basis.

Provide feedback  
Please provide feedback on the provided data.

Related tables  
Together with the NZ Properties: Property table, this table provides a comprehensive view of the National DVR.

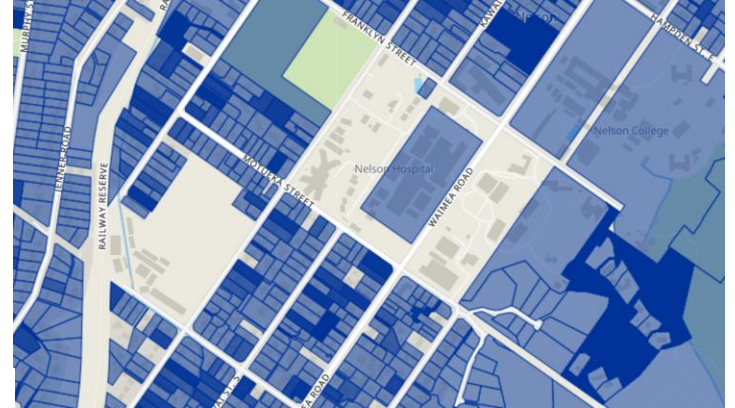
Please refer to the NZ Properties Data Table and its relationships to other tables in the LINZ Data Service.

Please note:  
For central government customers, the "license" relating to conditions of use in the "Agreement" section in the Agreement for National DVR Data.

unit_of_property_id	2002099876
0.0m	
7.0m	
9.0m	

# NZ Properties Hybrid

- Unit of Property layer contains gaps:
  - Currently only deals with titled land in the District Valuation Roll. State land, Māori land, etc. are future work.
- We are developing a temporary, hybrid, interim dataset:
  - NZ Properties Unit of Property layer – highest level definition of property.
  - NZ Property Titles – for titled land not referenced in the Unit of Property layer.
  - NZ Primary Parcels – for all other land.
- Percentage of titles and parcels will reduce over time as we work to fill the gaps in the Unit of Property layer.
- Same access and use conditions as NZ Properties: Unit of Property.
- Yet to develop a timeframe – will keep you posted.



# Property Data Management Framework

- Release 1.2 in preparation, likely September 2022.
- Includes some user feedback, and some material from the recent LINZ/StatsNZ Property Spine project

*New section for composite properties*

*New content for dwellings*

*Some rules for connecting buildings*

*Unit of Property: some rules and constraints, and some new content on property ID's*

*Change to Record of Occupation*

*Brief comment on spatial polygon integration*

- All ideas/comments/help welcome... "community standard"
- Webpage: <https://www.linz.govt.nz/property-data-management-framework>
- Contact: Mike Judd, mjudd@linz.govt.nz

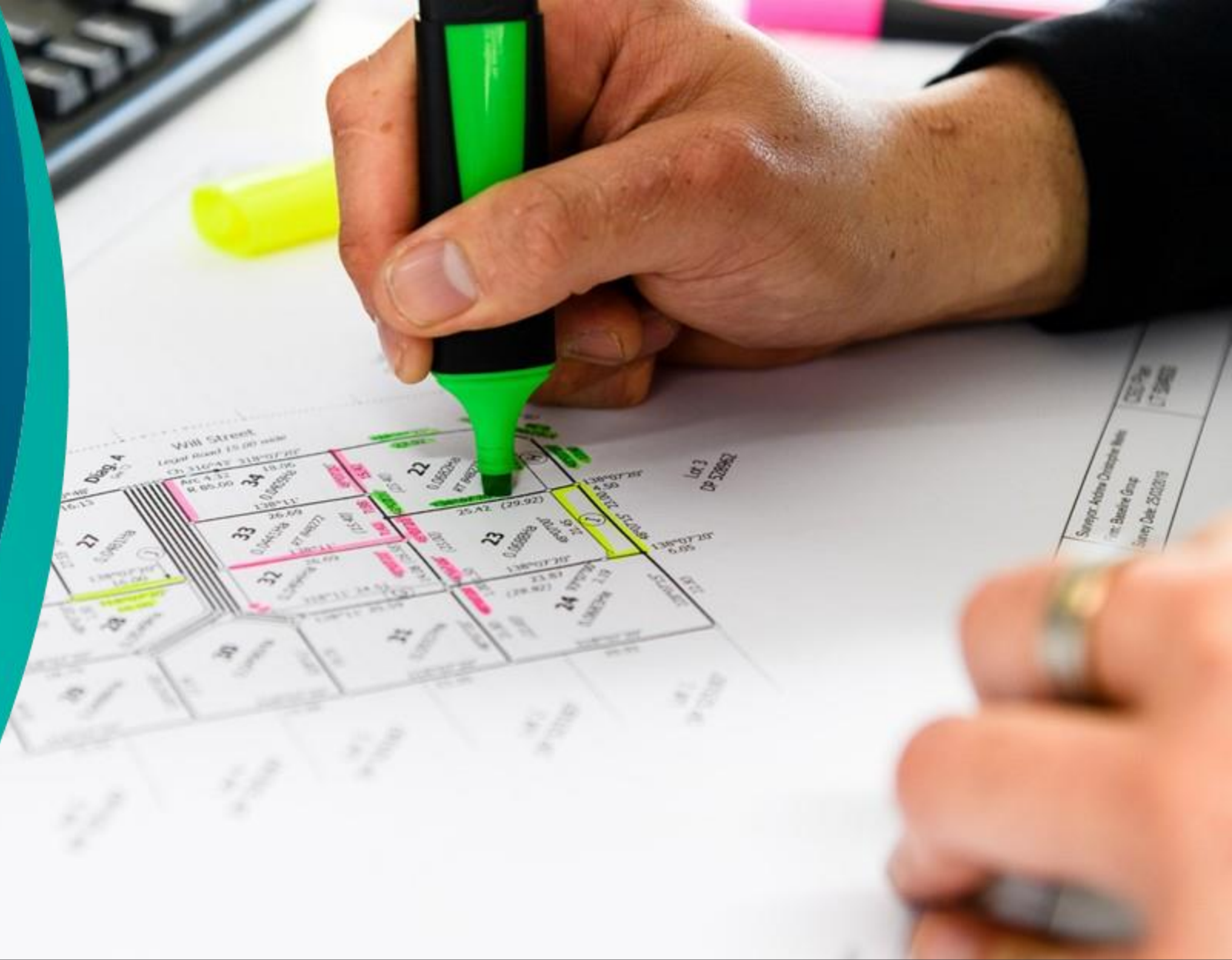


# Property Spine - Stats NZ Pilot

📷 Credit: Name



# Pātaka Whenua: replacement for Māori Land Information System and Māori Landonline



📷 Credit: Name

# Te Kooti Whenua Māori Māori Land Court

Toitū Te Whenua Land Information New Zealand

Property Data Network

4 August 2022



# Māori Land Information System (MLIS)

- Current system (since 1999)
- Majority of court paper records were entered into the MLIS in 1999-2000
- Holds all land data
  - Block title information
  - Ownerships
  - Trusts/Māori Incorporations
  - Case management

# Māori Land Online (MLOL)

- Launched in 2004
- Displays land title data from MLIS
- Uses data from LINZ to display parcel information
- Uses Google Maps to display the GIS information
- While it displays land title data, i.e. owners and ownerships, memorial schedule information, references for documents (court minutes, orders etc)
- To view or receive a copy of the document you must visit an office of the Māori Land Court or request it be sent to you

# New Legislation – Amendments to Te Ture Whenua Māori Act 1993

- Effective from 6 February 2021
- Introduced a new mediation service
- Extended jurisdiction of Judges and Registrars
- Empowers the court to order a survey of a block
- Improved accessibility to the court and its services
- Recognised that the current system cannot support the changes introduced by the amendments to the Act

# Pātaka Whenua

Dashboard

Block Map

Search >

## Kia ora

Nau mai ki Te Kōti Whenua Māori.

Register

Login

Welcome to Māori Land Court online services. Here you can:

- **ask us a question** - use the 'submit enquiry' button below
- **access Māori land information** - use the menu on the left to search Māori land blocks, land ownership, and trusts, and to view Court documents
- **file a Court application** - either use the button above to register with us before you start (so you can save your application and come back to finish it later), or continue as a guest user using the button below

You can make these applications online:

- Succession (when grant of administration held)
- Succession (when no grant of administration held)
- Transmission by survivorship or determination of life interest
- Vesting order
- Constitute a whānau trust
- Constitute an ahu whenua trust
- Add, replace, or remove trustees
- Occupation order
- Dispute resolution
- Application to the Chief Judge to remedy a mistake or omission in the Court record
- Search for a person's interests
- Succession to further interests
- Review trust
- Vary a trust
- Terminate a trust
- Vest land in trustees
- Enforce obligations of trust
- Change your name in our records

For any other application, please download the relevant application form [from our website](#) or visit your nearest MLC office.

Submit application as guest user

Submit enquiry

# Pātaka Whenua

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Pātaka Whenua concept includes:

- Web based application
- Tailored to support the new court processes and requirements
- Combines MLIS and MLOL
- Displays all Land Title Information
- Including GIS data
- Users can submit applications/enquiries via a web portal
- Registered users can track their application
- Users can view court minutes and orders

# Geospatial Data in Response & Recovery

Edgecumbe Floods Case Study

Glen Clarkin and Casey Box



An aerial photograph showing a residential area in Edgumbe, South Africa, severely flooded in April 2017. The image shows numerous houses with various roof colors (blue, red, green, grey) surrounded by brown, turbulent floodwater. A large, tall, thin tree stands prominently on the right side. The floodwater has inundated the yards and streets, leaving only the roofs and some trees visible above the surface. A small boat is seen in the water on the left side of the image.

# Edgumbe Floods April 2017

# What Happened?

Cyclones Debbie & Cook within 7 days of each other

Rangitāiki River breach

Inundation and evacuation of Edgecumbe township

1 in 200-year flood





# Geospatial data

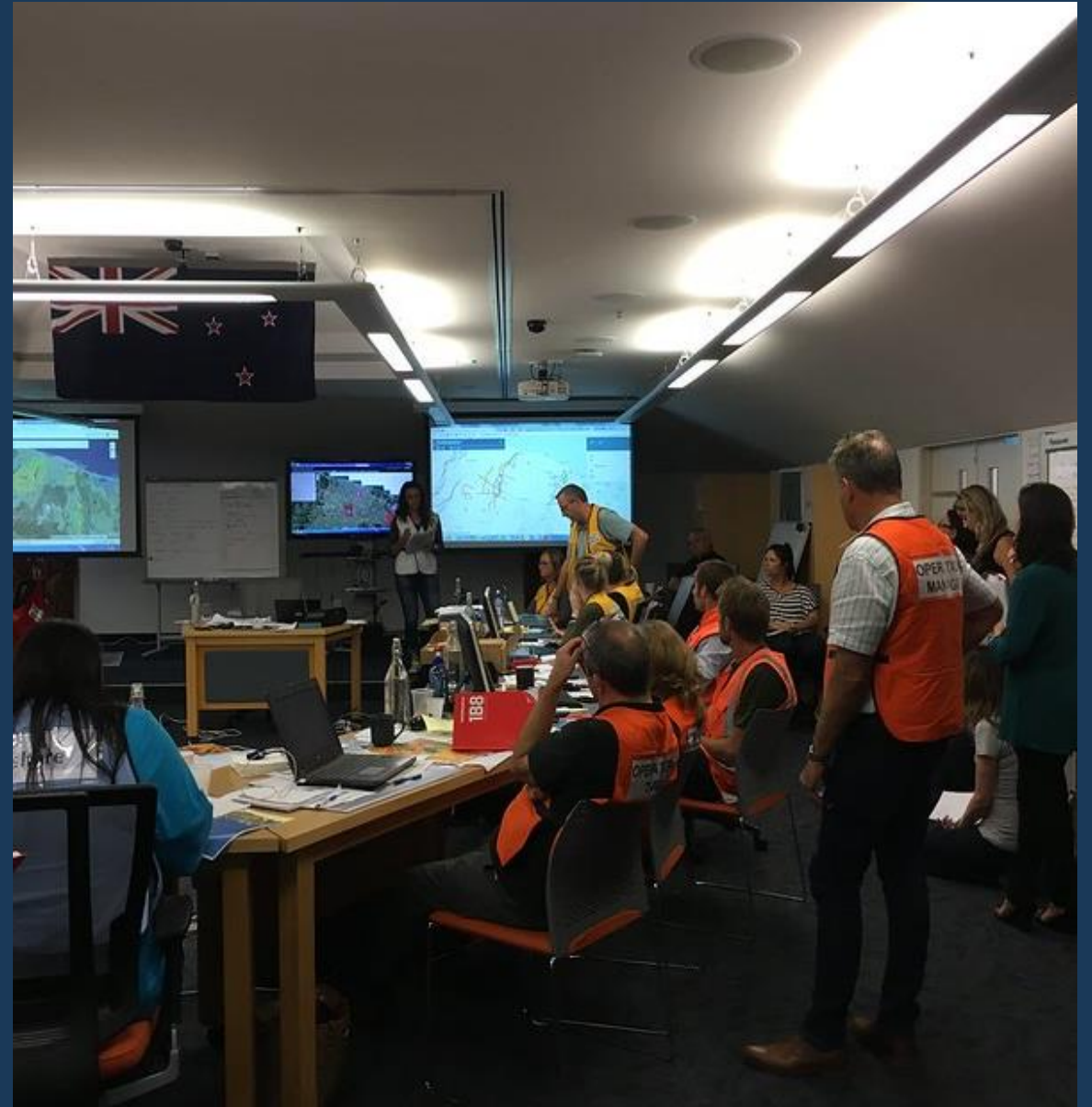
EOC activated in Whakatāne  
prior to stopbank breach

Order to evacuate prior

GIS – we started from scratch

Multiple data sources and  
systems

Early stages all about the 'COP'





# Common Operating Picture

Imagery & LiDAR

Addresses/Buildings/Properties

People

Roads

Cordons/Zones/Evacuation Areas



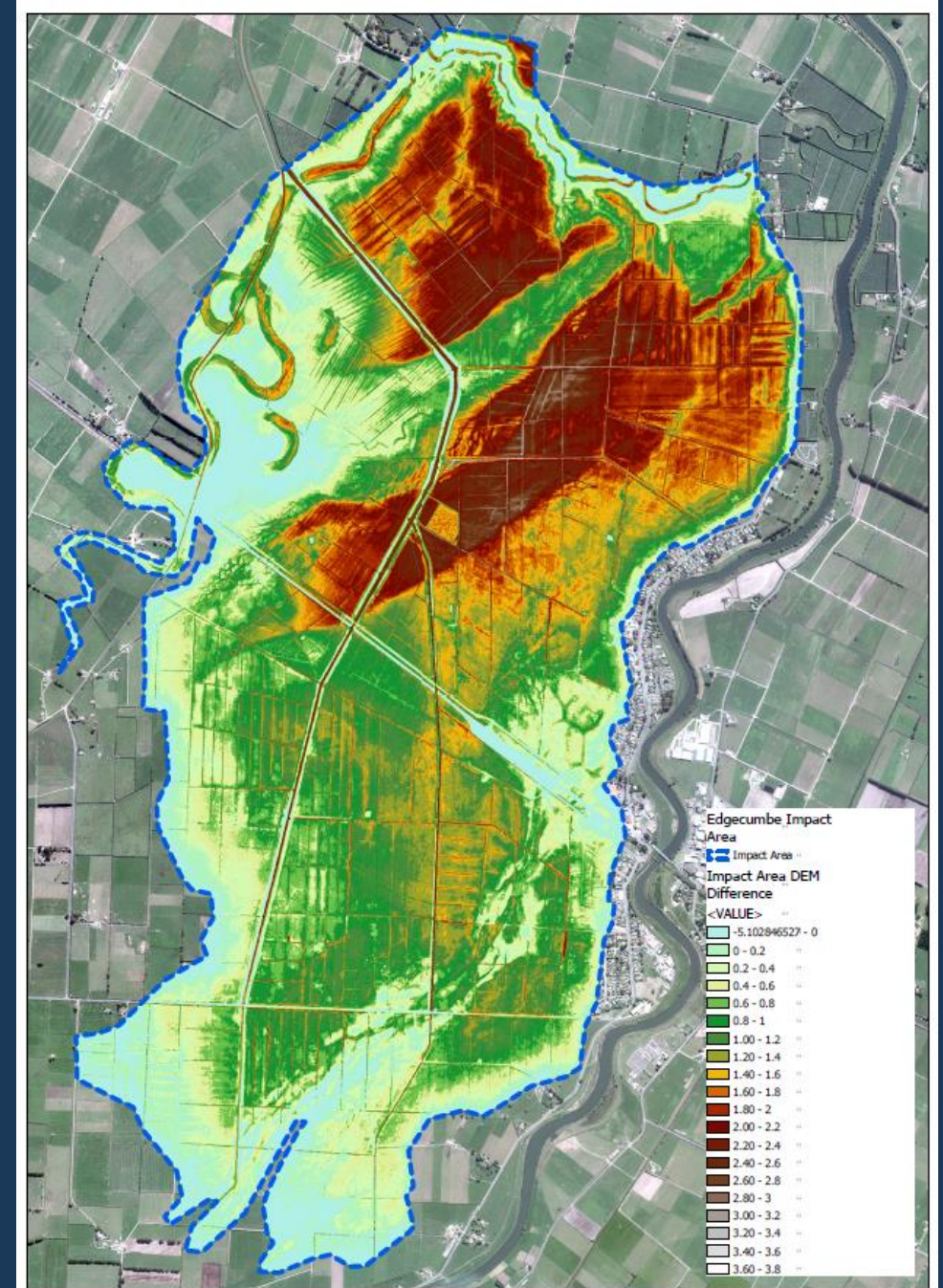
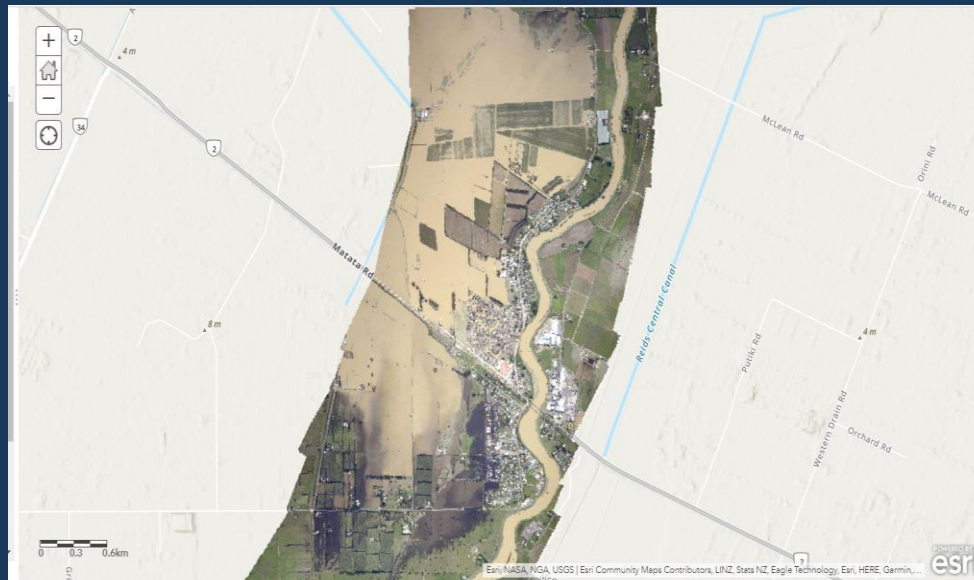
# Imagery & LiDAR

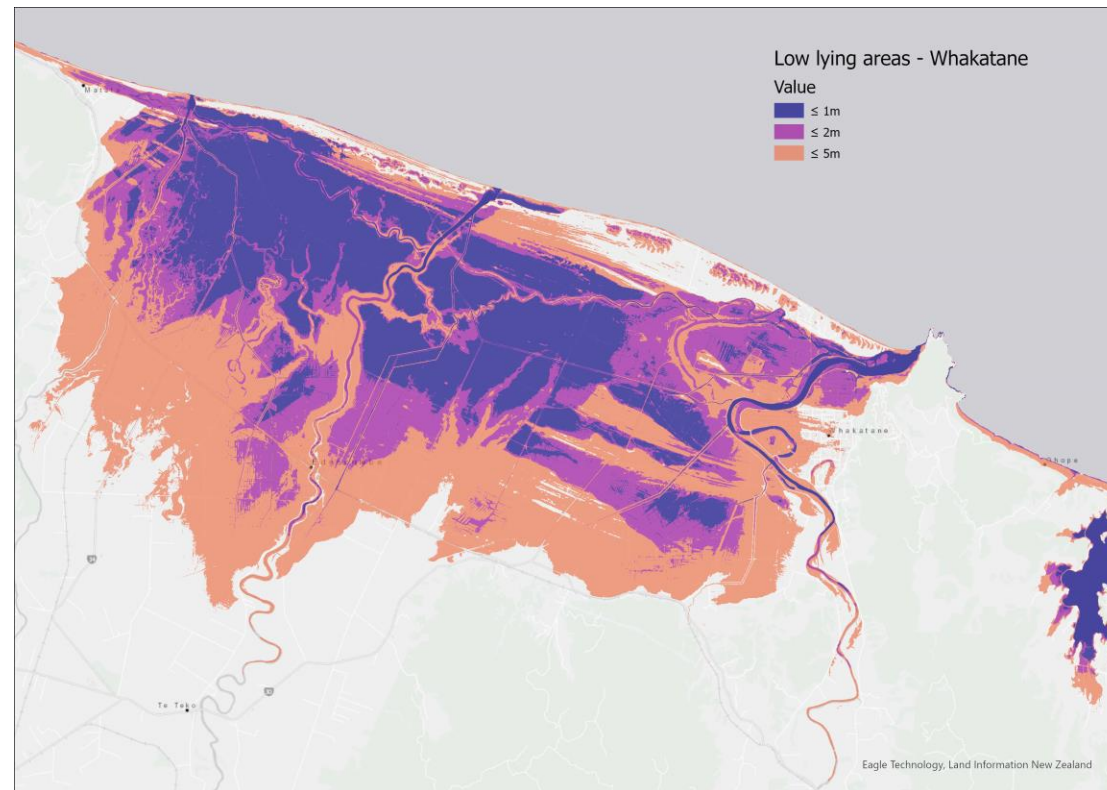
Key questions:

- What was the extent of the flooding?
- Where are the low-lying areas?
- How many properties are/will be impacted?

No imagery captured at height of flood

Drone imagery from fire service





# Property Data in the Response Phase

Who & What is impacted?

Location, location, location

- Addresses
- Buildings
- Properties
- People

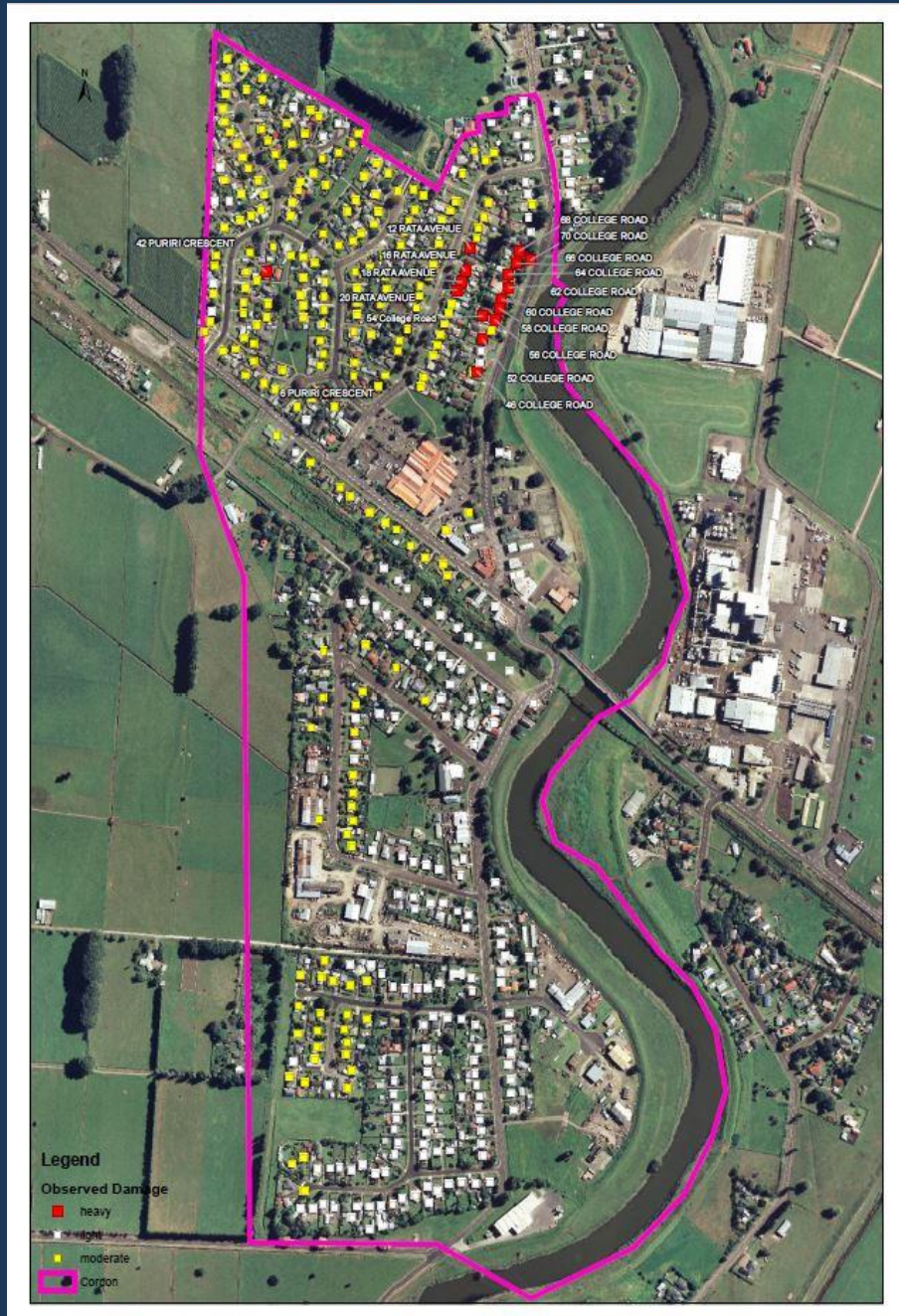


# Response cont...

Data coming from different agencies:

- USAR
- SPCA
- MPI

Collaborated on a Rural Welfare Form with Rural Support Trust





# Recovery Project

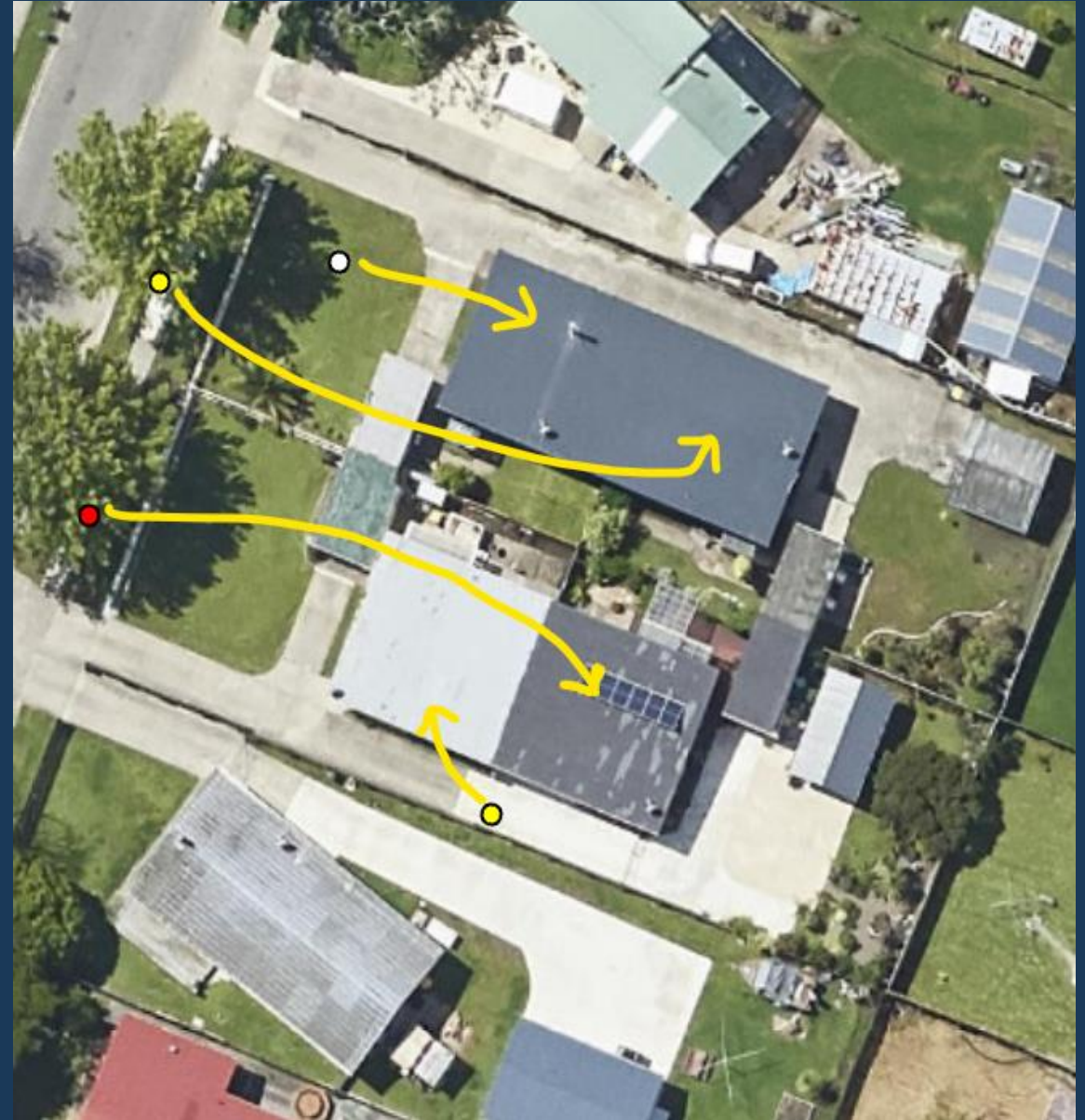
Recovery is (surprise!) all about People and Places (Addresses, Buildings, Properties).

External pressures focus the importance of data accuracy.

- Near-enough not good enough

Sharing data with external organisations.

BAU Council processes affected by the legacy of the event.




## Lessons Learnt

- Have datasets ready to go
- Property Analysis
- Knowing what you want to track ahead of time
- Develop standardised Address data collection methods





# LINZ Data Review & Data Strategy

 Credit: Name

# Methodology

50+ internal interviews

22 business domains

1800+ surveys

30+ industries

35+ external interviews

10+ internal workshops

Customer Survey

Internal Interviews

Regulatory Bodies

Customer Interviews

Systems & Data

Geospatial Data  
Management Review

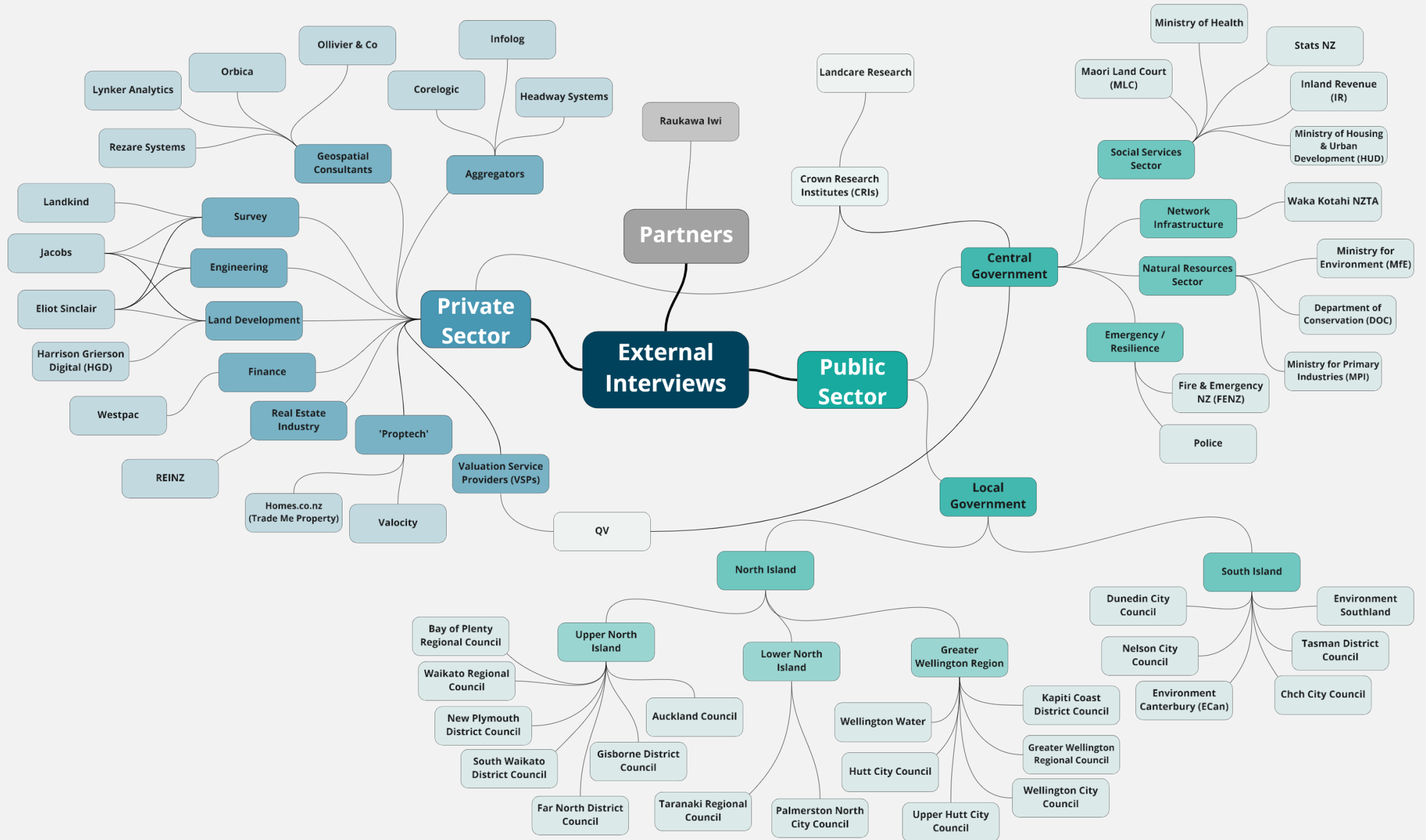
Analysis

Data Delivery

Policy

Systems

People & Capability





# Feedback

Landonline survey  
and title data good  
quality

Improve standards  
and integration with  
councils

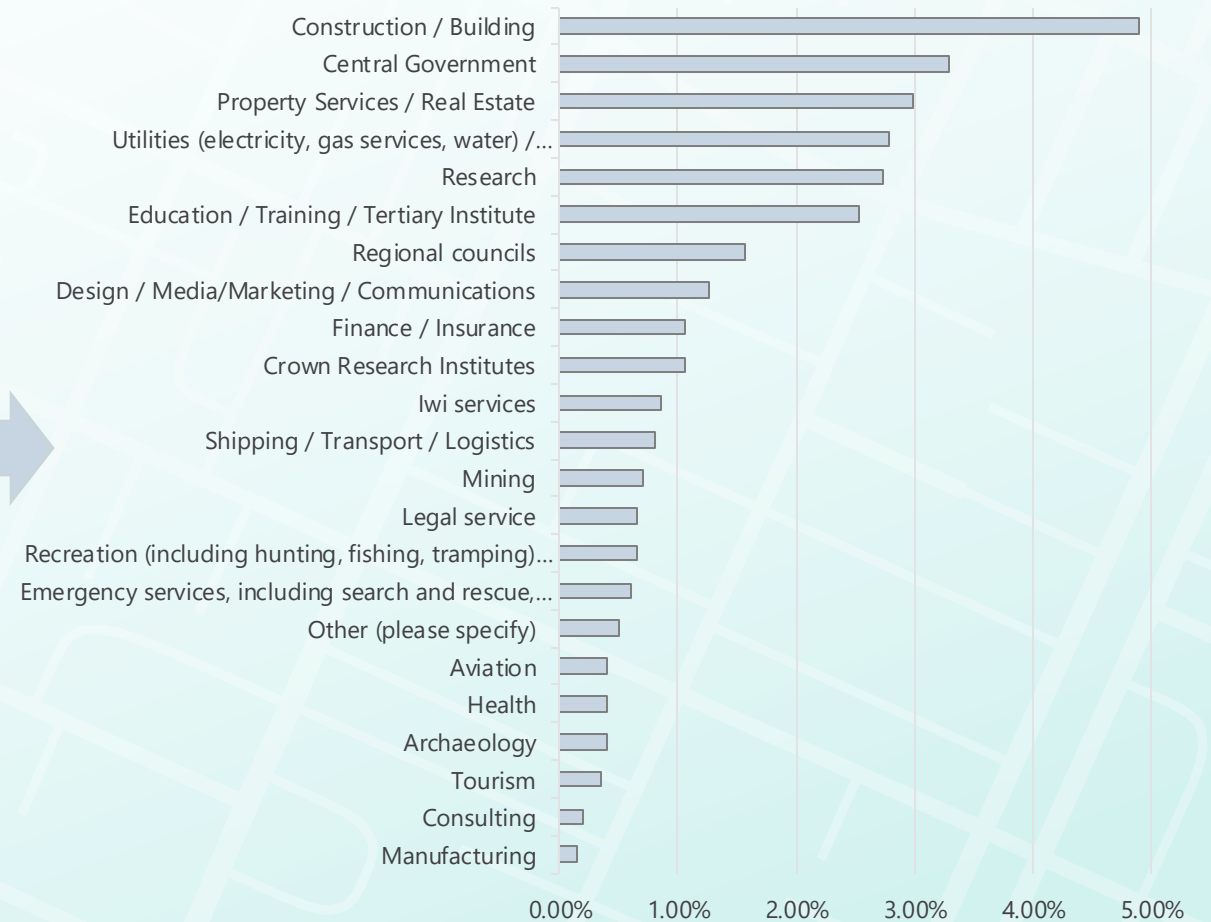
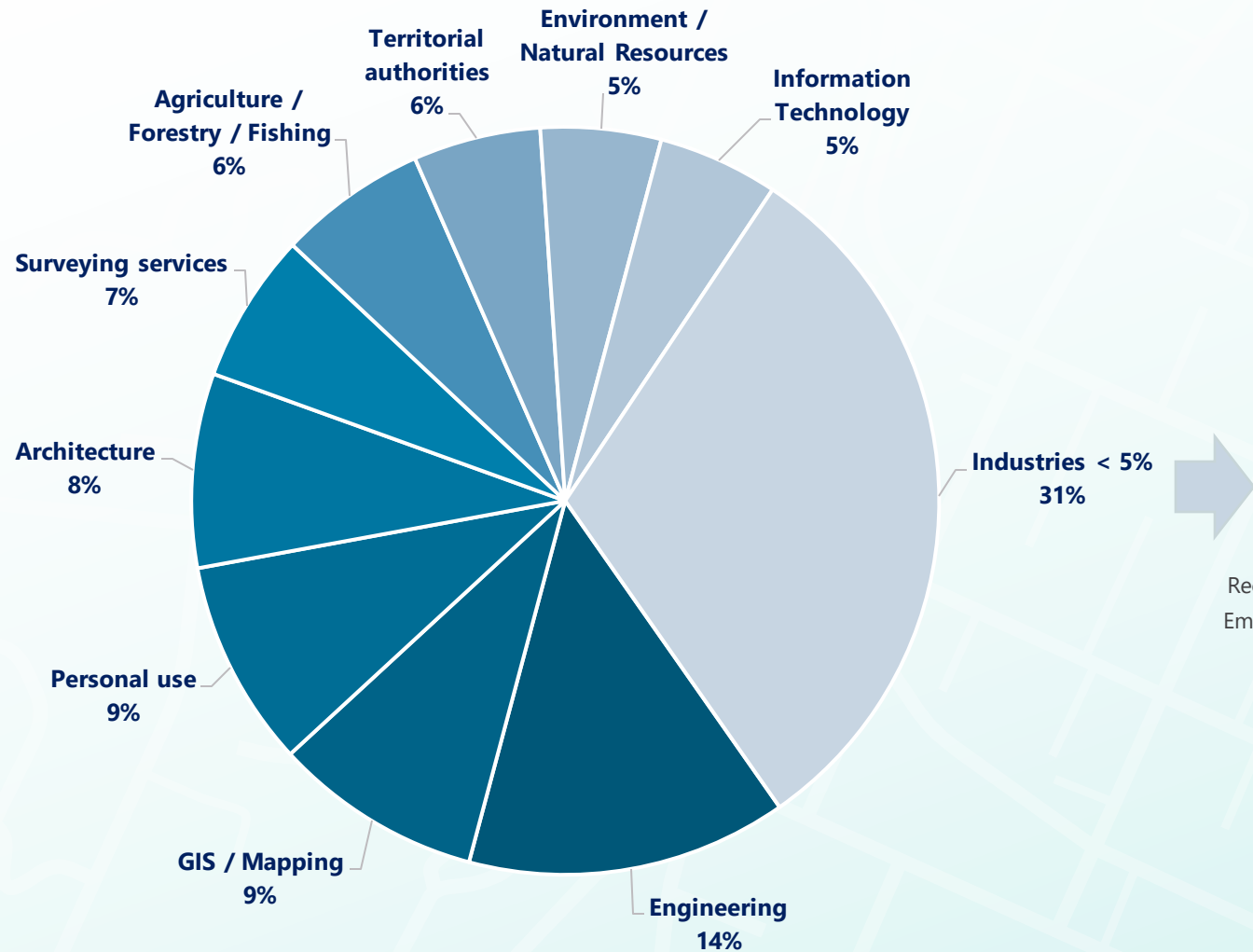
Addressing confusing  
data landscape - no  
reliable authoritative  
source of truth

**LINZ provide single  
source of truth for  
NZ property data**

No publicly available  
national DVR and  
Sales dataset

Can't get an  
authoritative view of  
Crown or Māori land

# Survey - Industry stats

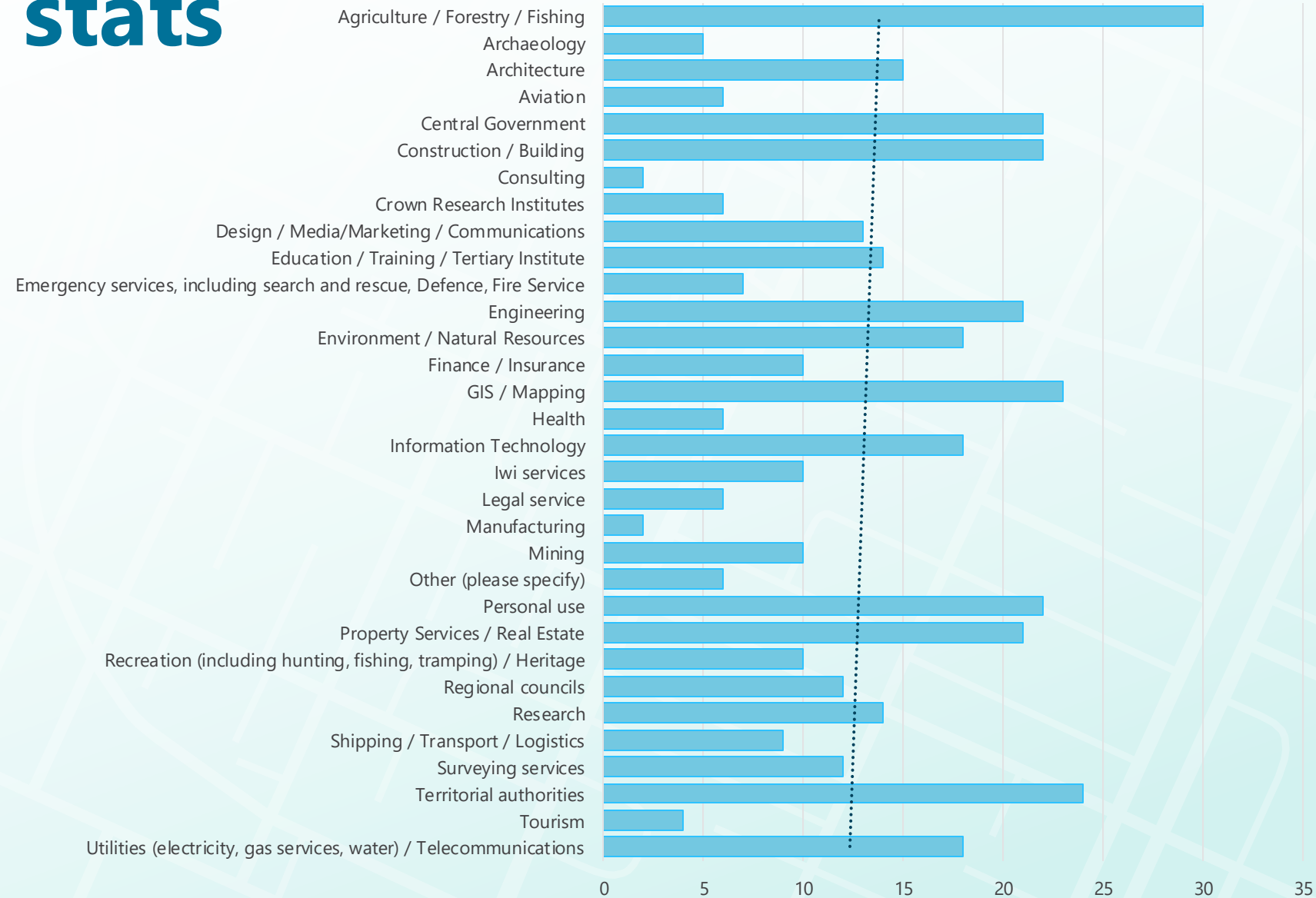


# Survey - Roles stats

Broad numbers of roles represented across each industry type (~12-14 on average).

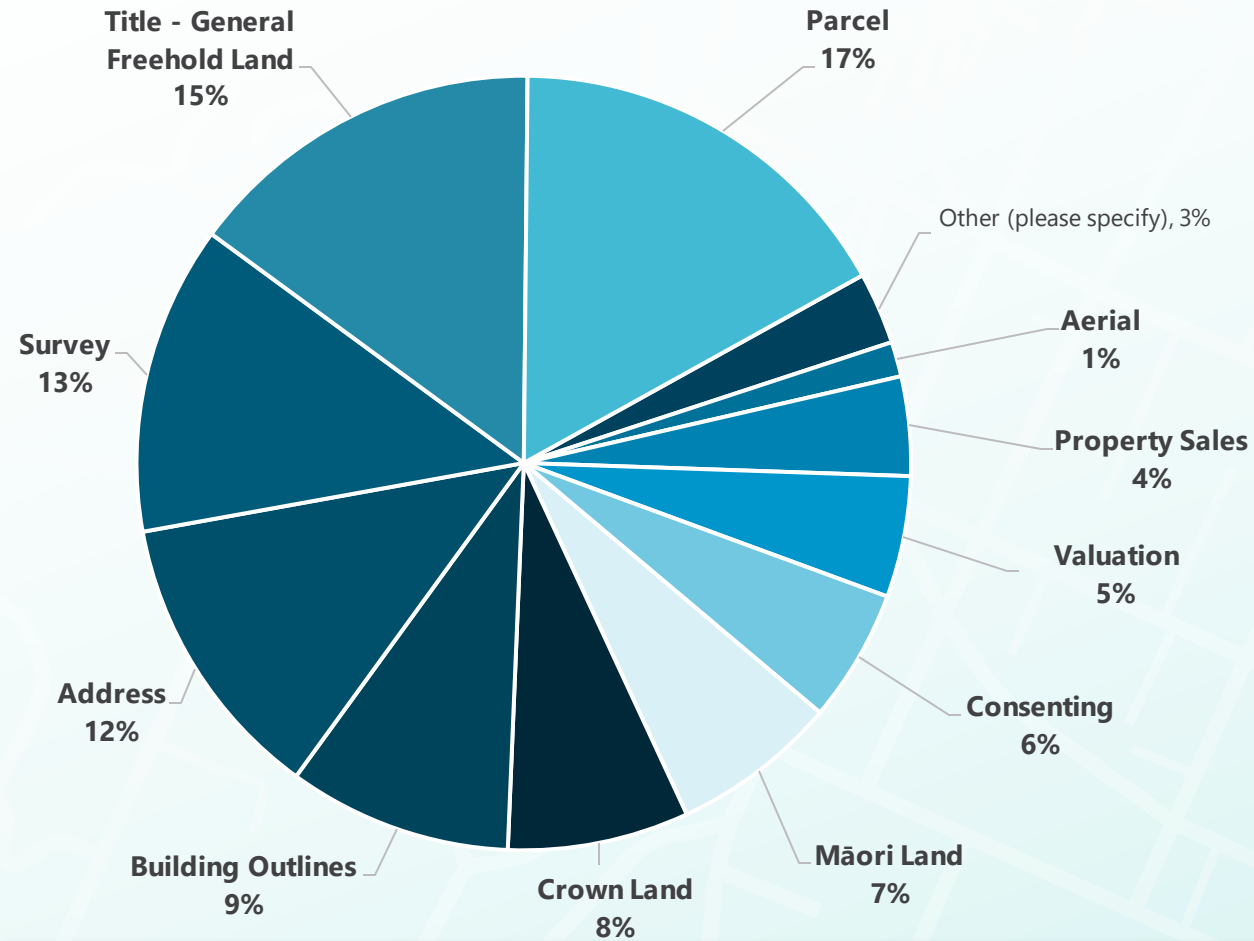
Increases confidence of having a representative sample.

## Count of Roles per Industry Type

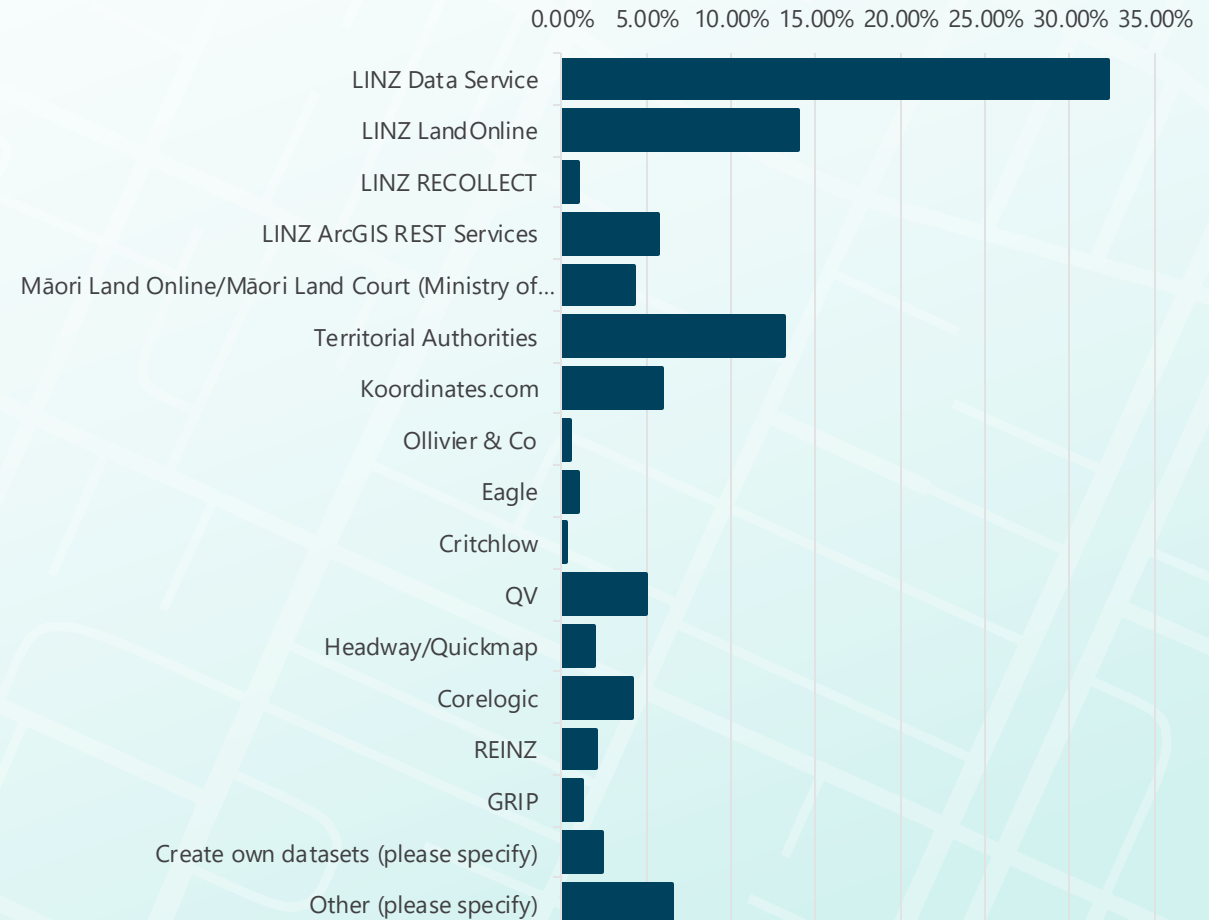


# Survey - Property data stats

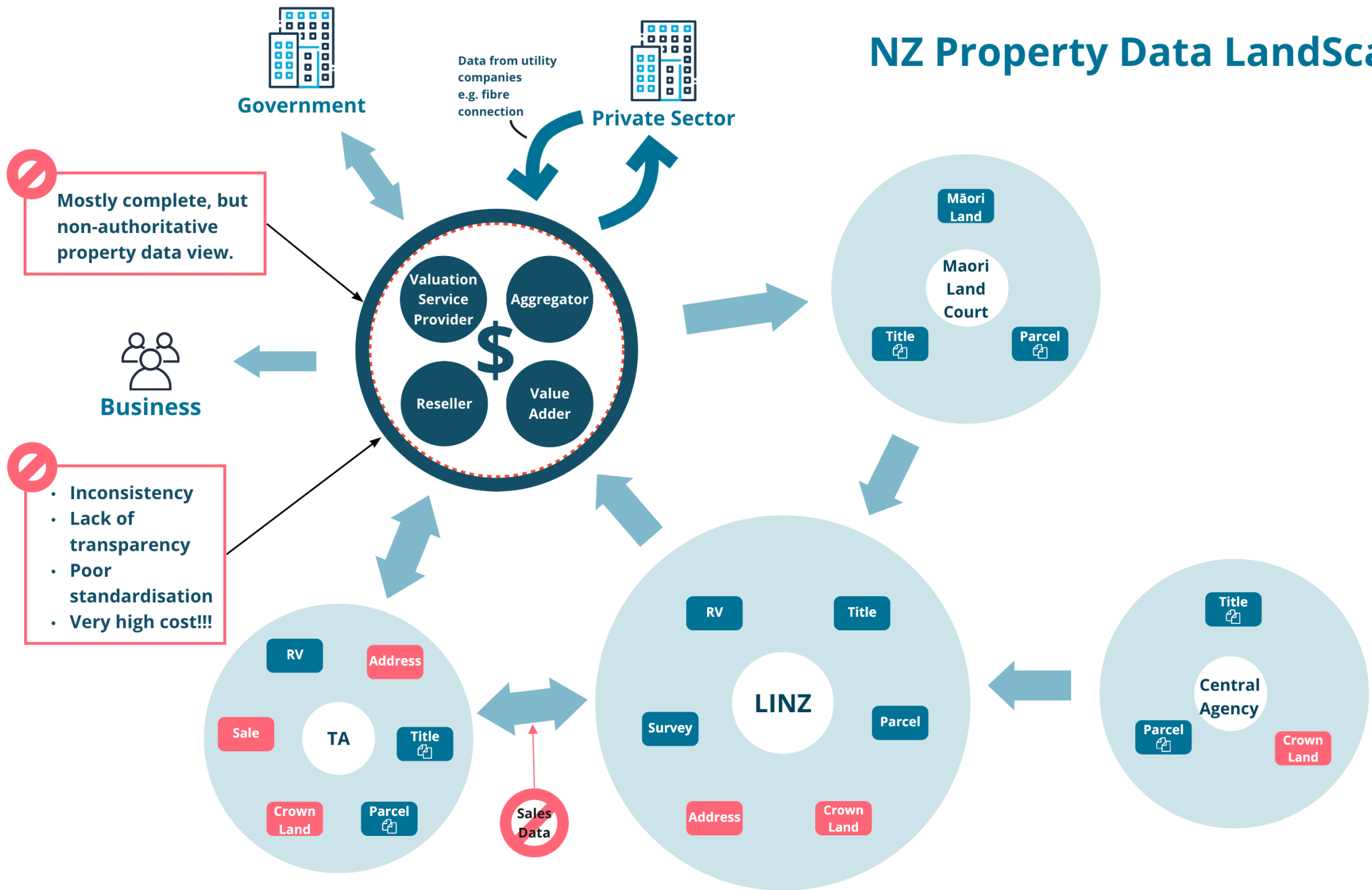
## Datasets Used



## Data Sources

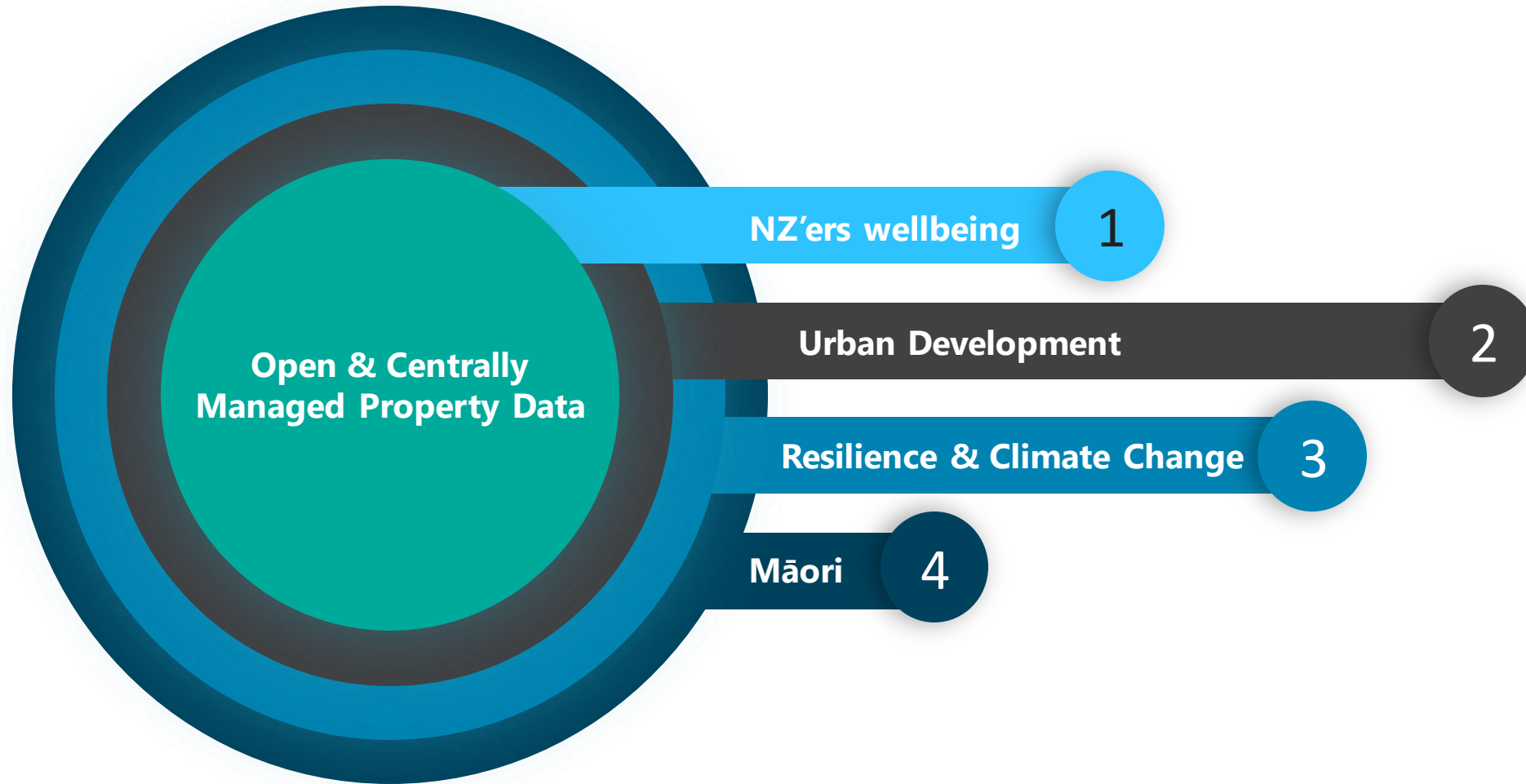


# NZ Property Data LandScape





# Drivers for Change



# Next Steps

- Complete analysis
  - Strategy and roadmap
  - Including short to long term actions
- Deep dive session with stakeholders/customers

# Thank you!