

Wellington Underground Asset Register beta pilot

*The opportunity to
improve asset data*

**Absolutely Positively
Wellington City Council**

Me Heke Ki Pōneke





Context

Public value

What are we doing?

We are tackling the lack of trustworthy information about assets and taonga underground.

Why are we doing it?

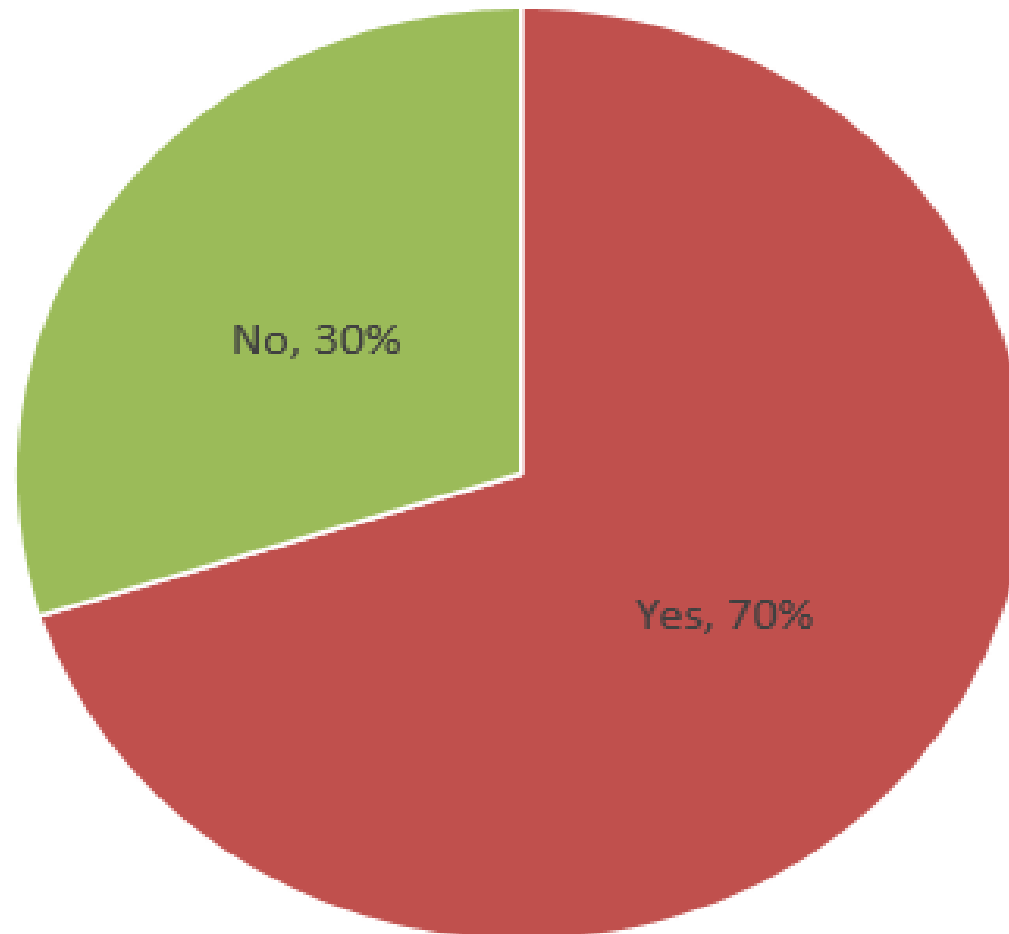
This will enable the efficient and safe delivery of infrastructure promoting economic growth, enhanced social wellbeing, protection of taonga Māori and improved response and recovery from natural disasters.

This is a long-term initiative.

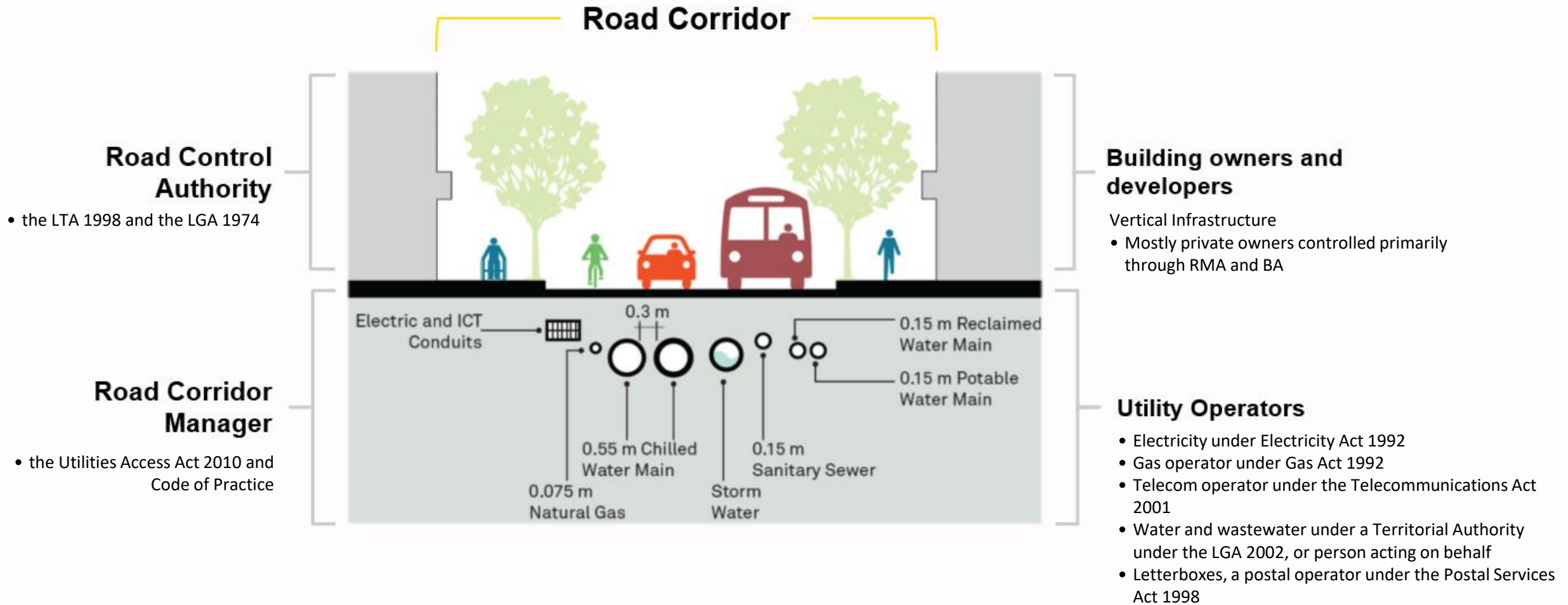


Sector Survey – initial findings

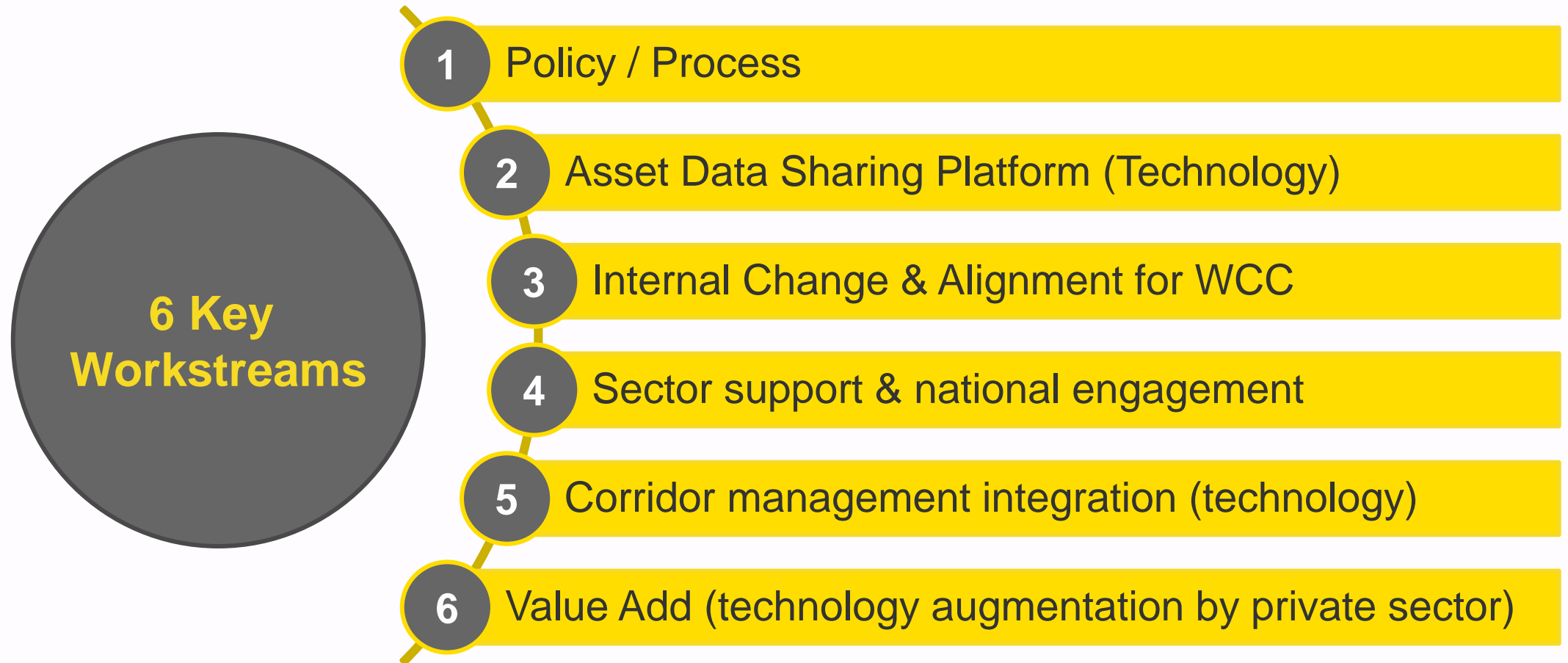
Over the past year, has the availability or accuracy of information on the underground affected the progress or execution of the CARs/WAPs you have been involved in?



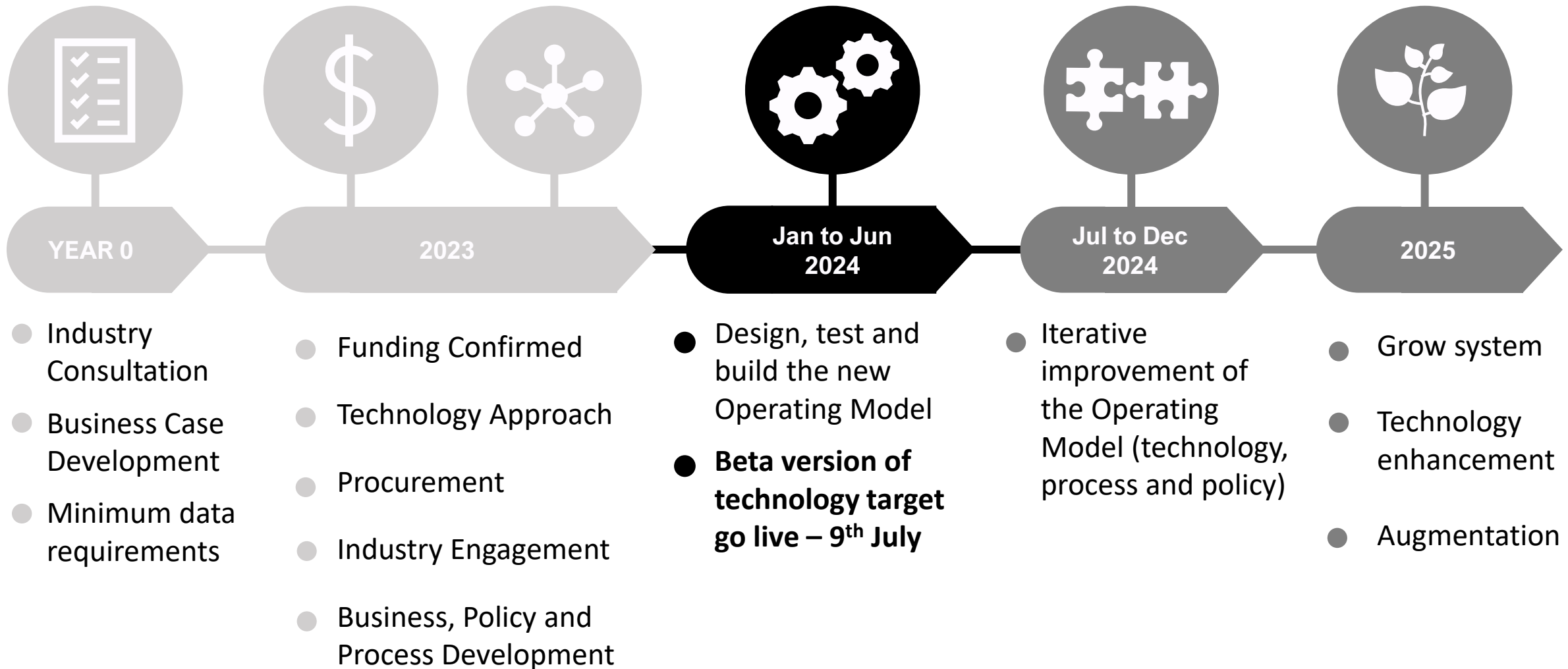
The good news... we have the mandate to lead change



Programme approach

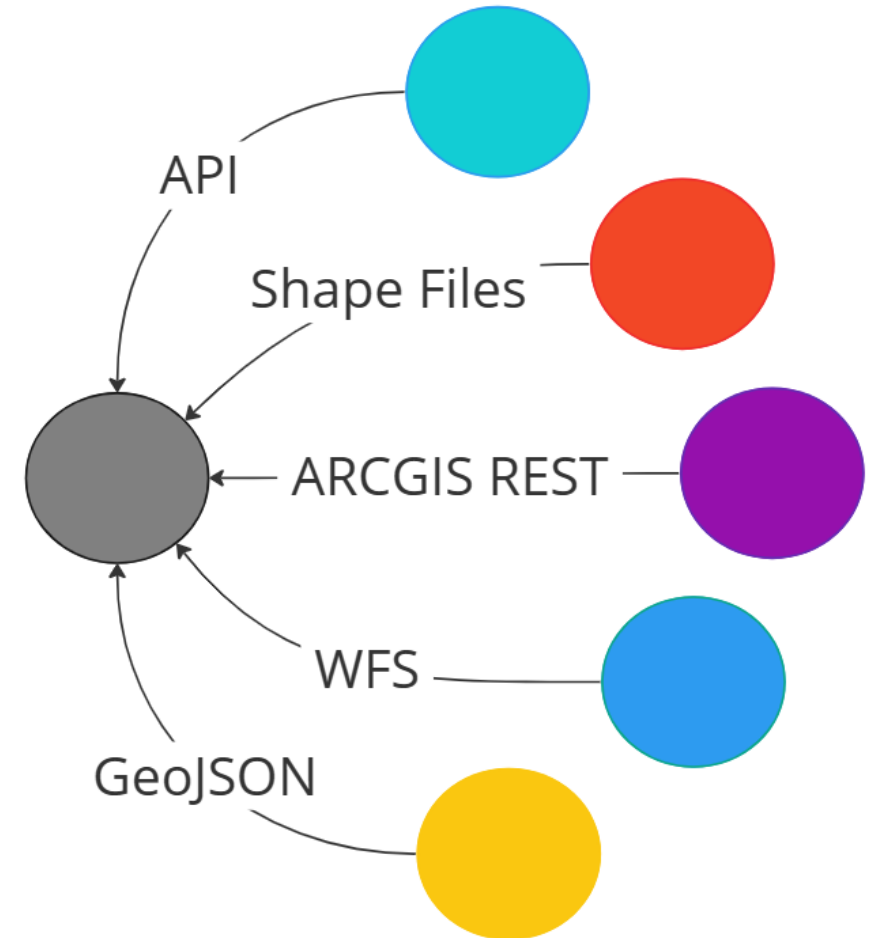


Programme roadmap



Data Loading – making it easy

- ▶ Data is Federated from Network Owners into a central location.
- ▶ This is done using Online REST services so that updates are picked up automatically.
- ▶ We can also use hosted or emailed files if there is no online option.
- ▶ We support multiple ways for providers to publish and supply asset data.



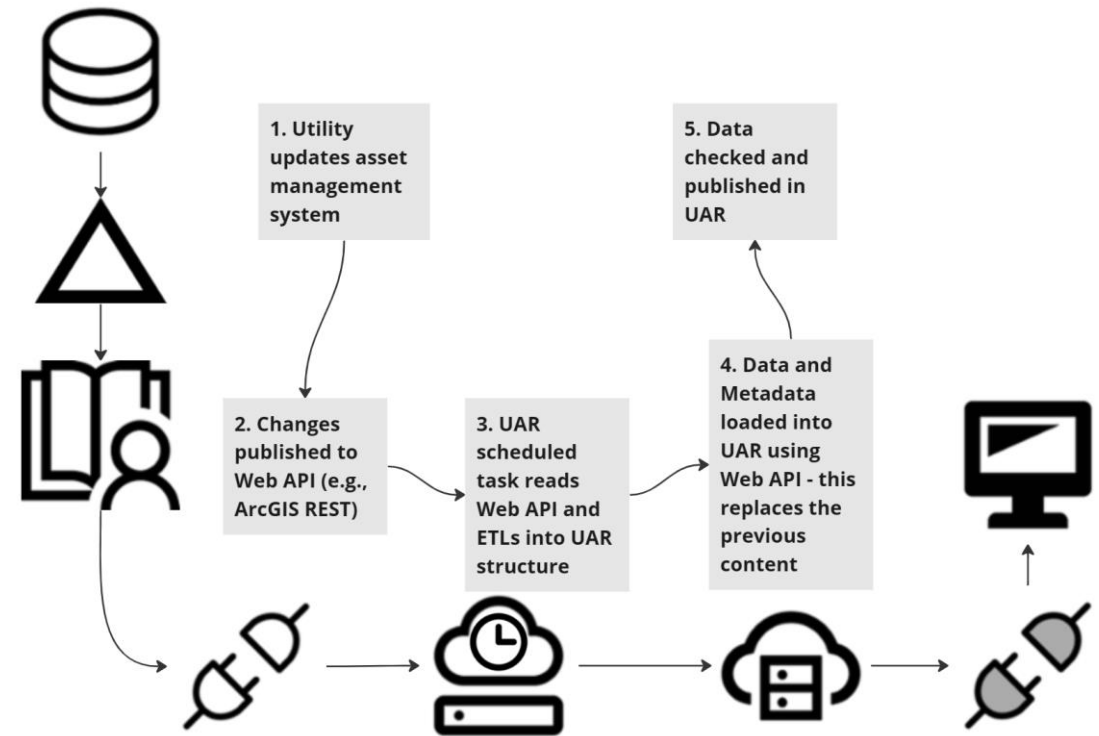
Data Transformation

- ▶ Data is transformed into a common schema structure for ease of use and consistency across asset classes. This is based on MUDDI and other industry standards.
- ▶ There are common data fields for the data set, e.g., Contact details – these are supplied once.
- ▶ Mandatory Fields are essential – these must be supplied, however field values can be "Unknown" if not available.
- ▶ Optional Fields provide extra detail, if available. This can include values specific to a particular utility (e.g., rating, conveyance method etc.,)
- ▶ Our initial focus is Network Segments, i.e., utility lines.

Dataset	Owner	Wellington Electric
	Operator	Wellington Electric
	Contact	0800 248 288
	Emergency Contact	0800 248 148
Mandatory	Type	Electric
	Asset ID	WE-1234-xfc-fvb
	Criticality	Critical
	Operational Status	In Service
Optional	Material	PVC-Neutral Screen-Copper
	Diameter	120mm
	Depth	1.15m
	Utility Specific - e.g., Capacity	400 kV

Loading the Underground Asset Register

- ▶ This is an automated process using Web APIs or via sharing static files.
- ▶ *Ideally* no manual intervention is required.
- ▶ Metadata describes
 - The data contents and terms of use
 - Links to guidance and safe working practices for assets
- ▶ Data update frequency can be as often as the utility data owner wishes to publish data.





Results based off area of interest selection:

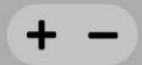
- Communications —
- Organisation ▲ S2 ☰
- Electric —
- Organisation S1 ☰
- Organisation S1 ☰
- Gas —
- Potable water —
- Organisation S1 ☰
- Storm water —
- Organisation S1 ☰
- Organisation S1 ☰
- Waste water —
- Organisation S1 ☰
- Other ▼
- Unknown —
- Organisation S1 ☰

Site Records

- Wrongly recorded object (WRO) 📌
- Unidentified buried object (UBO) 📍
- Site records 👤



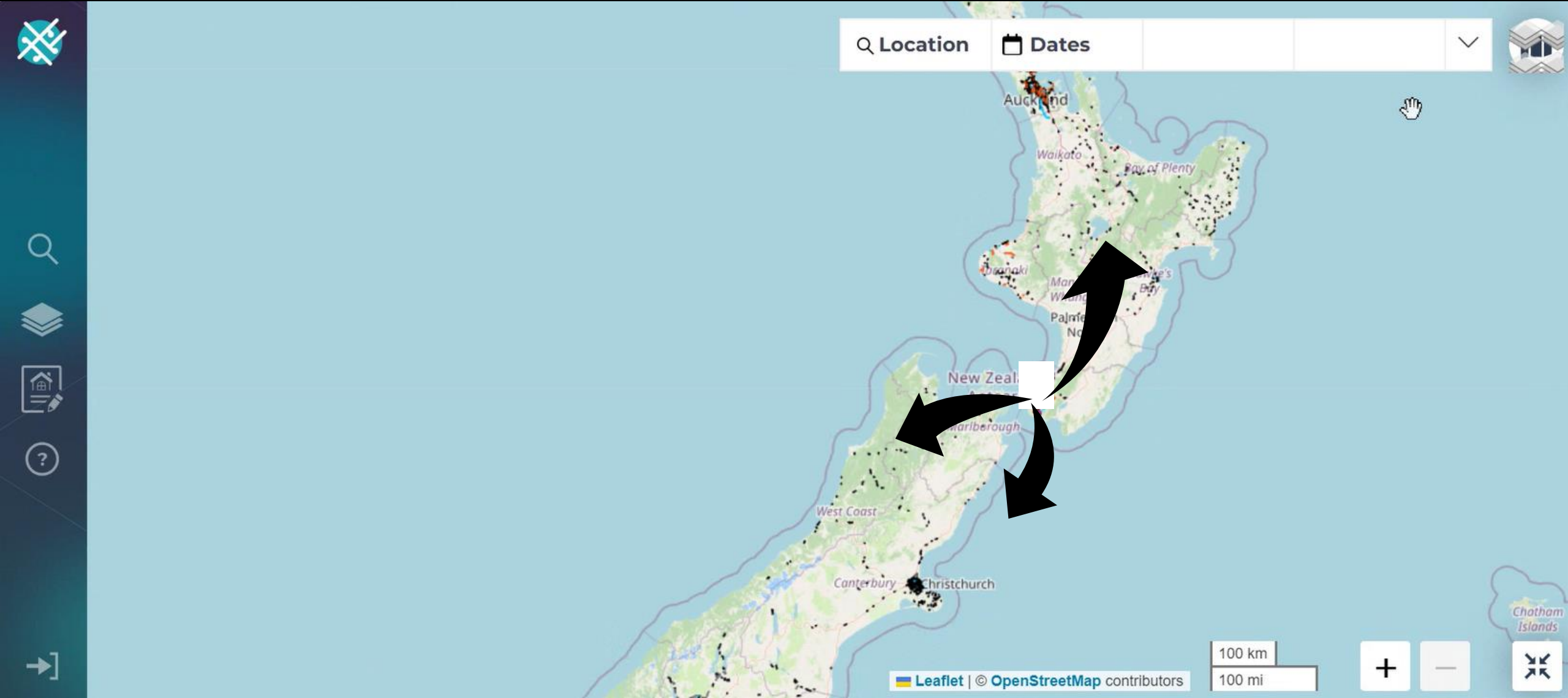
500m scale bar



The value add of site observations



Scalability



Our Vision *something we collectively develop*

To provide a single, authoritative, and trusted view of relevant asset and contextual data so that work in the subsurface environment can be undertaken safely and efficiently

We are going to start simple,
add features
and functionality

It's not about the platform,
it's about what the platform
enables us to do



Questions





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[Wellington City Council Web Page](#)