

URBAN DEVELOPMENT GROUP

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# 2019 New Zealand ESRI User Conference

## Supporting and managing Housing Development Growth with GIS

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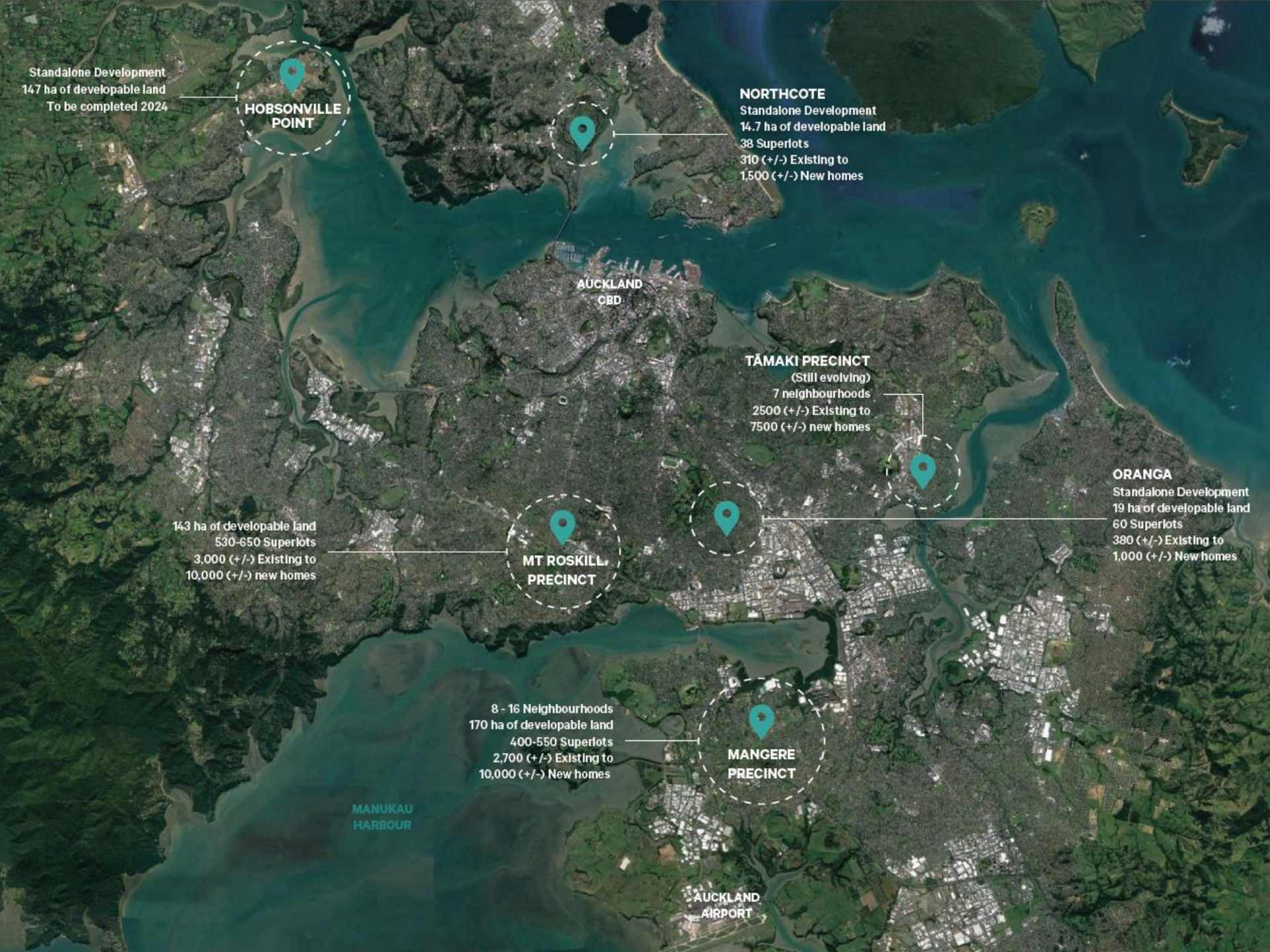


## About UDG

- Comprises of HLC, KiwiBuild and Housing New Zealand
- Established as an interim step towards Kainga Ora – Homes and Communities
- New Zealand's largest project residential re-development and regeneration developer
- Aims to achieve greater alignment on urban development planning, and improve the speed and efficiency of delivery







## The housing delivery pipeline is large

- In excess of 40,000 homes
- 10-15 years



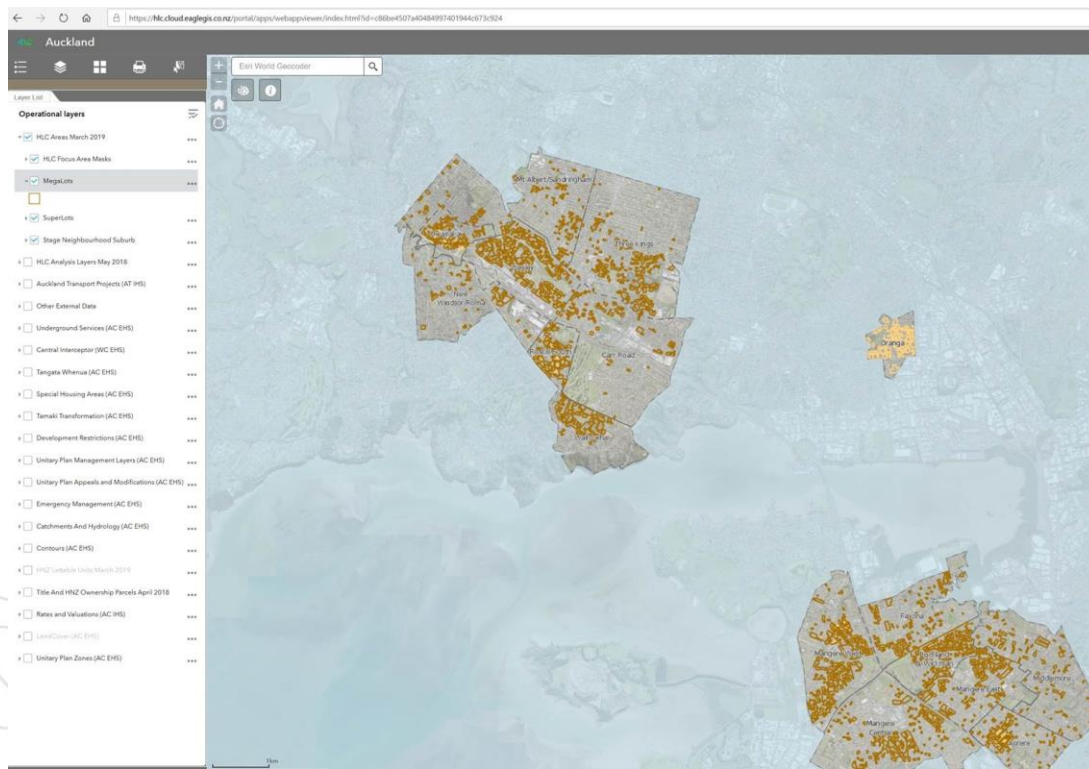
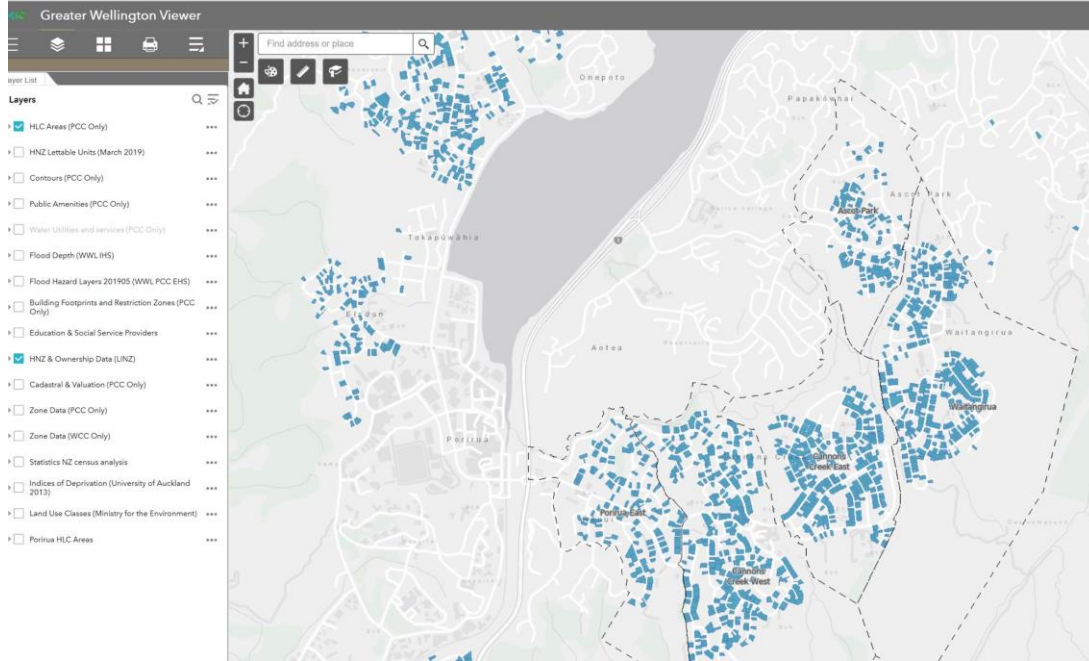


## **We've established a civil design and construction alliance – Piritahi**

Combines

- Dempsey Wood
- Hick Bros.
- Harrison Grierson
- Woods
- Tonkin + Taylor
- And HLC

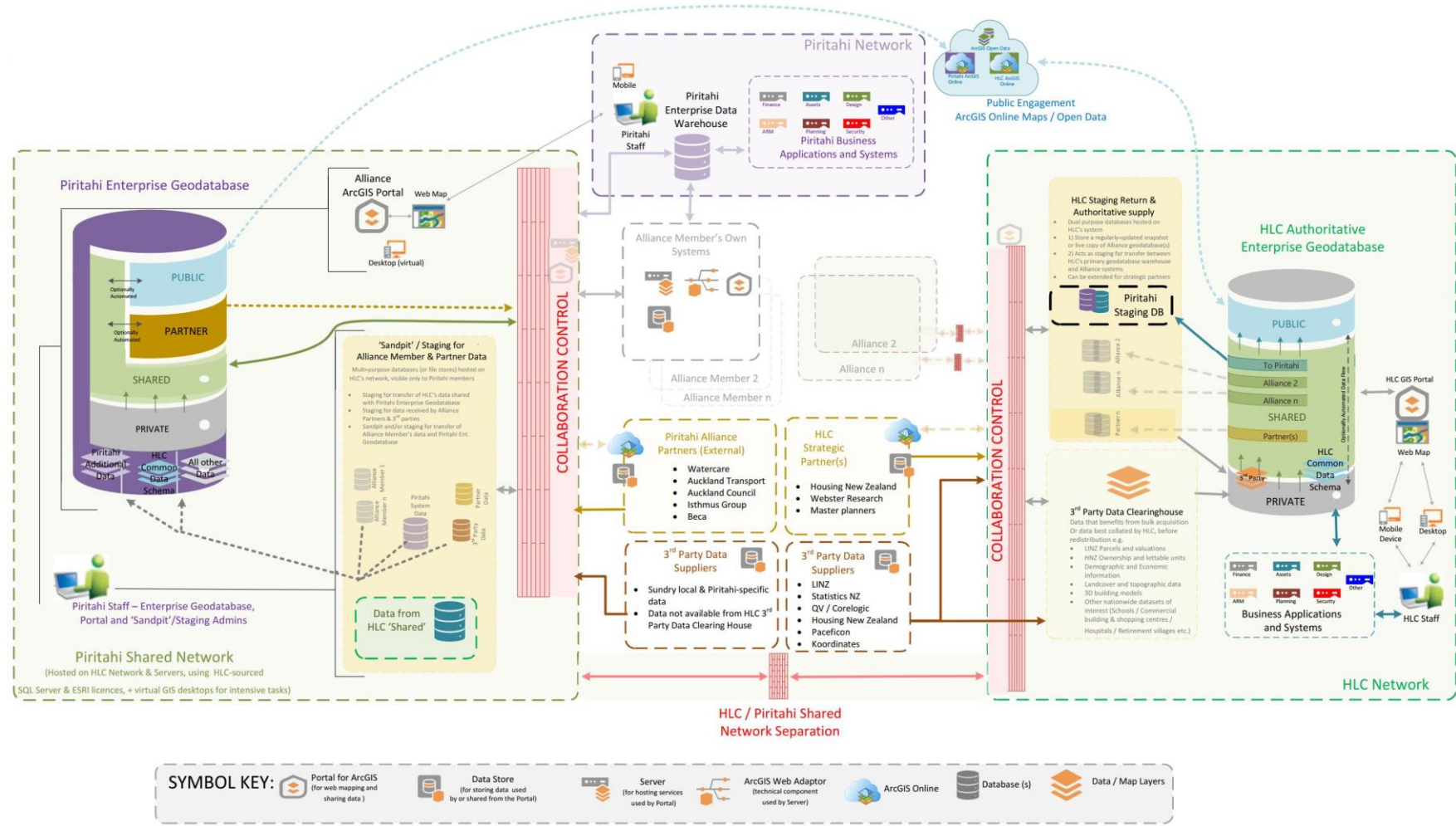




# Why GIS?

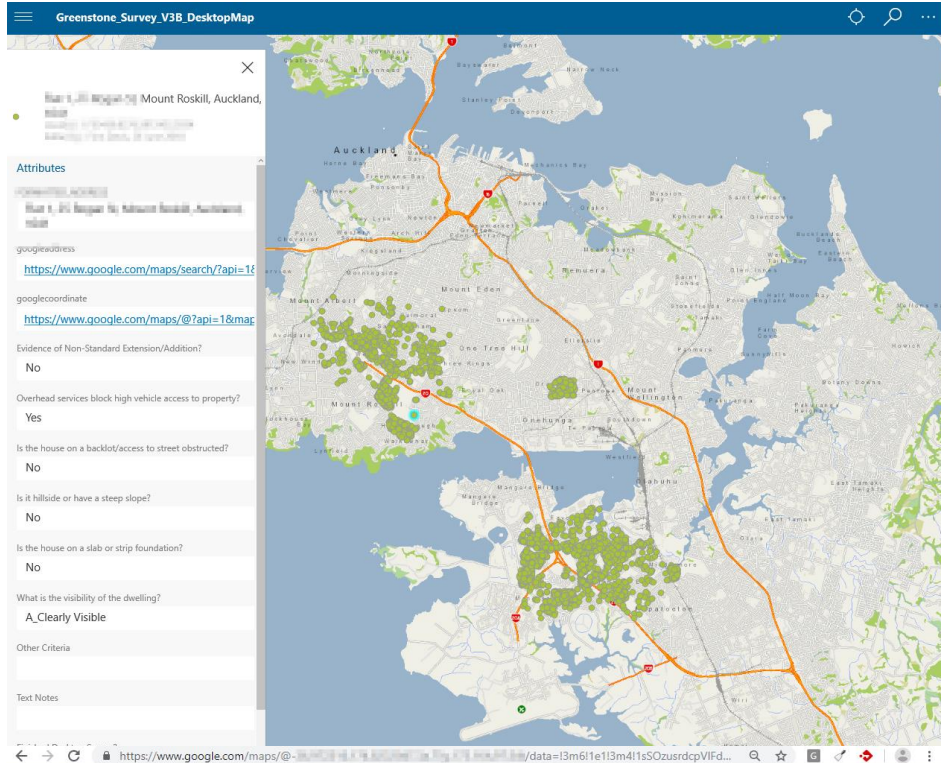
- Typically in past, 3rd party holds HLC's data
- Different data standards by each consultant and divisions within consultants
- Getting bigger and more contracts, different consultants and areas, need central data store
- Richer as-built information, for developers and builders – value add

# System Architecture



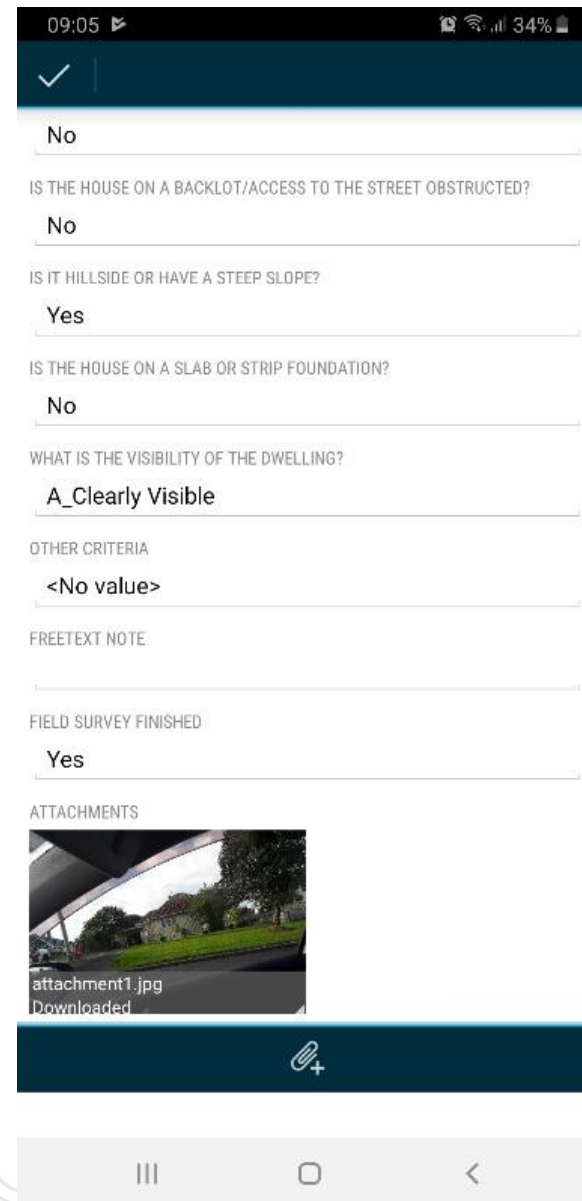
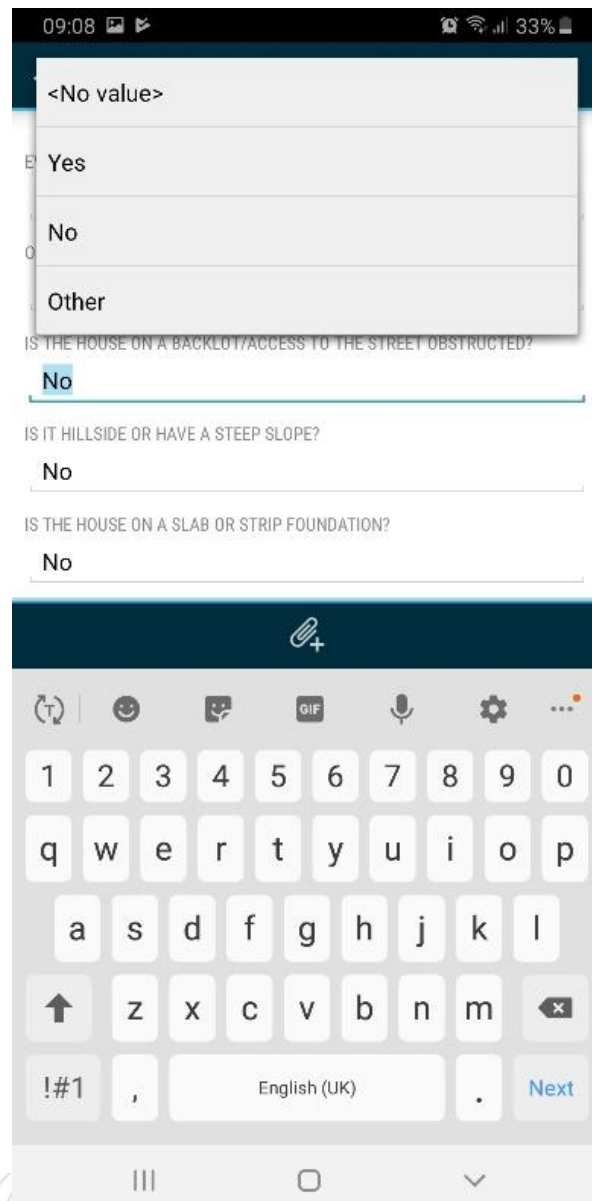
- We got it wrong in the beginning
- AWS hosted – full cloud
- Enterprise structure - scalability
- Set up for multiple databases – expansion and flexibility





## Esri – Collector, Win 10

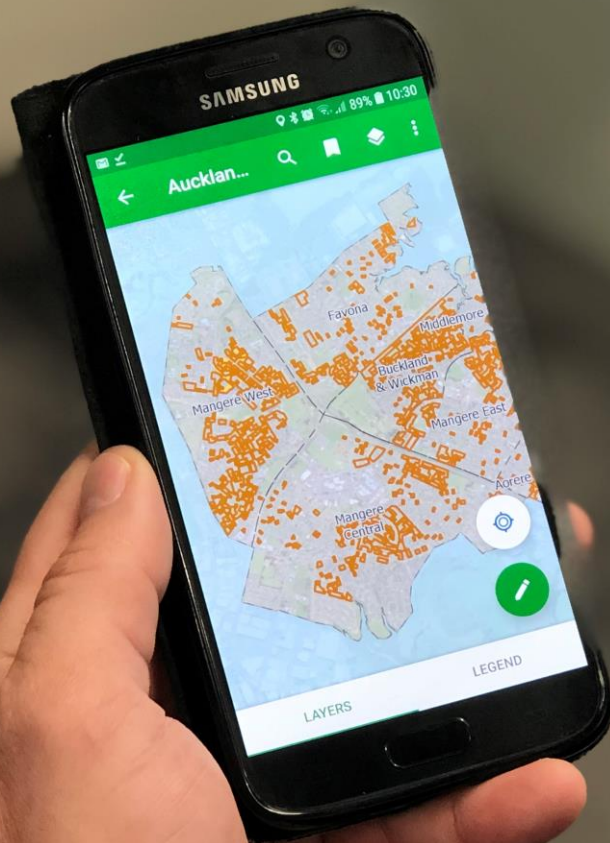
- Office based surveying, using aerial photos and Google Street View.
- Added to GIS database, through Collector
- Used Windows 10 interface



## Esri – Collector, App

- Field based data collection
- Using Android devices from vehicles





## Esri – Explorer App

- Executive view, puts GIS in the user's pocket
- Field staff view, relevant information where its needed. Reduction of paper and out of date info
- Easy to show others, quick and understandable, will be used for stakeholders, customers, etc.
- People love it

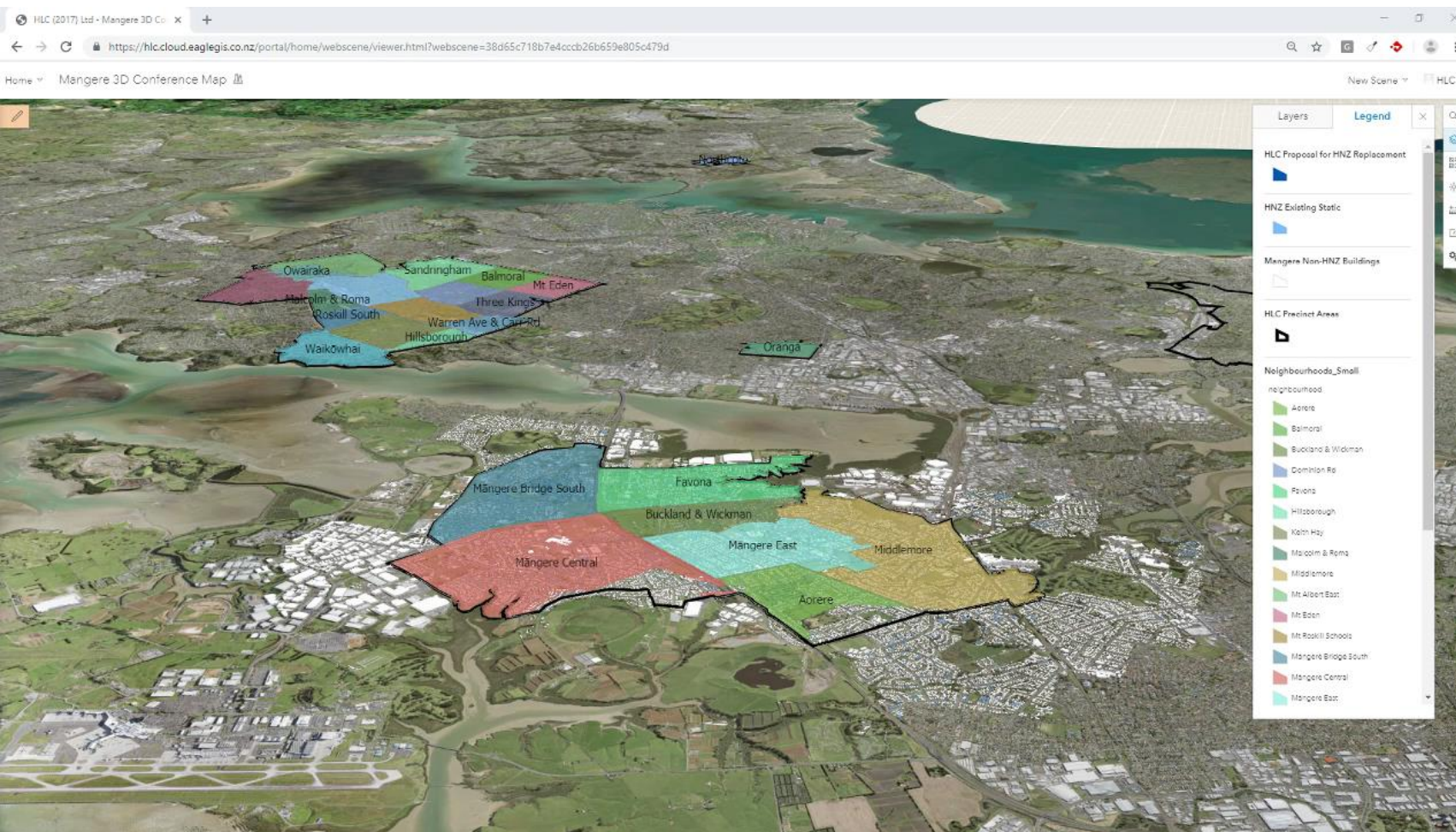




## Esri – Map presentation

- Standard tech, nothing special
- How we have used it, is different compared to others
- Used it to deliver a bus tour to Australian and NZ CE's, they loved it





## What next.....

- 3D photo overlays and BIM (Building Information Modelling), to assist design review and buying off plans
- Potential additional integrations
  - Oracle P6 –bring in the money
  - Bespoke in house Project Management tools – e.g. time and status



Questions?

