

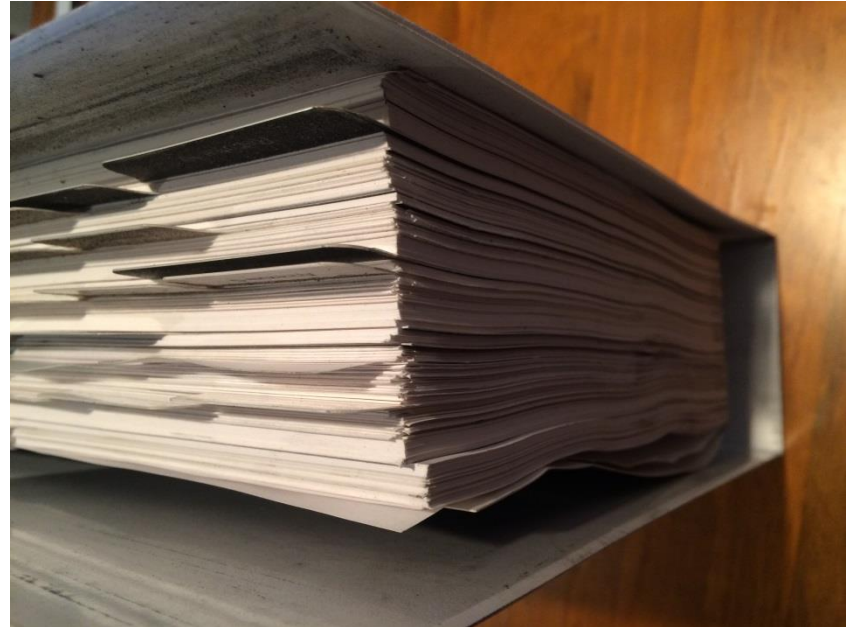
Immersing In the Future

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Agenda

- The challenge of stakeholder engagement
- Our evaluation Criteria
- Enabling Technologies
 - Pen & Paper
 - GIS
 - Virtual Reality
 - Table-top Augmented Reality
 - Outdoor Augmented Reality
 - “Blended” reality
- Conclusion



Stages of stakeholder engagement

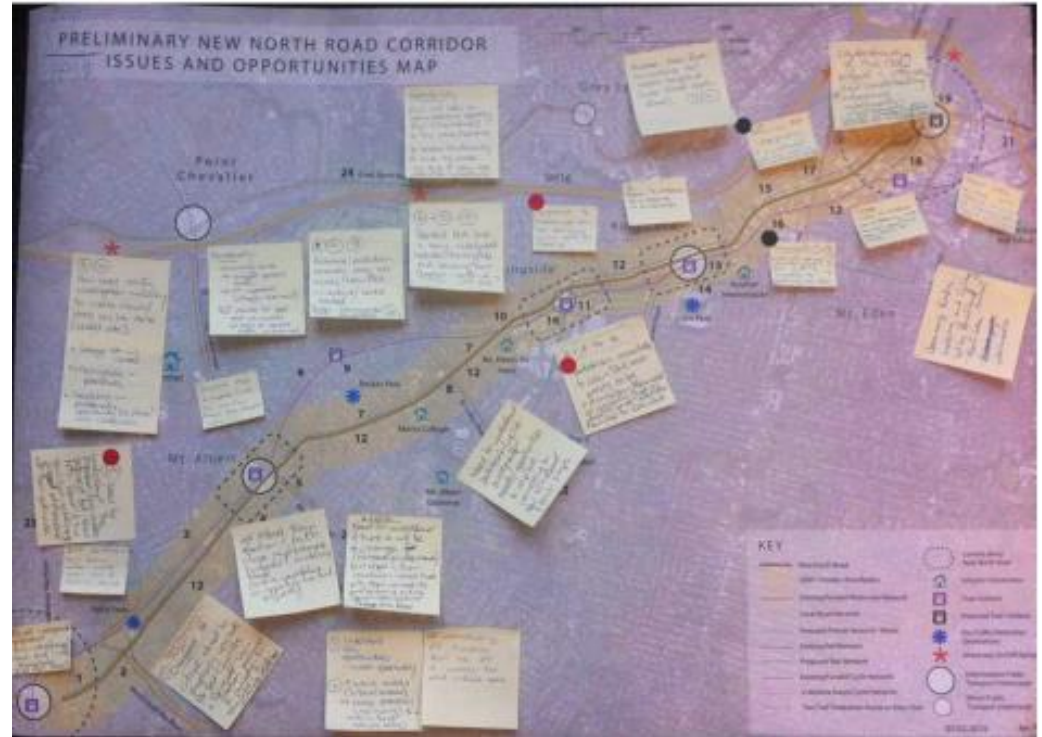
1. Plan
2. Understanding Stakeholders and their Wants and Needs
3. Internal Preparedness and Alignment with Stakeholders
4. Building Trust
- 5. Consultation**
6. Respond and Implement
7. Monitoring, Evaluating and Documenting

Evaluation Criteria

- Present multiple options
- Collect feedback from multiple stakeholders
- Present the feedback dynamically on the options
- Provide a high level of engagement with the various planned options

Technologies: Pen & Paper

- Advantages
 - Accessible
 - Cheap(?)
- Disadvantages
 - Limited number of participants
 - Static
 - Engagement is low



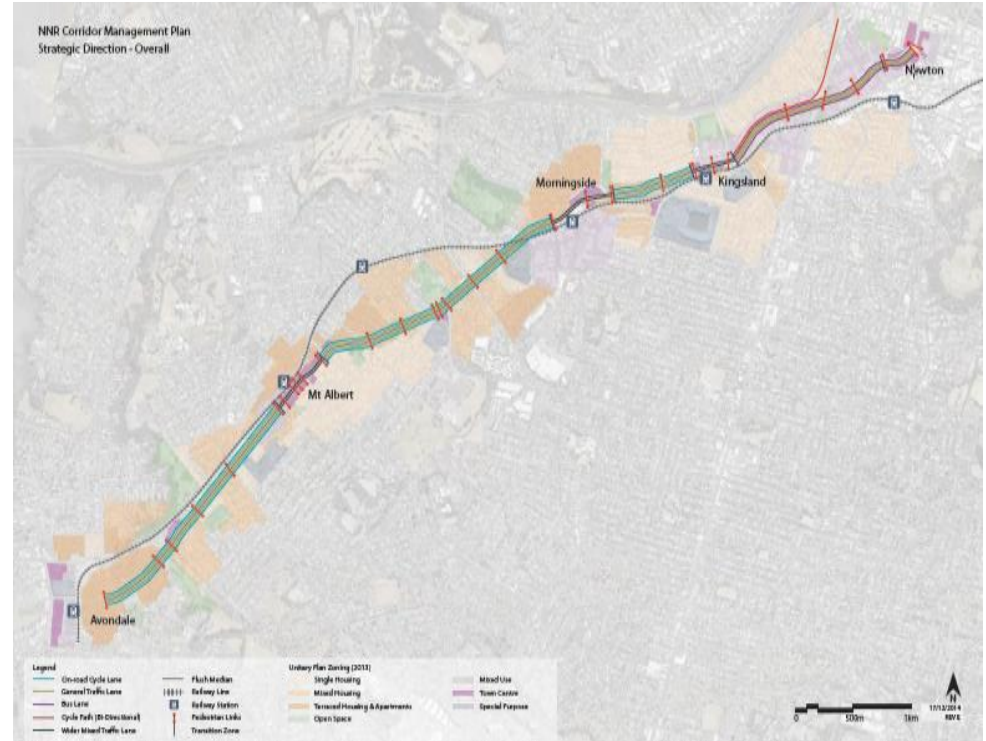
Technologies: Survey

- Advantages
 - Simple
- Disadvantages
 - Limited to the questions you ask
 - Responses can be biased
 - Relatively expensive
 - Not much more interactive



Geospatial Information Systems (GIS)

- Advantages
 - Intuitive
 - More likely to be believed
 - Can include very dense information
- Disadvantages
 - Not easy to explore multiple options
 - Typically 2-Dimensional
 - No animations



Virtual Reality

- Advantages
 - Easy to understand a 3D representation
 - More than one participant can interact (some additional work required)
 - Multiple options can be presented
- Disadvantages
 - Many people find it confusing and unnatural



Table-top Augmented Reality

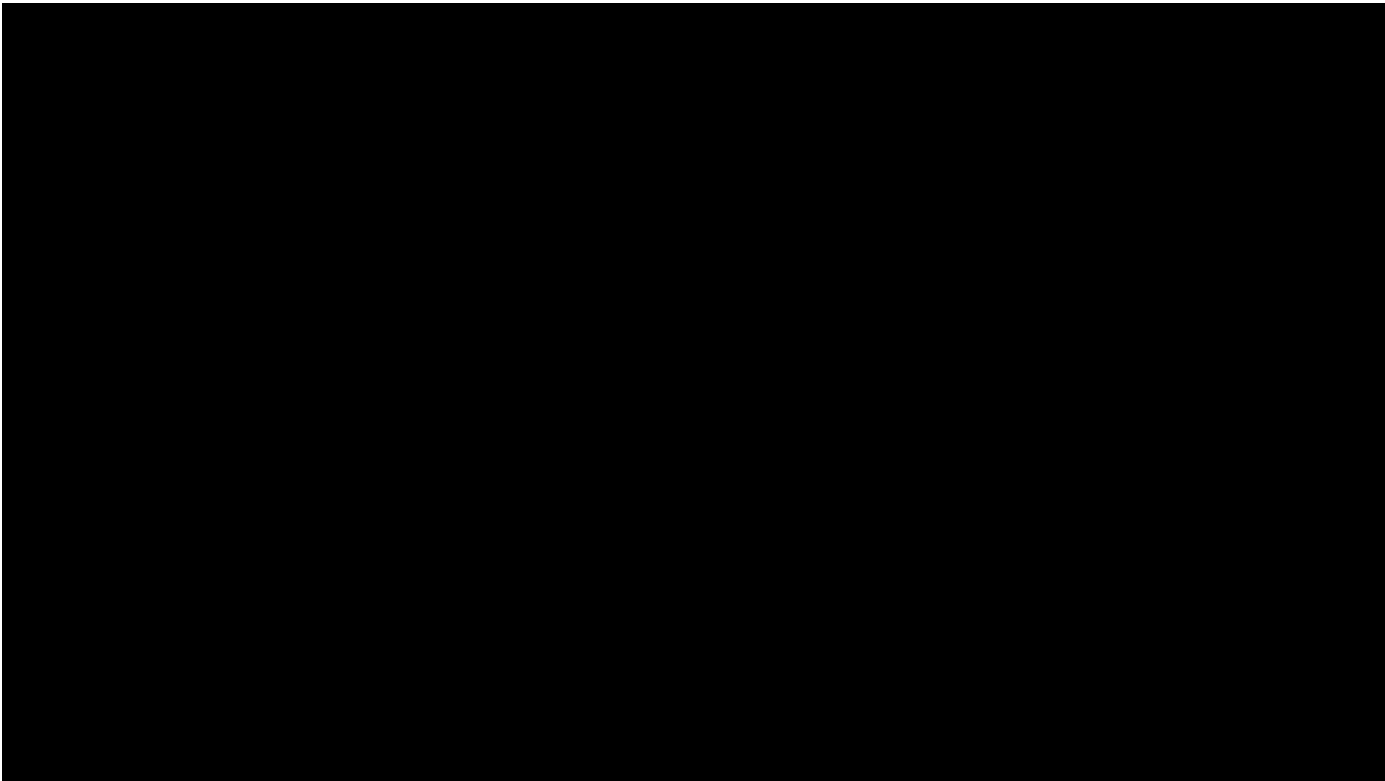


Table-top Augmented Reality

- Advantages
 - Interacting with real-world objects is immediately more intuitive and engaging
 - Various options can be presented, including animations.
 - Naturally supports multiple stakeholders
 - Relatively cheap
- Disadvantages
 - Not fully “immersive”



Outdoors: Keyhole AR (Augview)

- Advantages
 - Can be done anywhere, any time from any perspective
 - Immersive in the sense of overlaying in the real world
- Disadvantages
 - Requires specialist hardware (presently)
 - Relies on GPS, Compass and orientation sensors
 - Only works outside (GPS)



Outdoors: Digital Binoculars

- Advantages
 - Complete control over the experience
 - Fully immersive
- Disadvantages
 - Expensive
 - Could be vandalised
 - Fixed in place (not my bedroom window)



“Blended” Reality

- Advantages
 - Fully immersive
 - Projects “onto” real surfaces rather than “over”
- Disadvantages
 - Requires a unique environment to map
 - Limited field of view
 - Will *probably* struggle outdoors
 - Relatively expensive



Conclusion

- Consider Augmented Reality as a way to engage with stakeholders
- Think about why and where
- Choose technology platform carefully
- How will you collect feedback?

- This technology exists today and is New Zealand based!

