



# ARTA Cycle Route Analysis Tool

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## Project Purpose

- Regional goal is to double cycle trips by 2016.
- 1% of trips in Auckland region currently by cycle (Census 2001 journey to work data).
- Main method to achieve strategic goal is to build a Regional Cycle Network (other methods in Sustainable Transport Plan).
- This project set out to establish which of many models for a Regional Cycle Network would be the most effective to achieve the strategic goal of doubling cycle trips in 10 years.



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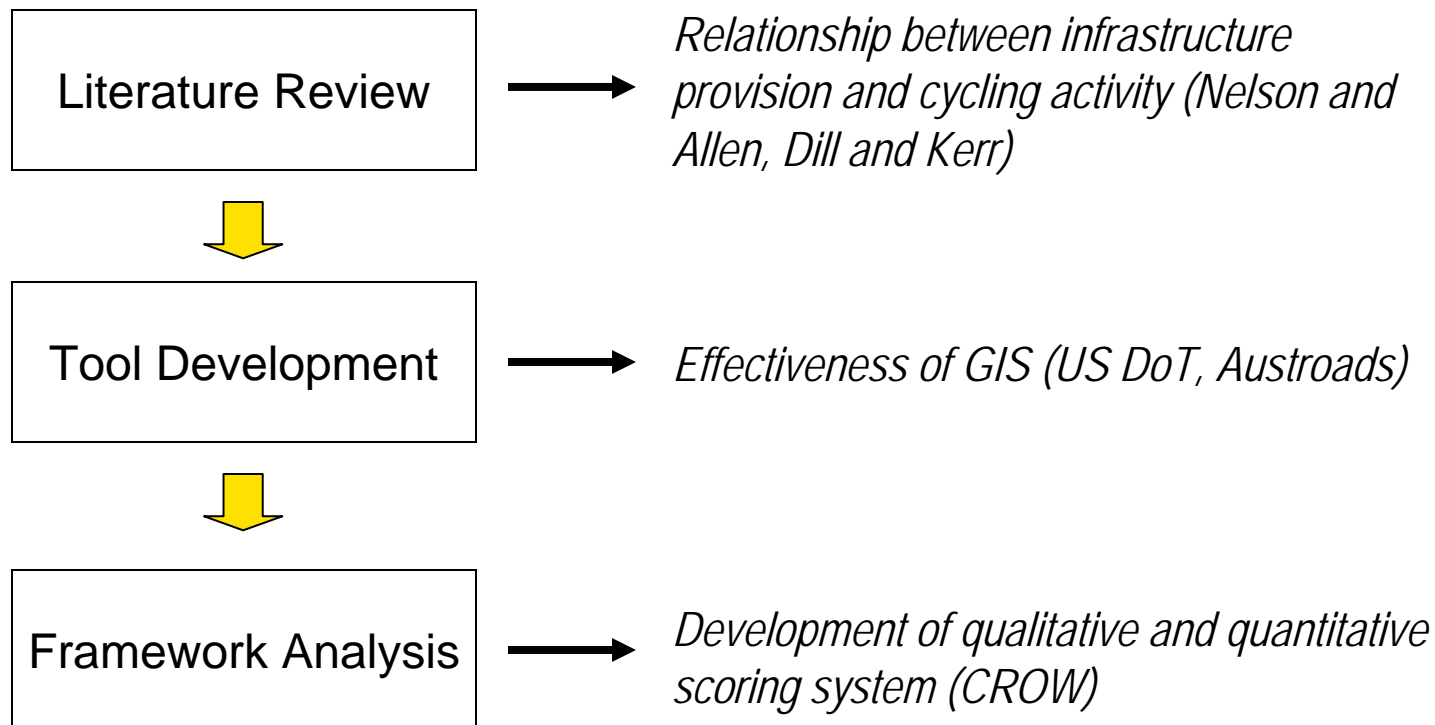
## Project Challenges

- ARTA responsible for coordinating development of Network which will deliver strategic results, and for making funding recommendations to build this Network through Auckland LTP.
- TLAs/Transit responsible for implementation, including (part) funding.
- Development of a Network model needed, with buy-in from all key stakeholders (TLAs, Transit and cyclists) - new exercise in the region.
- Many different models to consider – regional; town centre focus; integration of both; integration with PT.

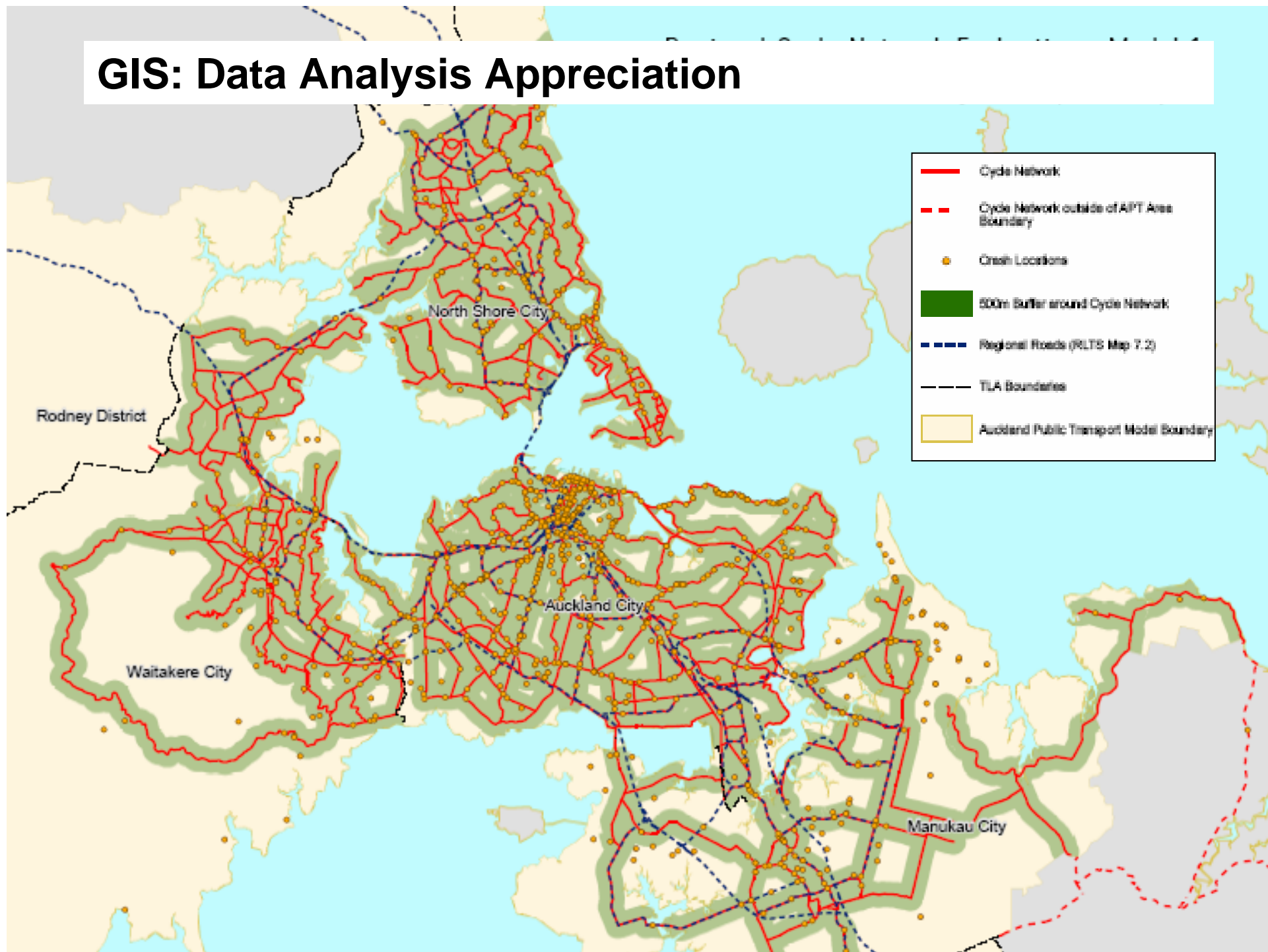


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## Process Overview:



# GIS: Data Analysis Appreciation



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## Framework Analysis

Criteria	Calculated by:
Demographics (Coherence and Directness)*	<ul style="list-style-type: none"> <li>Based on demographic projections to 2016</li> </ul>
Safety*	<ul style="list-style-type: none"> <li>Based on the last 5 years crash data</li> </ul>
Length of Cycle Network	<ul style="list-style-type: none"> <li>Proposed cycle network lengths</li> </ul>
Value for Money	<ul style="list-style-type: none"> <li>Assumed length of cycle network is surrogate for cost</li> </ul>

Note: Attractiveness \* and comfort \* not included.

\* CROW Criteria



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## Example of Summary Table

	Model				
	1. TLAs published networks	2. Regional strategic parts of 1.	3. Town centres	4. Town centres + regional	5. New network of regional routes
Demographic Coverage	82%	47%	55%	74%	81%
Safety Coverage	74%	24%	60%	80%	92%
Raw Score	155	71	115	154	173
Cycle Network Length	854	375	1,192	1,420	757
<b>Final Score</b>	<b>0.18</b>	<b>0.19</b>	<b>0.10</b>	<b>0.11</b>	<b>0.23</b>



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## Study Related Conclusions

- Allowed TLAs to understand their networks relative to other TLAs.
- Each city had quite different relative amounts of cycle network.
- Model 5 resulted from cities each reviewing their network. New networks were produced approximately 15% road network length.



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## Process Related Conclusions

- Provides a cycle network option comparison tool.
- GIS enables large amounts of different data sets to be quickly analysed.
- Provides good data from which to make decisions.
- Transferable methodology.



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## Key Project Staff and Contact Details



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**GIS analysis:**

- ARC

