



Smarter shared path markings

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Aim

To make shared paths safe, enjoyable and effective to all people using or wanting to use them by encouraging positive sharing behaviours

Objective

To identify markings for key sharing behaviours for further testing in a comprehensive on-path behavioural study



KEY BEHAVIOURS

- 1 – Give others space
- 2 – Slow down
- 3 – Keep Left
- 4 – Communicate with other path users (i.e. Use your bell)
- 5 – Move off path when stopped
- 6 – Keep dogs on short leash

Process & Timeline

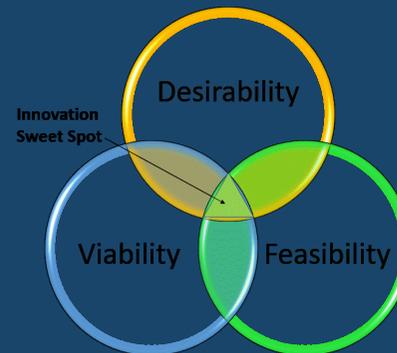
Stakeholder needs

- Intuitive so that behaviours are natural
- Provide the right level of service so additional work is not required
- Are not the only tool, but part of system
- Are different from marketing/activations, applied in different ways
- Can be placed where required or where things change, the overall behaviour norms being set by other mechanisms

Cognitive Ergonomic principles

- Familiarity
- Simplicity
- Meaningfulness
- Concreteness
- Semantic closeness

Service design principles



Ideation Session
11 Nov 2019

Initial Survey
25 Nov 2019

Preliminary On-path Trial
11-12 Dec 2019

Focus Group
18 Dec 2019

Follow-up Survey
03 Feb 2020

Comprehensive On-path Testing
11 Nov 2019

Initial Survey

Ranking survey using Waka Kotahi panel – 286 responses

- **Decision:** Top 3 + 2 combos + Austroads advance to preliminary

| | | | | | | | | | |
|-------------|--|--|--|--|--|--|--|--|--|
| Give space | | | | | | | | | |
| Slow down | | | | | | | | | |
| Keep left | | | | | | | | | |
| Communicate | | | | | | | | | |
| Combination | | | | | | | | | |

On-path Trial

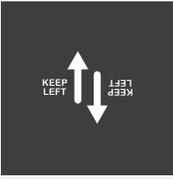
Lo-fi emulation of real life conditions

- On actual shared path – Wellington Waterfront
- Only look once as passing
- Various modes – cyclists, pedestrians, scooter riders, skaters

Questions

- Without knowing meaning: “What behaviour is the marking asking you to do?”
- Knowing meaning: “Out of 10, how well does the marking convey this meaning?”
- Comments



| Give Space | Rating | Go Slow | Rating | Keep Left | Rating | Ring Bell | Rating |
|--|--------|--|--------|---|--------|--|--------|
|  | 8.84 |  | 8.74 |  | 9.21 |  | 8.42 |
|  | 7.35 |  | 8.11 |  | 7.86 |  | 6.57 |
|  | 7.26 |  | 7.57 |  | 7.40 |  | 5.42 |
| | | | |  | 5.68 | | |

Follow-up Survey – Give Space



Follow-up Survey – Keep Left



Selected Designs



Use in higher density areas where space is currently an issue. Size and position could be varied e.g. smaller & to the left of the path



Use to bound areas with high pedestrian density, place function, or vulnerable people



Use where an immediate decrease in speed is required e.g. blind corners



Use as reminders in locations where not keeping left is currently causing risk. Could compare impact with no centre line version below

Additional markings

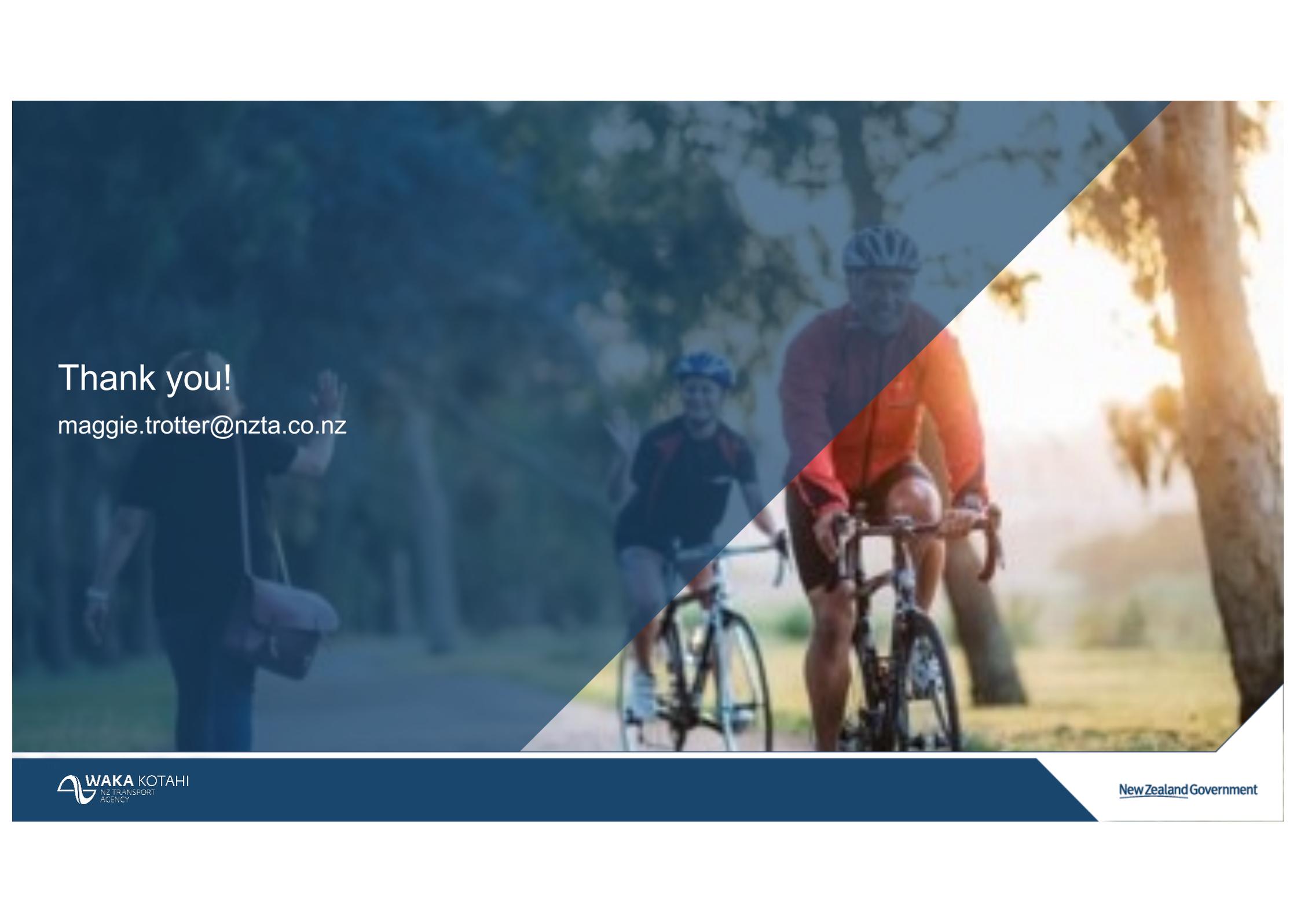


On-road Testing (Mackie Consulting + ViaStrada)

Slow & Keep Left

- KEEP LEFT
- Improved lane keeping
- SLOW
- No or subtle changes in speed
- Highlights importance of hierarchy of solutions – where speed is a key risk need to look to infrastructure design rather than rely on markings





Thank you!

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