

#### Introduction

- Context / brief overview of cycle planning principles/categories of cyclists
- Some examples of good & less successful outcomes
- Challenges
- How can we better meet our goals?
- So Discussion

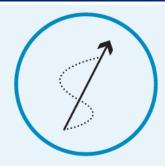


## Key Cycle Design Principles



Safe

It feels safe for users and helps overcome safety concerns associated with cycling.



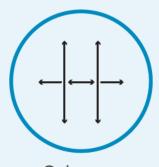
Direct

It follows direct routes with minimal detours and waiting times.



Comfortable

It provides an easy and pleasurable cycling experience.



Coherent

It is well integrated into a continuous and consistent cycling network.



Attractive

It is aesthetically pleasing and attracts users.



Convenience shouldn't be traded off against safety



Directness shouldn't be traded off against comfort, etc.

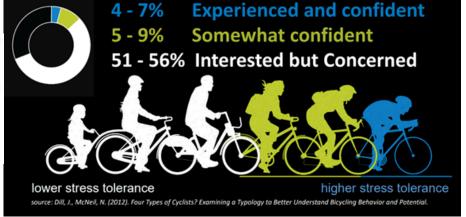


#### Categories of Cyclists

So Broke down city population into 4 types (in reality a

continuum):





- Proportions may vary according to local culture & other demographic factors
- Not everyone can be clearly assigned into one category



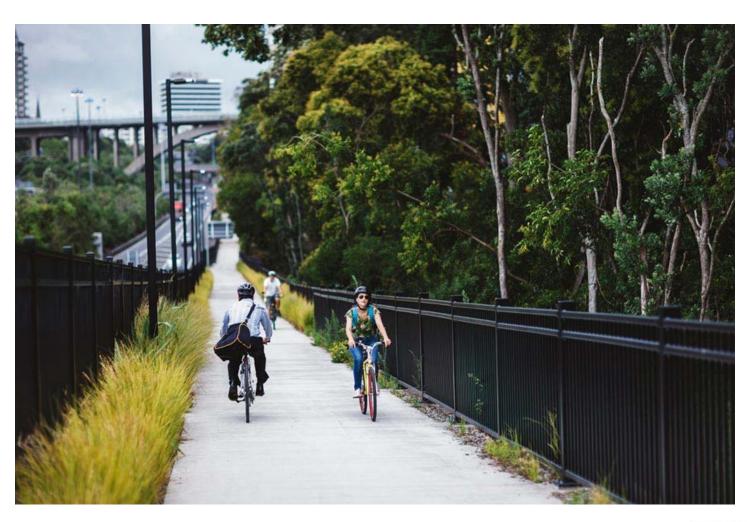
### 'Interested but Concerned Cyclists'

- A People who "generally require physical separation from motorised traffic before they are prepared to travel by bike"
  - Some may be "prepared to mix with motorised traffic when both volumes & speeds are low"
- The level & standard of provision should meet the needs of its target audience over its entire length



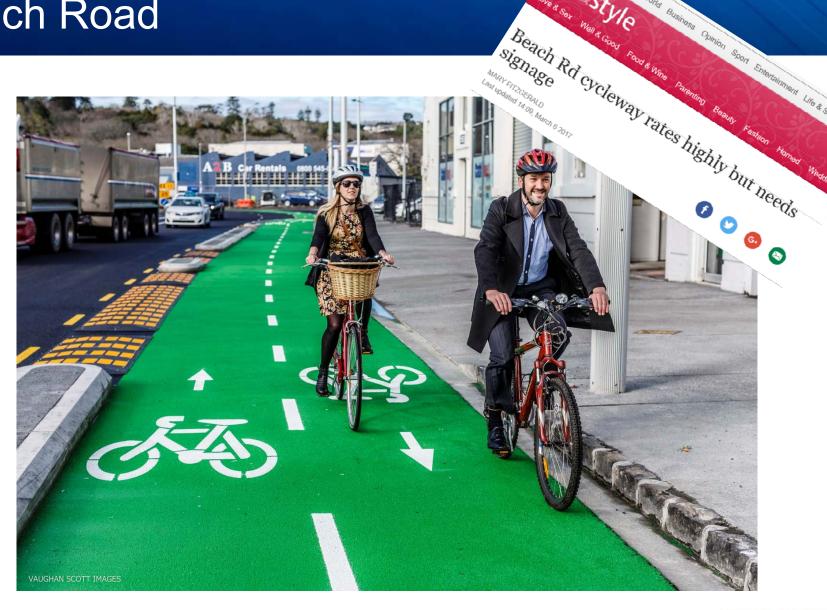


## Cycle Design Headlines: Grafton Gully





#### Beach Road





## Cycle Design Headlines: Island Bay



# Cycle Design Headlines: West Lynn



shop owners across super city say it is destroying their businesses

Last updated 11:26, November 23 2017 SIMON MAUDE



#### Cycle Design Headlines: Oriental Parade

#### **THE DOMINION POST**

Wellington Wairarapa Porirua Kapiti Hutt Valley Hawke's Bay Local Papers

#### Back to the drawing board for Oriental Pde Cycleway design

COLLETTE DEVLIN Last updated 18:45, December 17 2017















## The Many Challenges Typically Faced



Financial constraints



Time constraints



**Road space constraints** 



Public & press reaction



Political support



Fixing existing problems



Lack of guidance/standards?



Legislation doesn't help (e.g. signal design)



Catering to one group of cyclists often detracts the accessibility of another





## Some Key Success Factors....





#### The Importance of Collaboration

- Collaboration between planners, urban designers & landscape architects, as well as transport engineers & transport planners, is vital
  - Many cycle projects become streetscape / place making projects

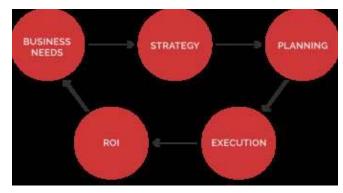
Each aspects of the design is important





#### Defining the Corridor Strategy

- Many transport authorities have significant overlap in their modal networks
- Resolve network level implications before considering individual corridors
  - Have clear objectives & principles
  - Evaluate the options & make a clear decision
- Needs clear & shared agreement on network modal priorities
- state If not done, opportunities can be missed





# Define Realistic Goals and Know What Success Looks Like!

- Are our aims realistic / achievable & consistent with other transport goals?
  - Upfront effort usually leads to smoother implementation
  - BUT avoid the Kaizen Paradox incremental improvement can impede innovation
- Be clear what success looks like...
- Get the corridor strategy & priorities 'locked in' up-front is crucial to avoid
  - Delays
  - Cost blow-out
  - Failure to meet expectations

#### Political and Public Support

- Political commitment is often key to achieving project objectives, particularly re-allocating road space,
- The highest quality infrastructure often requires the most coherent & sustained campaign to persuade those in power to deliver it
- Reputation is important when championing cycle projects & winning over the general public!







#### Devil is in the Detail

- & Cycle design is very context driven
  - Space
  - Community requirements
  - User priority
- Different treatments fit different requirements for different users







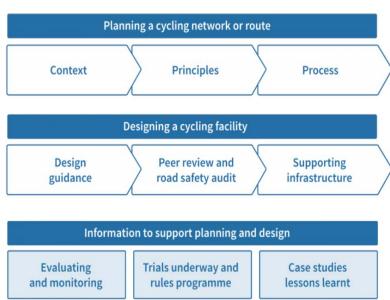
#### Design Standards

- Guidance is evolving
- NZTA National Cycle Design Guidance project developed on-line 'framework'

 Designed to be updated to keep track of continually-evolving best-practice / fit for purpose guidance

#### % Needs to be:

- Simple to use
- Flexible
- Not too restrictive
- Not exclude engineering judgement
- Not inhibit innovation



#### Some Possible Gaps in Guidance?



A flow chart/matrix to outline how to define the target audience for the cycle project



An overview guide of each cycling group, what they want from a cycleway & what specific design features they need



An ideas/innovations register that showcases design from around NZ & explains any problems/issues with that design



#### Do we Know when to Pause?





How often have we accepted **too many compromises**?



How often do we fail to reconsider whether a project **can** achieve its initial objectives?



Are we willing to highlight where design objectives & principles are being **over-compromised**?



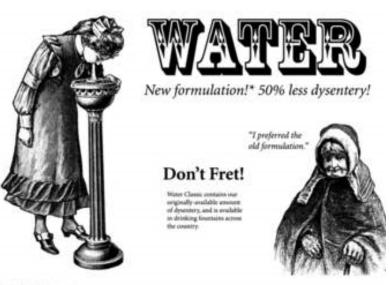
Are the mechanisms easily or readily available to have 'difficult conversations'?



### Closing Thoughts...

Of course it's often 'hard' to do things properly, **BUT** when is the last time that Watercare said:

"...there is rarely a perfect solution that can be lifted from the design guidance.....so we are carrying out public consultation to see which water carried disease people would prefer: Cholera, Typhus or Dysentery."



#### Discussion

- 1. Think of an example where compromise has been left to go too far
- 2. What are the main barriers to us being slow to see or highlight that a <u>project is departing from its intended trajectory</u>
- 3. What is the <u>one thing we could do differently or better</u> to deliver better cycling infrastructure?



## Questions



