South Dunedin Strategic Cycle Network

Cycling Forum 23 May 2013

ViaStrada Ltd

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TRAFFIC ENGINEERING AND PLANNING

Overview

- Background and context
- Who are we doing our work for
- How we will cater for cycling
- Quiet Streets
- Network
- Progress report
- Conclusions



Introducing ... Axel Wilke

- ME (Civil) (Canterbury University)
- ViaStrada (Director)
- 15 years traffic/transportation experience
- Cycling-related projects/publications
 - Develop cycling strategies around NZ
 - Develop guidelines and write design manuals
 - -Cycling papers at numerous conferences

-Train my peers (close to 1000 by now)



Background and Context

- DCC Strategic Cycle Network (SCN) defined in 2011
- South Dunedin is DCC's top priority for implementation
 - -High crash numbers
 - -High demand (existing usage; topography)
- Further work has been done on network and planning approach



Statistics

- 1. Dunedin not doing well with commuter cycling
 - but South Dunedin better than NZ's best city
- 2. 8% commute mode share is quite a bit
- 3. Dunedin doing well with cycling to school
- 4. Huge potential to produce much larger cycling share (West Coast / Nelson / Marlborough / Tasman example)



How to get people cycling

• What is a cyclist?











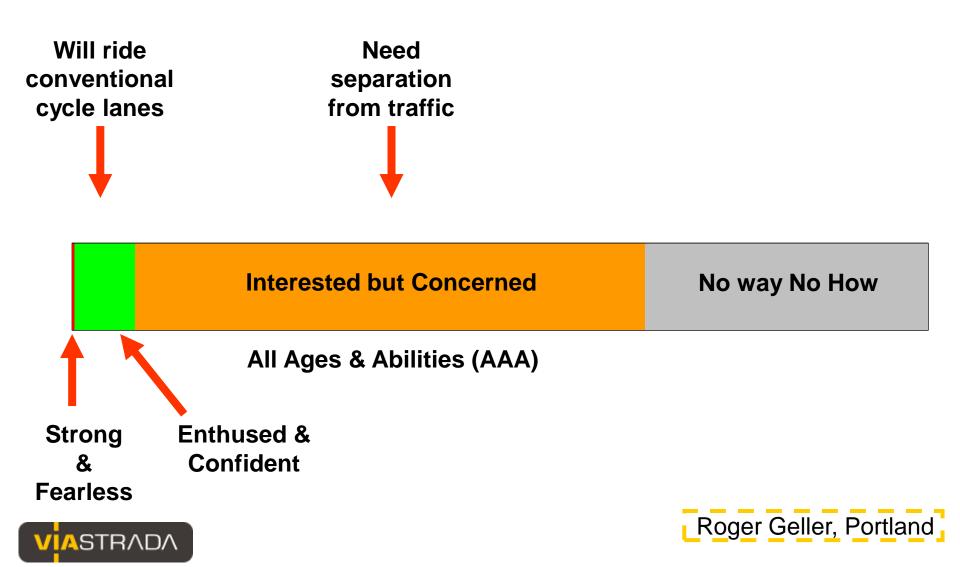


Trip types and requirements

- No such thing as the "average cyclist"
 - Wide range of abilities, motivations and trip purposes
- Need to understand the target audience before planning and designing
- Who is the network aimed at?
 - -We may get different users depending on what we provide
 - -We may get different uptakes in cycling depending on who we aim at



4 types of transportation cyclists



Chosen planning approach

- Aim high target the 'Interested but Concerned' on some corridors
- Provide for the 'Enthused and Confident' on other corridors
- Know target audience when defining the network elements



Providing for 'Enthused & Confident'

- Conventional cycle lanes
- Some mixing with other traffic ok / tolerated
- Basically the approach that has commonly been used





Providing for 'Interested but Concerned'

- Needs some form of separation from traffic
- Mixing with much or fast traffic would not be accepted (needs continuous routes)
- Could share with pedestrians
- Various facility types could achieve this, some of which haven't been tried in Dunedin



Planning – take home messages

- If we provide for the 'Interested but Concerned', our target market is huge
 - $\sim 2/3$ of the population
- 2. Corridors need to have a consistent quality
 - think of weakest link in the chain
- 3. People will do what is most convenient to them
 - We can't choose their mode of transport for them
 - The quality of our work will determine how many users we get



Quiet Streets

A roadway with low motor traffic volumes and speeds designed to provide a safe, attractive, convenient and comfortable cycling environment



Quiet Streets cont'd 2

- Achieve good cycling environment through
 - -Traffic calming and traffic reduction
 - -signage and pavement markings
 - -intersection crossing aids
 - -Car access to properties is maintained
- Traffic speeds should not exceed 30 km/h
- Volumes below 2,000 veh/day



Quiet Streets cont'd 3

- **Design principles** (in its simplest form)
 - -Give right of way to local road (give way to face side streets)
 - -Traff spee
 - Entr (to pr beco
- Less
- Adva

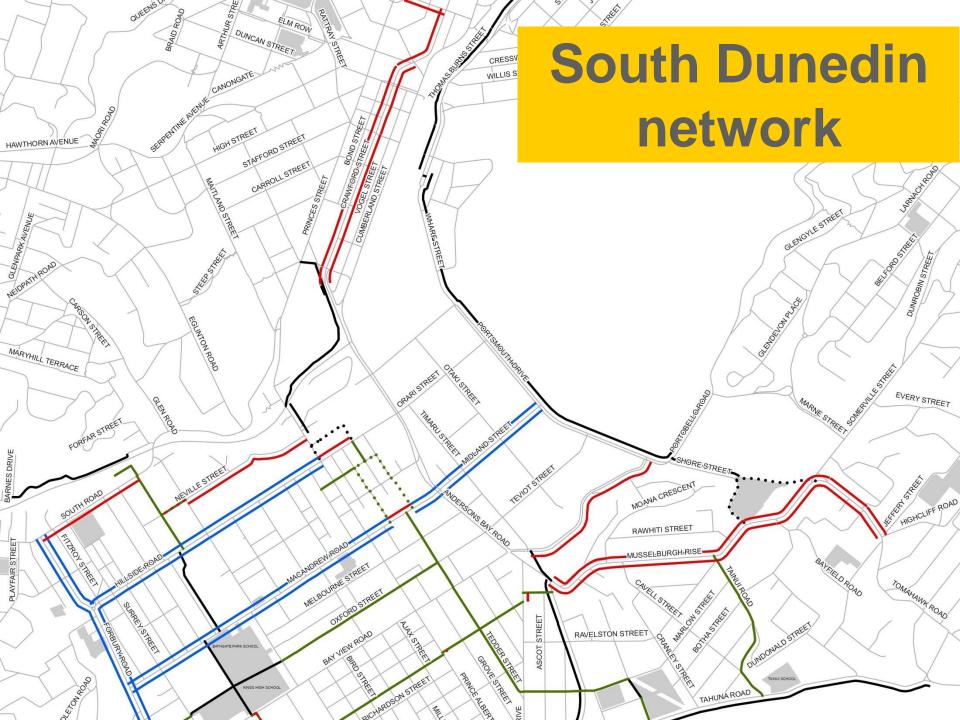


2013 network map cont'd

- Some links have route options
 For example Shore St
- Some corridors aren't set in stone yet
 - Crawford St (preferred) but only viable once it becomes a two-way street
 - -Vogel St a viable alternative
- If Oxford St (preferred) is viable, we would drop Macandrew Rd

–Macandrew Rd for 'Enthused & Confident'





South Dunedin network

EVERY STREET

POles

Avenus ROAD

Enthused & Confident

STREET

5

RAVELSTON STREE

CRESS WILLIS

ELM ROW

DUNCAN STREET

HAWTHORN AVENUE

MARYHAL TERRACE

WAR STREE

TONOT

Cherdon .

THEF

Interested but Concerned

MOANA CRESCENT

RAWHITI STREET

TAYUNANO

What does this mean?

- We will enable the 'Interested but Concerned' to travel by bike
 All Ages & Abilities (AAA)
- Nobody else has done this before in urban New Zealand (Napier / Hastings)

Dunedin will be leading the way for New Zealand



What does this mean? Cont'd 2

- Segregated facilities will improve safety
- 'Interested but Concerned' will only ride if they feel safe
 - Caveat: there's no such thing as 100% safe as long as humans interacting with humans

Dunedin will become much safer for cycling



Where are we at?

- Consultation on revised network and some routes underway
 - -Portsmouth / Wharf path improvement
 - -Portobello Rd (Timaru-Portsmouth)
 - -Shore St
 - -Royal Cres
- Construction to start soon (Victoria / Tahuna)





Conclusions

- We are not building a network for cyclists
- Network for the community, so that community members can ride a bike
 - Good level of service, so that existing cyclists will want to use the new infrastructure
- South Dunedin network built by July 2015
- First comprehensive network for 'All Ages & Abilities' in urban New Zealand



Thank you

- All presenters are happy to receive your feedback
 - -Now or later
 - -My contact details below

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2013 South Dunedin network map

- Several refinements to 2011 network map
- Some corridors added
 - -Neighbourhood greenways not used in 2011
- Some corridors removed
 - -King Edward / Prince Albert (no options)
 - -Andersons Bay (not value for money)
 - -Queens Dr (Royal Cres much better)
 - Princes St (parallel options better)
 - -Tomahawk Rd (Tainui Rd is flat)

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