

Presentation to the 2WALKandCYCLE Conference
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Bicycle Network Planning: The Target Audience Approach



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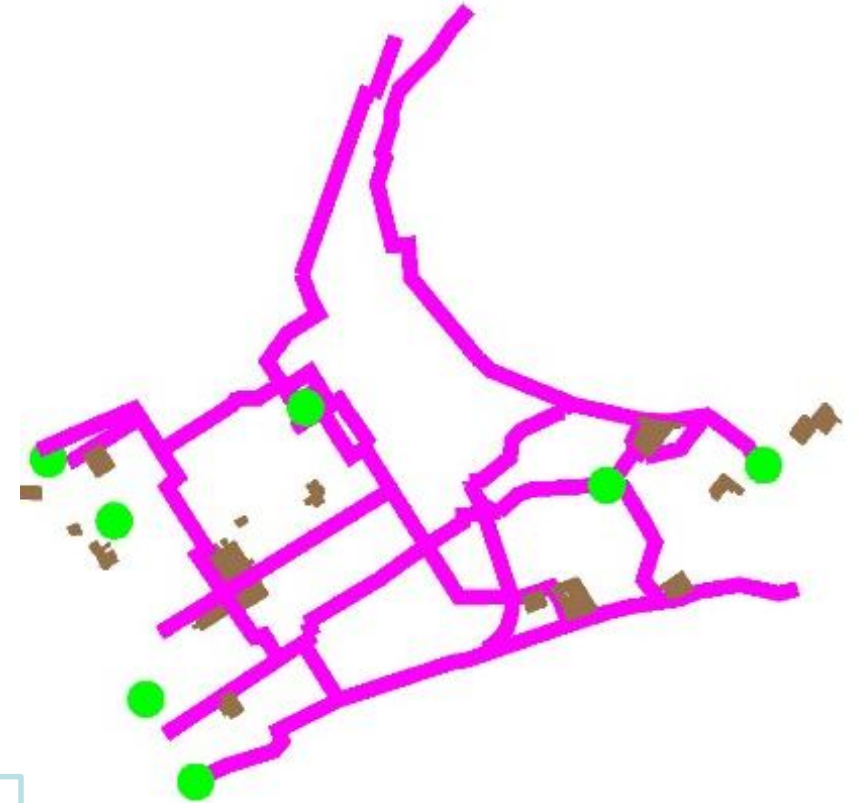


Michael Ferigo

Christchurch City Council

Overview

- Geller's cyclist typology
- Cycle network planning approaches
- Australasian planning guidance
- Cycle network planning case studies
 - Dunedin
 - Christchurch
- Conclusions



Peer reviewed paper has much more detail

Authors

Axel Wilke

- Director, ViaStrada
- Traffic engineer & transport planner since 1998
- Undertakes industry training (walking, cycling, modelling)
- Member Cycling Safety Panel (2014)

Sarah Connolly

- Transportation Planning Manager
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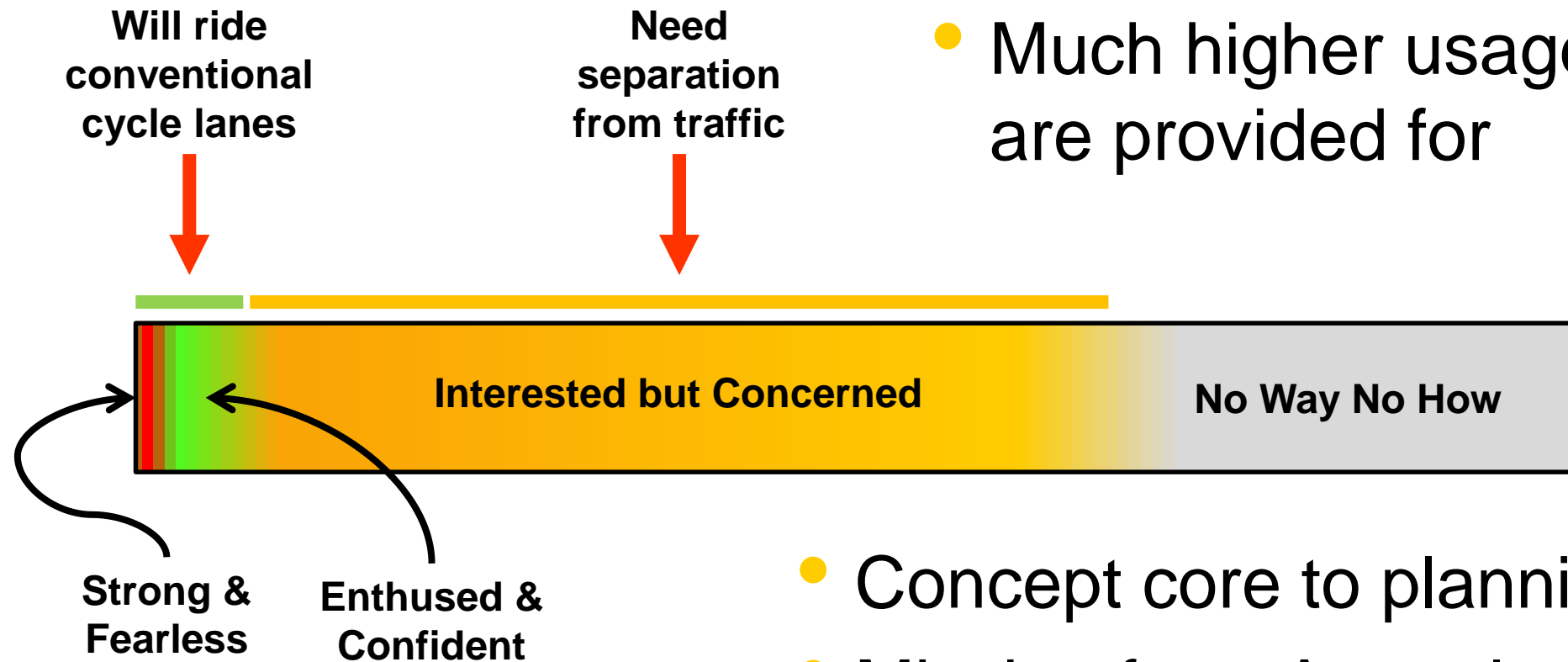
Michael Ferigo

- Transport Planner – Cycling and Walking
- Christchurch City Council



4 types of transportation cyclists

- Much higher usage when IbC are provided for



- Concept core to planning approach
- Missing from Australasian guidance

Geller (2009)

Interested but Concerned

No Way No How

Strong & Fearless

Enthusied & Confident



Old planning approach

[May or may not
define target
audience]



Define network
(high level)



See what is
possible during
implementation

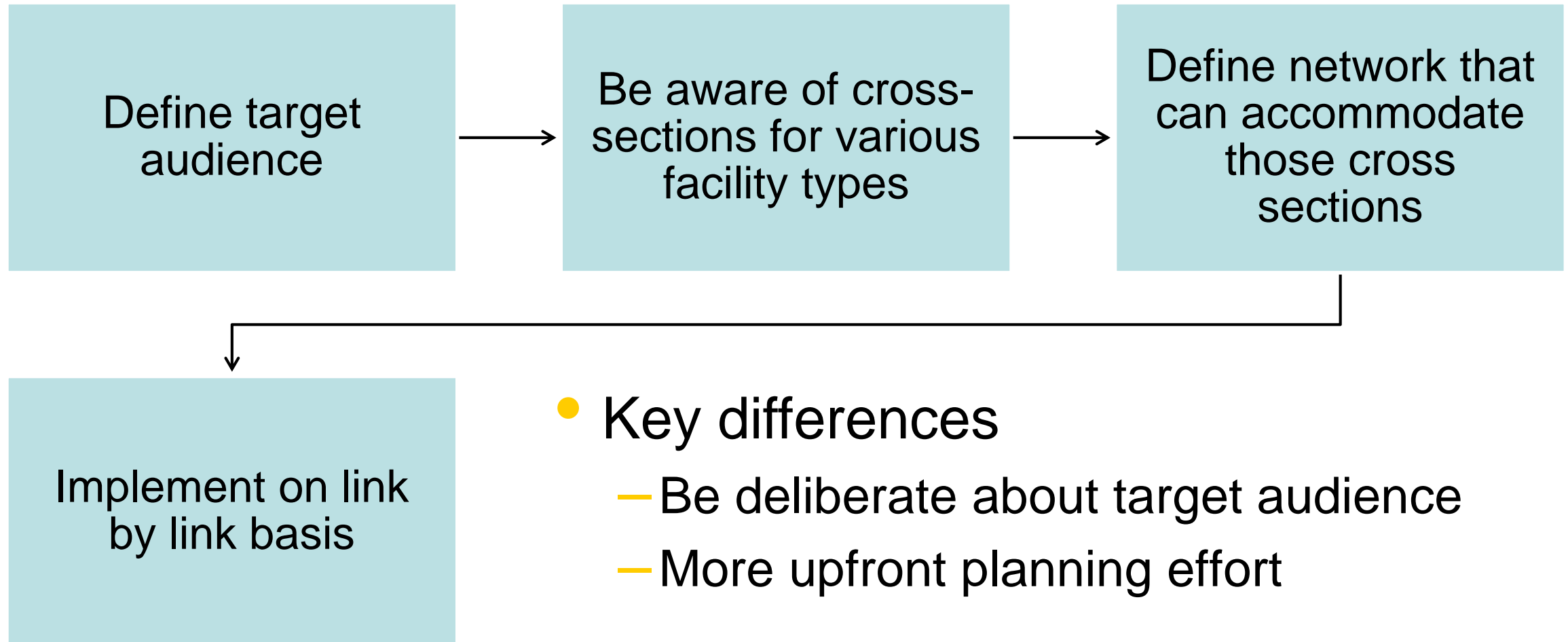
Network planning problem example

- Problem example
 - 12,000 veh/day (too busy for lane sharing)
 - Too narrow for cycle lanes unless parking removed (removal in retail strip inappropriate)
 - New kerb & channel (widening inappropriate)
 - Busy footpath (sharing inappropriate)

Inappropriate network link



Suggested planning approach



Australasian planning guidance

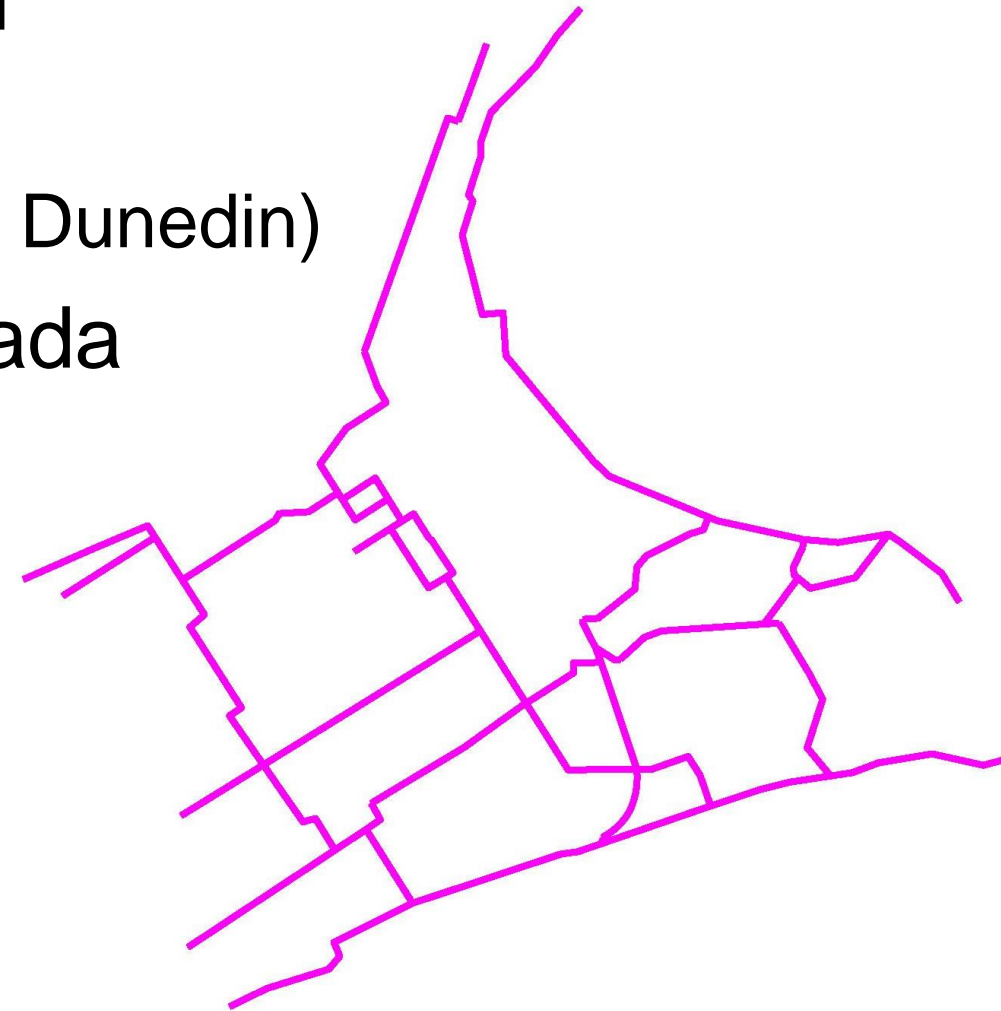
- Australasian bicycle network planning guidance
 - Two Austroads documents (2011 and 2014) and *Cycle Network and Route Planning Guide (CNRPG)* (LTSA, 2004)
- Best guidance in *CNRPG*
 - Although Austroads documents much newer
 - Bicycle Boulevards missing from all documents
- Geller typology better than what is in current documents
- Guidance in need of updating



CYCLE NETWORK AND
ROUTE PLANNING GUIDE

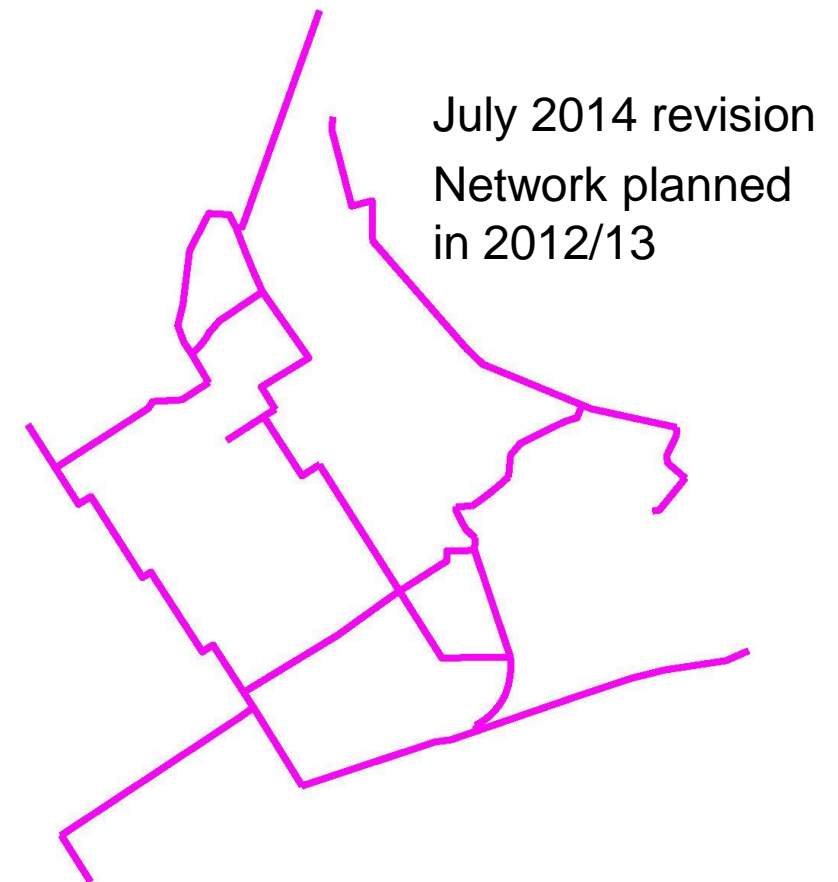
Case study: Dunedin

- Strategic Cycle Network developed
 - By external consultant (2009/10)
 - Adopted by city council in 2011 (all of Dunedin)
- Further work undertaken by ViaStrada
 - Covering South Dunedin only
 - Based on target audience principles (2012/13)
 - 2011 network adjusted (e.g. for problems outlined before)



Case study: Dunedin cont'd 1

- Network implementation costs underestimated
 - Budget was \$4.5m vs \$5.3m estimate
 - Estimate increased to \$7.85m
- DCC'lors agreed on reduced network
 - 14.8 km network for \$5.5m (July 2014)
 - Some 10 km less than initially planned
- October 2014 status:
 - Some routes built, some routes under consultation, remainder under design



Case study: Christchurch

- Cycling Strategy (2004)
 - Network not based on target audience
 - Intention to cater for “all types of cyclists”
- Chch Transport Strategic Plan (2012)
 - Replaced Cycling Strategy
 - Three levels of cycling network (major, local, recreational)
 - Major cycle routes have *Interested but Concerned* as audience



Case study: Christchurch cont'd 1

- Cycle network implementation
 - Staff had anticipated 30-year implementation timeframe
 - Level of planning detail reflected timeframe
 - City councillors decided on implementation within 5 years (\$68.5m)
- Status in October 2014
 - First signalised crossing built (“turf has been turned”)
 - Some links out for consultation
 - Some links under design



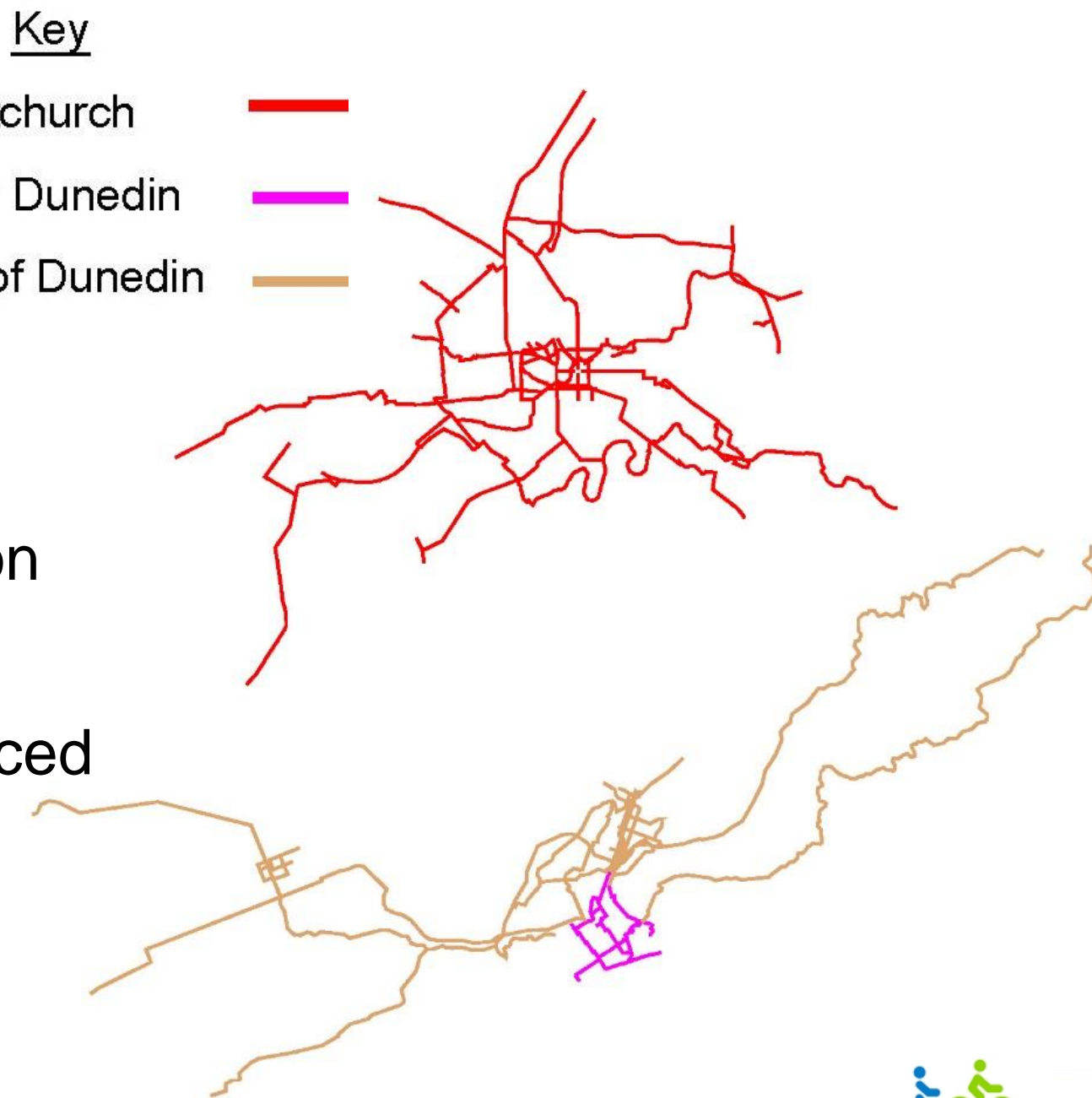
Dunedin-Christchurch comparison

- Both cities have planned networks for *Interested but Concerned* target audience
 - South Dunedin under implementation
 - Dunedin city centre under design
 - Rest of Dunedin defined in 2013 transport strategy
 - 13 Major Cycle Routes in Christchurch
- Both large networks
 - Dunedin advocates not entirely supportive
 - More positive reaction expected in Christchurch



Comparison

- Network density
 - South Dunedin denser than suburban Christchurch
 - Even after July 2014 revision
- Planning certainty
 - South Dunedin most advanced
 - Christchurch routes reasonably well advanced
 - Rest of Dunedin least advanced



Conclusions

- Best local network planning guidance in *Cycle Network and Route Planning Guide* (LTSA, 2004)
 - In need of updating for Bicycle Boulevards and Geller typology
- Agree on target audience before planning cycle network
- Plan cycle network links that are achievable
 - Upfront effort will lead to smoother implementation
- Dunedin and Christchurch implementing cycle networks
 - Both cities can expect significant increases in cycling

Thank you

- Questions & discussion please

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