Presentation to 7th NZ Cycling Conference New Plymouth, 13 November 2009

Estimating Demand for Selwyn's Cycleways

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- Costs and benefits
- Current status of project
- Conclusions

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Background

- Seven projects from SDC 2009 walking and cycling strategy action plan
- 26 km of proposed off-road cycle paths alongside roads
- Significant community and local political support





Proposed facilities

- Lowes Rd (Rolleston towards Burnham; 3 km)
- 2. Edward St (Lincoln to Rail Trail; 1.1 km)
- 3. Coalgate to Glentunnel (2.6 km)
- 4. Lincoln to Springston (3 km)
- 5. Lincoln to Rolleston (8.5 km)
- 6. Rolleston to Templeton (8 km)
- 7. Leeston Road bridge



Simplified Procedure 11 (SP 11)

- From Economic Evaluation Manual (EEM)
- Likelihood of cycling on a facility declines with distance from facility (multipliers):
 - 400 m (0.33)
 - 800 m (0.17)
 - 1600 m (0.07)

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- Populⁿ inside buffers
- Journey to work cycling mode share



New demand estimation method (1)

- Used data from existing Birchs Rd cycleway (Prebbleton to Lincoln)
- Existing traffic = 120 cyclists per day
- SP 11 predicted only 73 cyclists per day
- We modified SP 11 to better match data

Method not yet approved by NZTA

New demand estimation method (2)

- Simplified buffer structure just two
 - 800 m with a multiplier of 0.26
 - 1600 m with a multiplier of 0.13)
- Included population <u>and</u> school & uni rolls





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Results of predictions

	Original SP 11	Modified SP 11
	AADT prediction	AADT prediction
Lowes Rd	107	126
Edward St	49	78
Coalgate to Glentunnel	8	9
Lincoln to Springston	46	90
Lincoln to Rolleston	83	148
Rolleston to Templeton	116	156
Leeston Rd Bridge	1	2

- AADT = Annual Average Daily Traffic cyclists per day
- Calculations also done for pedestrians



Costs vary; average \$350,000/km

- Off-road paths seems cheap, but design will be relatively expensive
- Bridges can be "pinch points" and expensive to fix





Benefit / cost ratio

- Benefits from modified SP 11 = \$97 M
- Cost of all projects = \$9 M (\$350,000/km)
- Benefit / cost (B/C) ratio = ~11





- Funding declined in RLTP (Aug 09)
- Three paths on "Reserve A" list for possible funding:
 - Lowes Road (Rolleston towards Burnham)
 - Edward Street (Lincoln to rail trail)
 - Lincoln to Springston
- SDC to resubmit for "LTP Online" review

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Conclusions

- Methodology considered to improve on SP 11 as it:
 - is simpler (2 buffers instead of 3)
 - uses school / uni rolls, not just population
 - is calibrated against a local facility



 Healthy B/C ratios possible even for rural projects; no guarantee of funding

If you build it, they will come...





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