

Cycling Research

I WANT, I WANT, I WANT...

No, the above title is not a reference to the latest Christmas wishes; rather, something more close to home for CANners: what do cyclists want? After all, a lot of effort goes into the "four E's" of engineering, education, encouragement and enforcement - is it pushing the right buttons? The question is particularly of interest for existing non-cyclists, who might be encouraged to take up cycling, given the right conditions.

The answer it seems depends a little bit on what questions you actually ask. Some people for example are specifically interested in the demand for different cycling facilities, whereas others want to know what other "social" measures could be implemented. Antonakos (1994) surveyed 550 bikers from four major recreational bike tours on their preferences for various features, using a 1 ("not at all") to 5 ("very much") rating scale. Personal and cycling characteristics were also recorded to identify sub-group trends. In terms of general cycling facilities, the following average preferences were recorded:

Facility	For Recreation	For Commuting
Bike Lane (on-road)	3.9	4.1
Wide Kerb Lane	3.6	3.8
Bike Path (off-road, sealed)	3.4	3.1
Trail (off-road, unsealed)	2.4	2.0
Dirt Road	1.8	1.9
Footpath	1.5	1.7

It's interesting to note that even a wide general traffic lane is preferred to an off-road solution like a bike path. However, looking at the data in more detail, less experienced cyclists and those with mountain bikes rated bike paths just as highly as on-road lanes. The consistency of preference regardless of trip purpose is also important to note. In contrast, people had quite different priorities for general characteristics of cycle facilities:

Characteristic	For Recreation	For Commuting
Safety	4.4	4.2
Quick	-	3.9
Direct	-	3.8
Low Traffic Volumes	4.1	3.6
Smooth	4.1	3.8
Scenic	3.9	2.0
Slow Traffic	3.6	3.3
Convenient for Errands	-	3.2
Few Stops	3.0	-
Few Hills	2.7	2.2

Clearly safety is paramount to everyone. But other issues like scenery, while important to recreational cyclists, weren't rated by commuters. And no-one was too bothered by hills - so there's no excuse here!

Antonakos also asked cyclists what "community improvements" they felt were needed:

Improvement	Preference
Bike Lanes	4.5
Motorist Awareness	4.4
Child/Youth Bike Safety Education	4.2
Surface Quality	4.2
Adult Bike Safety Education	4.1
Bike Paths	3.8
Road Markings	3.4
Road Signs	3.3
Slower Traffic	3.2

Now we see the second "E" of education coming into play. The ratings show that clearly all improvements were favoured to some degree though.

Closer to home, a recent major travel survey of over 2000 Canterbury University staff and students (Wilde 2000) asked a number of questions about measures that might change people's travel choices. Factors that rated the highest for encouraging more cycling or taking up cycling include:

Factor	Staff	Students
Better cycle routes	34%	26%
Better cycle (parking) security	30%	33%
Less traffic on the road	35%	29%
More courteous vehicles	33%	26%
Financial incentives	17%	29%
Better changing facilities	21%	19%
Better located bike parking	11%	19%
Nothing!	24%	19%

In terms of the most important factor, things were fairly evenly split. Interesting to see the reaction (especially by poor students!) to the financial incentives suggestion - although obviously a lot of people haven't appreciated the financial savings that already come with riding a bike! And it's always important to remember that percentage of people for whom nothing will make them change their ways.

Christchurch City Council undertakes annual market research on attitudes to cycling by both cyclists and non-cyclists (CCC 2000). Among the many interesting questions posed, participants are asked what improvements would encourage them to cycle or cycle more:

Factor	Overall	Cyclists only	School Students
Having a secure place to park a bike	64%	70%	83%
Making it safer to cycle	66%	79%	87%
More cycle ways separate from the roads	66%	75%	79%
More cycle lanes on the roads	56%	68%	79%
Having fun rides and a cycle festival	28%	32%	52%
Improving the overall image	47%	53%	56%

The results highlight the fact that different things matter more to different groups of people, making targeting of initiatives important. Survey participants could also suggest other important issues that would affect their choice, and other ones that came up regularly included more aware/considerate motorists, better weather & less wind, not having to wear a helmet, and (funnily enough) owning a bike in the first place.

You may want even more specific information than this. Palmerston North City Council for example commissioned market research to identify cycling routes, dangerous/black spots and the need for additional cycling facilities in the city (PNCC 2002). Participants indicated the routes they used and noted any sections of road or intersections where they had concerns. Streets could be ranked for providing cycle lanes, intersection treatments or separate cycle paths in terms of the number of positive responses.

In the near future, CAN is planning to undertake some surveying of its members to try to make sure that we're advocating for the things that matter to you - watch this space!

References

- Antonakos, C. 1994, "Environmental and Travel Preferences of Cyclists". *US Transportation Research Record 1438*.
- Christchurch City Council, 2000. *Attitudes Towards Cycling in Christchurch in 2000*.
Web:<http://www.ccc.govt.nz/Recreation/Cycling/Reports/>
- Palmerston North City Council, 2002. *Cycle Route & Provision Development Research*.
Web:<http://www.pncc.govt.nz/council/cycling.aspx>
- Wilde, H., 2000. *Year 2000 Travel Survey*. University of Canterbury, Dept of Civil Engineering, ENCI 495 project report.

Glen Koorey (koorey@paradise.net.nz)