Is there a serious role for cycling in the renewal of Christchurch?

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Background

- Commuter & utility cyclist
- Teacher and Researcher
- Local Transport involvement
  - Regional Transport Committee
  - Urban Development Strategy Forum

Evidence based cycle advocate
Talk today

1. Urban challenges
2. What are the needs of potential bicycle users?
3. Can Christchurch be rebuilt as a city for bicycles?
Peak Oil

YOUR GASOLINE OR YOUR LIFE.

GIVE ME A MINUTE ON THAT.

Climate change
Urban Challenges

Climate change and peak oil are real problems
Potentially technology could solve them
But:
- probably won’t
- not in time
- at a cost society won’t want to pay

But other major problem – HEALTH
- Technology cannot solve this
- Behaviour change is the key

Obesity

"New Zealand is in the grip of a global obesity epidemic, the future costs of which will be enormous, potentially unaffordable for the health system."

- Professor Norman Sharpe, New Zealand Heart Foundation
  medical director, Sept 2011

www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=10762121
Energy balance

Increasing evidence that this side is more important

**INTAKE**
Calories From Foods

**OUTPUT**
Calories Used During Physical Activity

THE ENERGY BALANCE

What are the needs of potential bicycle users?
What sort of cycle infrastructure?

What do non-cyclists want?

What is best for their health?

Attracting the new cyclists

Assessment of the type of cycle infrastructure required to attract new cyclists

- NZ Transport Agency funded research
- To assess the type of infrastructure needed to attract ‘new’ cyclists
- Investigate the barriers and motivations for cycling


* Available on Conference Proceedings CD
Methods

Questionnaires to get an understanding of current transport patterns
- 4772 University of Canterbury Travel Surveys
- 376 Recreational Cyclists Questionnaire
- 122 Community Cycle Survey

Focus groups of 3-6 ‘potential' commuter cyclists
- discuss transport and cycling in general
- series of diagrams of cycle facilities shown
  - Participants asked to rate facility and frequency of cycling - Frequently, Sometimes, Rarely, Never

Findings

- Major barriers:
  - Safety (most significant)
  - Showering and changing facilities
  - Enjoyment of journey (relaxing and pleasant)

- Minor Barriers:
  - Bicycle parking
  - Work vehicles
  - Luggage capacity
  - Helmets
  - Clothing
  - Children
  - Weather
  - Logistics
  - Trip chaining
  - Night time cycling
  - Confidence
  - Cycling equipment (lights & fluoro vests)
Findings

- People were prepared to cycle 5-10 minutes longer for a more attractive (off-road) route
- Infrastructure
  - Consistency was important (most significant)
    - same facilities across the city
    - continuous facilities
  - Type of infrastructure

![Diagram of C3 - Right Turn Facility with Advance Stop Box]
C3 - Right Turn Facility
Advance Stop Box

A4 - No Specific Cycling Provision
A6 - Marked Cycle Lane with extra Highlighting

A7 - Kerbed Cycle Lane with parking behind
A5 - Kerbed Cycle Lane directly behind parking

Mid-Block Facilities
- Shared Path
- Cycleway behind parking with separation
- Cycleway directly behind parking
- Kerbed Cycle Lane
- Cycle Lane with extra highlighting
- Cycle Lane
- No Specific Cycling Provision

0% 20% 40% 60% 80% 100%

Never Rarely Sometimes Frequently
Findings

- Danger is main barrier!
- Network of off-road routes is favoured
  - If not possible, then clearly marked cycle lanes are preferred (not just white lines)
- Some level of separation was preferred to sharing facilities with traffic or pedestrians
- If shared facilities are necessary, with pedestrians is preferred
- Different needs of experienced vs inexperienced cyclists
  - Policy and consultation implications
Can Christchurch be rebuilt as a city for the bicycle?

Process

- Share an Idea
  - Six weeks of ideas
    - Community Expo
    - Road show & Drop in
    - International Speaker Series
  - 106,000 ideas
- Central City Plan
  - Consultation
- CERA
  - More consultation
- Minister for Earthquake Recovery
The Draft Central City Plan

- Draft Central City Plan (CCP) includes lots of positive cycle initiatives and promises
Streets for cycling

Christchurch is a relatively compact city where more daily journeys to, from and within the Central City could easily be undertaken by cycle.

To achieve this change of attitude, however, people of all ages and abilities need to feel safe cycling. Christchurch has a city plan and the infrastructure to make this happen. As the city grows, the Council will develop more infrastructure for cycling. There will be more on-street cycling lanes on many streets separated from traffic, as well as quiet routes linking destinations across the city.

These facilities will be amongst the best in the world, providing perhaps the catalyst for the long-sought change in how people can travel around the Central City.

Cycling routes within the Central City will be made even with a network of continuous and safe cycle routes. These cycle routes will be developed to substantially reduce the usual low road speeds within the limited facility with key destinations across the Central City and beyond.

Recreational cycle paths

The cycle network on the city’s streets will link up to leisure routes and paths within the city, particularly along the Avon River."

Cycle lanes

A cycle lane can be a separated and/or raised lane reserved for cyclists, usually between a parking lane and the footpath.

This provides a buffer to separate people and remove cyclists from traffic lanes. In the future, it might be that all options for cyclists are considered for all streets. Alternately, a cycle lane can be painted narrow across the street placed in the left of the vehicles traffic and название lane.

Cycle streets toolbox

As a new standard of cycle network across central Christchurch is delivered, some of the following features will be planned as appropriate to each route.

- **Bicycles always on the left side**
  - This proposes that the bicycle lane always remains on the left side of the road. This rule is vital for safety and is consistent with the way cyclists travel.

- **Cycle lane markings**
  - Cycle lane markings are different colour to street intersections unless awareness with pedestrians.

- **Bicycle head start**
  - Time should be given so that the bicycle lane can start first before the vehicle lane.

- **Secure cyclists against cars doors**
  - A buffer will be used to separate cyclists from doors opening into the cycle track, and provide an easier platform for emergency services.

- **Buffer at left hand signal**
  - Signal left turn approach start and side of the lane which allows for visual and not physical contact.

- **Built-in as part of the road edge**
  - To minimize a clear cycle path, the services can be “built-in” to shorten crossing distances.
But ......

- Central City Plan is vague on ‘How’ and ‘When’
  - Devil will be in the detail
- There is nothing in Canterbury Earthquake Recovery Authority’s (CERA) Recovery Strategy about active transport
- Cycle lanes shut post-EQ to accommodate more cars
But……..

- Central City Plan is vague on ‘How’ and ‘When’
  - Devil will be in the detail
- There is nothing in Canterbury Earthquake Recovery Authority’s (CERA) Recovery Strategy about active transport
- Cycle lanes post-EQ to accommodate more cars
- Roads are being repaired and little evidence of new assistance for people on bikes
- Two recent local plan (Linwood Village and Selwyn St) consultation documents do not include adequate provision for cyclists
Christchurch - Copenhagen of the South?

For
- Plenty of road space
- Flat terrain
- Mild climate
- Many short journeys
- People like cycling
- Massive infrastructure build soon

Against
- Perceived as dangerous
- Limited investment – GPS (Govt Policy Statement)
- No central govt interest?
- Low population density?
- Our love of cars!
- Little congestion & high speeds

Final Conclusions
- Investing in cycling is very cost effective
  - Especially health benefits
- We must cater for the needs of ‘potential’ cyclists
  - Safety is the main issue
  - Consistent infrastructure at junctions
- Separation from traffic
  - Perceived by non-cyclists as safe and attractive
  - Significantly reduces pollution exposure
- Huge opportunity NOW
  - Can’t be missed, but might be!
So what will we see in Christchurch?