Future Streets – Te Ara Mua

International Cycling Safety Conference 2015, Hannover, Germany

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Auckland transport context

Mode share trends in four main modes of travel to work

- Total light vehicle
- Total public transport
- Bicycle
- Walking
Human Centred Design
More deliberate design for all road users
Crash reduction

Reduction in crash costs


Mackie, Charlton et al. (2013). AA&P 42(742-750).
Auckland cycling policy simulations

Monetary impact of different cycle network policies

- Cyclist fatalities
- Cyclist serious
- Car crash fatalities
- Physical activity related mortality
- Greenhouse gas emissions
- Fuel cost
- Infrastructure cost

Saving in NZ$M

- Auckland Regional Cycle Network
- SER
- Combined best practice

Macmillan et al 2014 Environmental Health Perspectives. doi: DOI:10.1289/ehp.1307250
Street design and Public Health

Physical Activity

Public Health

Road Safety
Future Streets
Te Ara Mua

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Future Streets Aims

With an equity focus,

1. demonstrate a \textit{process} for design and implementation

2. Measure health, environmental, social effects of retrofitting suburban streets

3. model more generalisable costs and benefits
The People of Mangere
Controlled before-after intervention study

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<th>Before</th>
<th>Intervention area</th>
<th>Control area</th>
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<td>Mangere Central</td>
<td>Mangere East</td>
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<td>Traffic behaviour</td>
<td>• Motorist speed &amp; volume measures</td>
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<td>• Video of behaviour</td>
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<td>• peds &amp; cyclist movement (road vs footpath, Adult vs child)</td>
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<td>• Neighbourhood perceptions</td>
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<td>• Children &amp; adults</td>
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<td>Air quality measurements</td>
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Case and control areas were matched for:
• Access to amenity destinations
• Street layout and age of development
• Demographics
Intervention area: Mangere Central
Making streets around Māngere Central safer and easier to travel around, especially by walking and cycling; and reflecting local identity
Participatory intervention development

**Community members**
- Community advisory group
- School focus groups
- Go-alongs
- Mall stalls

**Community leadership**
- Local Board
- Local stakeholders (e.g. schools/police)
- Iwi/Marae

**Funders**
- MBIE
- AT
- Local Board
- NZTA

**Issues identification**

**Concept development**

- October 2012
- October 2013
- October 2014
Measuring pedestrian and cyclist movements

Saturday (market day)

Wednesday
Design principles

1. Street/route hierarchy giving greater priority to pedestrians and cyclists
2. People feel safe on routes
3. Reduce traffic speed and make it more consistent
4. Improve peoples ability to cross the road safely
5. Schools and the Mall are priority destinations for the walking and cycling network
6. An arterial separated bike network is important
7. Improvements reflect the identity of Mangere people
Route hierarchy
Making better use of parks and reserves as transport, recreation and fitness routes
Windrush close a safe ‘place’ next to the recreation circuit.
Pedestrian priority where there are lots of pedestrians, better access to the town centre
Safe crossing, wider footpaths, new bus-stop layouts, protected cycle lanes
Changing layout on ‘rat-run’ street – Fresian Drive so more attractive for residents, cyclists and safer for everyone
Progress, next steps, challenges

- Baseline: low levels of cycling but higher than expected bike access
- Construction this summer 15/16
- Follow up data collection 1,2,3 years
- Difficult to align research with Council priorities and processes – learning for ‘demonstration’ projects
- How do we translate findings to wider practise?
Thank you!...

Request: Do you know about the Kronsberg ‘Connected Cities’ project (near here)? If so, please contact me.