Te Ara Mua Future Streets

A community intervention study to enhance local walking and cycling and reflect local identity
Acknowledgements

Auckland Transport
Boffa Miskell
Design Tribe
Māngere Ōtāhuhu Local Board
MBIE
NZ Transport Agency
Project intent and design principles

Hamish Mackie
WHAT DOES THIS THING DO?

J. J. Gibson (1979) Affordances

Almost **Half** of all of New Zealand’s travel is within 16 major urban areas

Approx **18,000 km** of local urban roads

Ministry of Transport 2017

**Perception drives action**
1989/90 travel to school

19% of secondary school children biked
12% of primary school children biked

2010-2014 travel to school

3% of secondary school children biked
2% of primary school children biked
COSTS OF OBESITY AND INACTIVITY – APPROXIMATELY $1.3B PA (NZD)

New Zealand has the third highest adult obesity rate in the OECD and our rates are rising

ACTIVE TRAVEL HAS HEALTH BENEFITS

Health benefits of an extra 1km daily travel

- Road injury
- Physical Activity
- Air pollution
- Total

DALYs saved/100,000 population

Walking  Cycling  Driving

-DALYs saved
-50.0  0.0  0.0
-100.0  100.0  100.0
-150.0  150.0  150.0
-200.0  200.0  200.0
-250.0  250.0  250.0
-300.0  300.0  300.0
-350.0  350.0  350.0

Derived from


Randall, Keall, M. D., Woodward, A. (Not yet published)
Self Explaining Roads

Local Roads

Collector Roads

40% reduction in crashes

48% reduction in crash costs
A WIDER VIEW OF WELLBEING...

- Road Safety
- Climate change
- Place-making
- Disease prevention
- Social equity
- Cultural responsiveness
- Public Health

Te Ara Mua – Future Streets
TE ARA MUA - FUTURE STREETS

A project to demonstrate ‘healthier’ street and route design

A research project to measure safety, health, environmental, and social effects of improving suburban streets and routes
Making streets around Māngere Central safer and easier to travel around, especially by walking and cycling; and reflecting local identity
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 Māngere people
Engagement and development

Adrian Field
Engagement

Future Streets Team-led engagement

Issues identification

Concept development

Community members
- Community advisory group
- School focus groups
- Go-alsongs
- Mall stalls

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

Funders
- MBIE
- AT
- Local Board
- NZTA

October 2012

October 2013

October 2014

Auckland Transport-led consultation

Letter box drops

Update Newsletters

Community Liaison Officer before/during/after construction
Community stakeholder group

Māngere Ōtāhuhu Local Board
Maori wardens
Town centre manager
Moananui Recreation Centre
Community Policing team
Nga Iwi School
Auckland Transport
Mangere Bike Safe
Healthy Families
Good Seed trust
Counties Manukau Sport
Future Streets research team
Te Aranga and Key Possible Opportunities

Mana (Authority)
Whakapapa (Names and Naming)
Tāiao (The natural landscape elements)
Māori Tu (Environmental health)
Mahi Toki (Creative expression)
Tohu (The wider cultural landscape)
Ahi Kai (The living presence)

Te Aranga

Te Ara Mua Future Streets - Design Process and Response

- Naming of the community trail or possible reserves
- Use of particular patterns or colours in markers or paving that may point to indigenous narratives
- Recognising and creating connection with tohu (wider cultural landscape)
- Planting - Use of specific plantings that used to exist locally / Use of fruit trees that have a historical connection with the area
- Inspiration - Looking at fauna that were established in the Mangere area before European settlement
- The initiation of a marae to maunga hikoi
- Use of waymarking and signage to re-create a connection to iwi history in the area, and through artwork developed in the area.

Steps:
1. Planting
2. Way Finding Signage
3. Trail Marker Posts
4. Community Trail Ground Plane
5. Pou - Art Installation
Town centre
Town centre
Windrush Park
Collaboration: the researcher-designer-planner interface

Karen Witten
Professional norms & organisational cultures

‘When you employ consultants and professionals to design something, they’ve been trained to a standard and so their instinct and what all their training tells them is you’re supposed to put something that’s tried and true and tested versus using people as guinea pigs’ (T)

‘......If you step outside of that boundary, you're exposed to those legal elements... and it can be a personal prosecution’. (T)
Ways of working

‘...there’s definitely a tension where AT are pushing to just move on to the next phase, get it done, deliver, deliver, deliver, while the research group are trying to redesign, or do quality assurance or things like that’. (R)

‘AT go through a reasonably clear, multi-faceted or phased planning cycle, quite traditional...whereas the research team was...a little bit more innovative on the process and potential solutions that are going to pop out in the end.’ (T)
Stakes in the project

Was Future Streets unique or one of many?
Governance

‘[If we had] a Memorandum of Understanding at the beginning...we could have gone... ‘what the hell have you done? Why have you signed us up to something so short? We can’t deliver it’. (AT)

Timeline Conflicts
Funding uncertainty

‘They seem to perhaps not appreciate how constrained funding is and maybe they take for granted that we will deliver this project for them without compromising on some of the deliverables.’ (T)

‘We’re sort of pushing hard deliberately and that’s given us all sorts of benefits’ (R)
Community participation

‘I’m hoping that one of the things we’ve established is that the first thing is to actually go to the community with the issues, not with the solution.’ (R)

‘...[it’s] interesting when you get feedback from people who are not sort of traffic engineers...[they] just throw all sorts of ideas at you, lots of them being ‘well hell no we’d never do that type of thing’ to some really good ideas.’ (T)

‘Getting that understanding of the community’s future desires has really strengthened [the project] and that’s something that we don’t do on the scale that the research team has undertaken.’ (T)
Sharing the vision
Research methods and findings

Melody Smith
Macmillan et al. (in preparation). Controlled before-after intervention study of suburb-wide street changes to increase walking and cycling: Te Ara Mua-Future Streets study design.
Safety for walking & cycling ➔ Improved perceptions ➔ Increased active modes ➔ Reduced congestion ➔ Increased physical activity ➔ Improved health and wellbeing

Timeline:
- 2017
- 2018
- 2019
- 2020
What has changed for our 12-year old child...

“It is safe for children to walk or cycle around your neighbourhood”

Image courtesy of Grant Mills
Increased independence on bikes

36 more children independent in their neighbourhood

Compared with 13 fewer in the control area
It is easier for *people* to get around

“Could you please tell me if you have any difficulty going outside and getting about using a wheelchair if you have one?”

‘...I used to push from home to here [gym by the mall] every day and some of the roads were really bumpy, unsafe and even because you have done lots of good changes I feel independent and safe within myself – in my manual chair or in my power chair. All the local places I feel comfortable and it is freedom for me, so I don’t have a bodyguard.[someone to push her]

58% improvement in ease of getting about

36 year old woman with mobility impairment
% differences at follow-up

- Traffic Volume
- Traffic speeds
- Safety - children's active travel
- Safety - children's play
- Child friendly
- Cycling ease
- Safety - walking
- Safety - lighting
- Roaming dogs
- Household bike availability
- Child bike availability
- Child biking independence

Intervention: blue bars
Control: orange bars
Change in Traffic volumes Baseline 2014 vs Post 2017

Intervention area no changes

...and fewer trucks

Control

Measurement site
Safer crossing behaviour
Improved health and wellbeing

- Safety for walking & cycling
- Improved perceptions
- Reduced congestion
- Increased active modes
- Increased physical activity

Timeline:
- 2017
- 2018
- 2019
- 2020
Reflections and looking ahead

Hamish Mackie
MAKING IT HAPPEN

1. A national conversation about healthy streets → a clear vision

2. Better engagement and communication

3. Scale up capability and capacity to match the challenge
Te Ara Mua 2
What will our transport future look like?