Pathways to walking: Preliminary findings from Te Ara Mua – Future Streets

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Associate Professor Melody Smith
University of Auckland
On behalf of the Te Ara Mua – Future Streets team

@MelOliverSmith researchgate.net/profile/Melody_Smith11 kidsinthecity.ac.nz futurestreets.org.nz
Te Ara Mua – Future Streets

*the future path shaped by the past*

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

Large, multidisciplinary study involving multiple institutions and stakeholders – Mackie Research, Dovetail, Massey University, University of Otago

Research funded by MBIE (and from late 2019, HRC)

Infrastructure funded by Auckland Transport, the Māngere Ōtāhuhu local board, NZTA
ENGAGEMENT

Future Streets Team-led engagement

Auckland Transport-led consultation
Letter box drops
Update Newsletters
Community Liaison Officer before/during/after construction

Te Ara Mua - Project Newsletter
Making it safer to walk and cycle around Māngere

Construction work on the Te Ara Mua – Future Streets project in Māngere will soon come to an end. Since work started in February, the project team have completed:

Community Trail
- A walking and cycling route to improve the connections between Waitahuna Road and Māngere Ave.
- It will leave pedestrians along its path, serving as a safe path through green space before connecting with Māngere Avenue.
- These works combined with other improvements such as even lighting improve safety for all those who use the shared space.
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 people’s 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
Making streets around Māngere Central safer and easier to travel around, especially by walking and cycling; and reflecting local identity
03:23 Community Trail, wider footpaths and better lighting
07:16 Zebra Crossings and raised zebra crossings
08:14 Pedestrian Access through carpark

Video credit: https://anonymouz.com
50% walking infrastructure
30% cycling infrastructure
10% traffic calming
10% planting, wayfinding, artwork and cultural references
Research Methods
Dynamic causal theory
causal loop diagrams, directed acyclic graphs
Safety for walking & cycling → Improved perceptions → Increased active modes → Reduced congestion → Increased physical activity → Improved health and wellbeing

2017 → 2018 → 2019 → 2020
Results

1. Traffic safety, speeds and volumes
Slower speeds

Traffic speed changes: Baseline 2014 vs Post 2017

Change in 85%tile speed km/h

-18.0 -16.0 -14.0 -12.0 -10.0 -8.0 -6.0 -4.0 -2.0 0.0 2.0

10B Tennessee Ave 31 Tennessee Ave Vine St Whiteman Way Buckland Rd 11 Yates Rd 33 Yates Rd Massey Rd Friesian Dr Mascot near Bader Imrie Ave Mascot at Ngi Mawi School Mascot at Friesian Bader near Orly Bader near Ashgrove Ashgrove Rd

Intervention area
no changes
Less traffic

Traffic volume changes: Baseline 2014 vs Post 2017

- Change in traffic volumes
- Control
- Intervention

Intervention area no changes
- 13% change at Mascot near Bader
- 3% change at Ashgrove Rd
It is safer and faster to cross the road.

- **near-doubling** in continuous crossings for pedestrians (not having to stop in middle of road)
- **quadrupling** of shorter wait times (waiting <3 seconds to cross road)
- **19.75 x increase** in vehicles stopping for pedestrians (4-79%)
Fewer pedestrian-car interactions
Results

2. Neighbourhood perceptions
Not all neighbourhood perceptions have improved.
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?”

58% improvement in ease of getting about
Results

3. Road user behaviour & walking
Changes to crossing movements

‘Wheeled’ movement has increased

- Mobility-assisted movement has increased from 0.3% to 1.9% of all pedestrians (from 2 pedestrians to 12)
- Pram movements have increased from 1.7% to 2.2% of all pedestrians (from 12 pedestrians to 14)
- Scooting and skating has increased from 0% to 0.8% of all pedestrians (from 0 pedestrians to 5)

Crossing is more orderly
Benefits for mobility-assisted movement

“...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].”

36 year old woman with mobility impairment
Thank you


