Palmerston North Urban Cycling Network Masterplan

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Transportation Group Conference 2020

VIASTRADA

TRANSPORT PLANNING AND DESIGN

Photo: Jack McKenzie

Overview

EXISTING CONDITIONS	PLANNING PROCESS	OUTCOMES	CHALLENGES
Subtopics…			

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EXISTING CONDITIONS
Parking / cycle lanes
PLANNING PROCESS
OUTCOMES
CHALLENGES


EXISTING CONDITIONS
Lots of green cycle lanes
PLANNING PROCESS
OUTCOMES
CHALLENGES
Photo: Jack McKenzie

EXISTING CONDITIONS

Disjointed quiet street network

PLANNING PROCESS

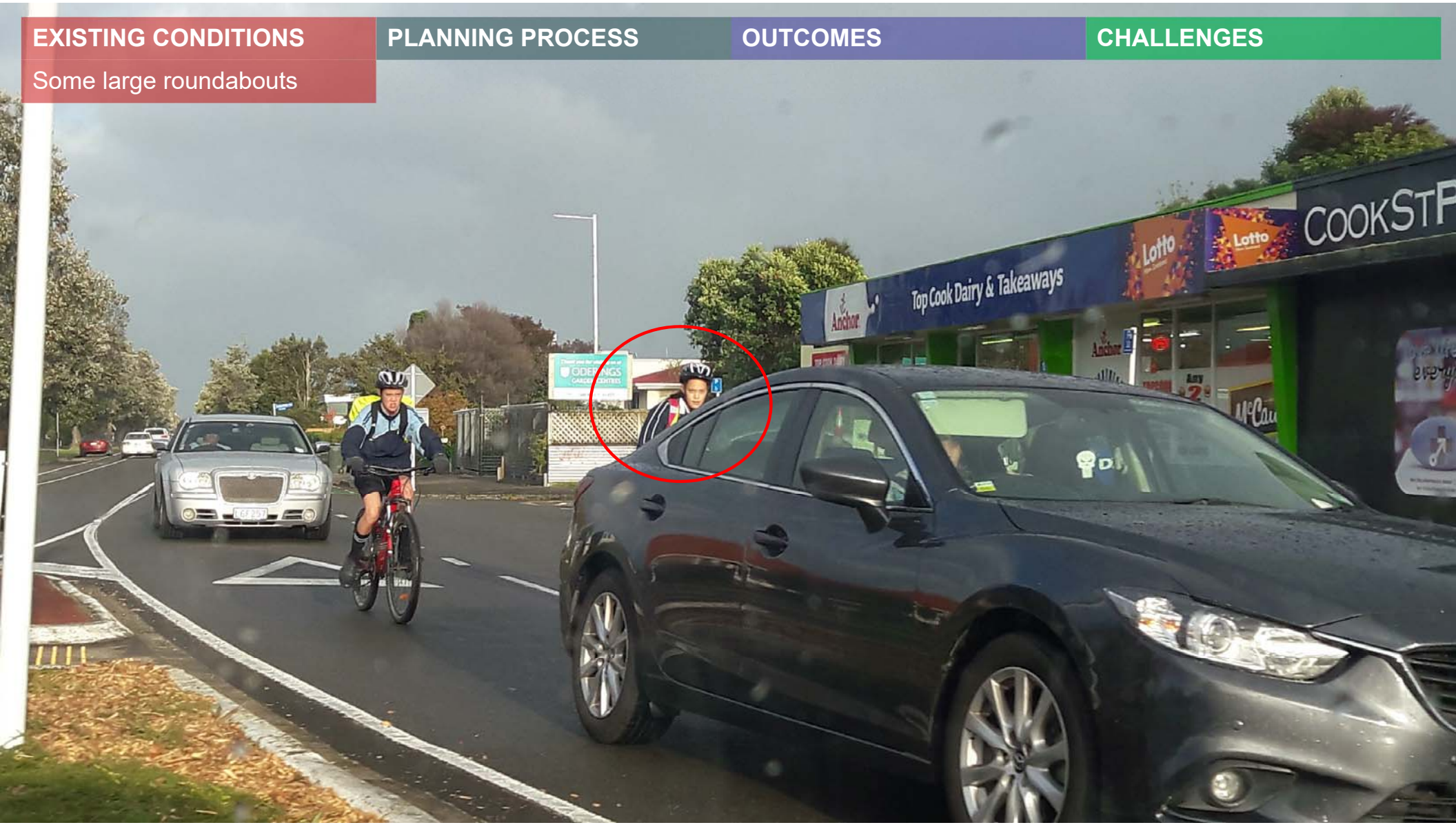
OUTCOMES

CHALLENGES

Photo: Jack McKenzie

EXISTING CONDITIONS | **PLANNING PROCESS** | **OUTCOMES** | **CHALLENGES**

Some large roundabouts



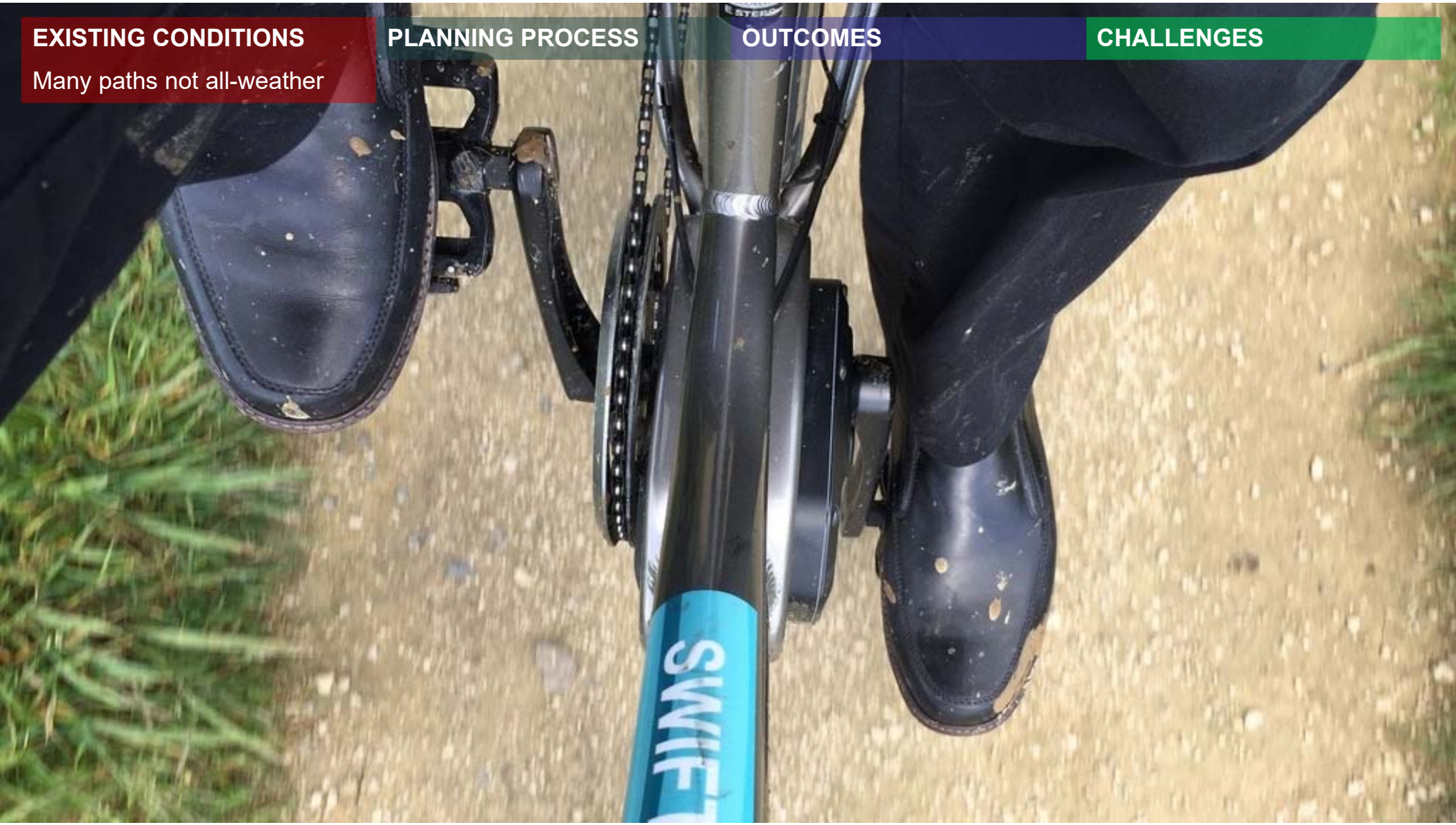
EXISTING CONDITIONS	PLANNING PROCESS	OUTCOMES	CHALLENGES
Wide (4m) shared paths			

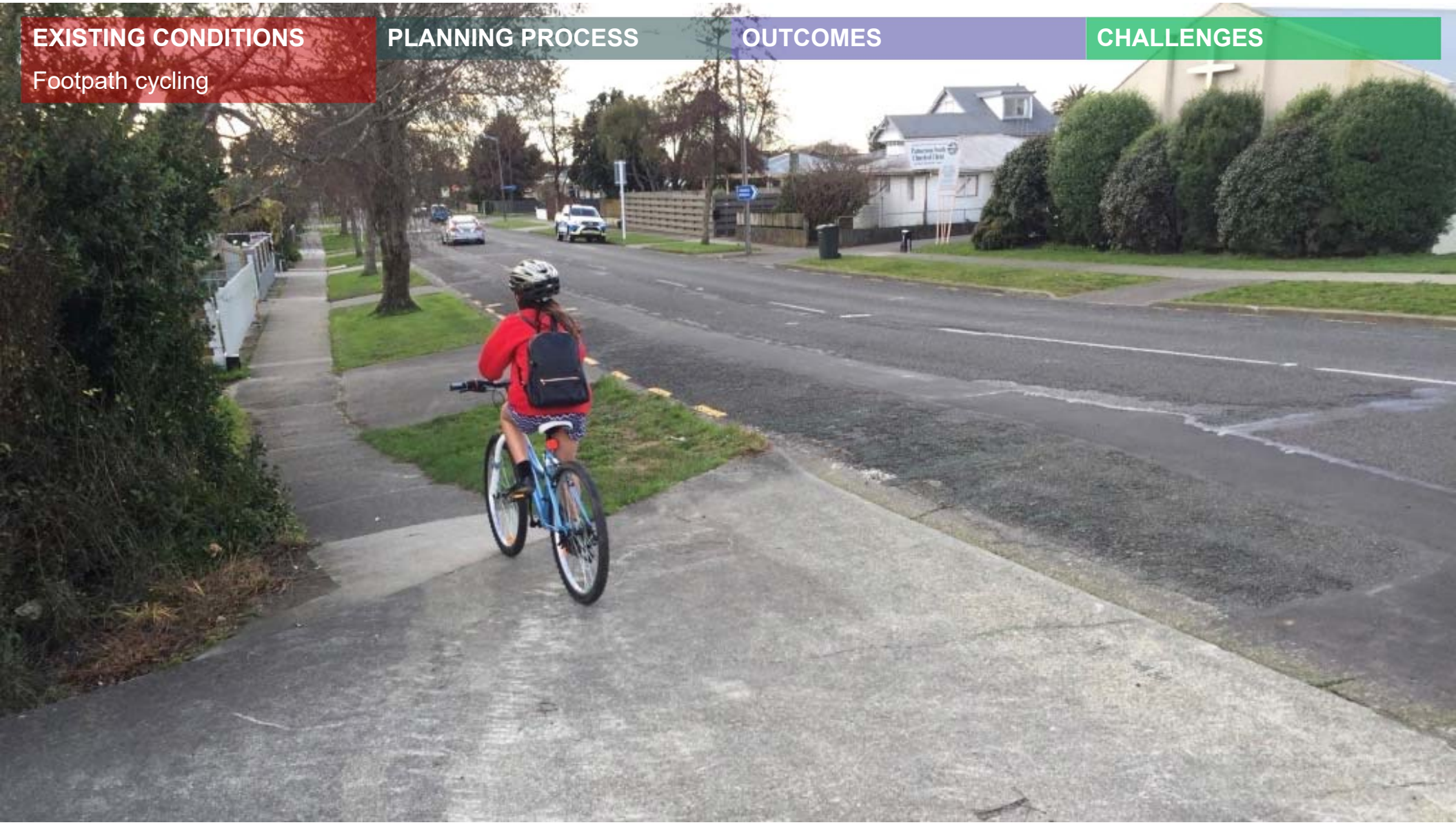
Photo: PNCC

EXISTING CONDITIONS | **PLANNING PROCESS** | **OUTCOMES** | **CHALLENGES**

Narrower, rougher and unlit paths with access barriers


EXISTING CONDITIONS
Limited use of traffic calming
PLANNING PROCESS
OUTCOMES
CHALLENGES


EXISTING CONDITIONS
Many paths not all-weather
PLANNING PROCESS
OUTCOMES
CHALLENGES

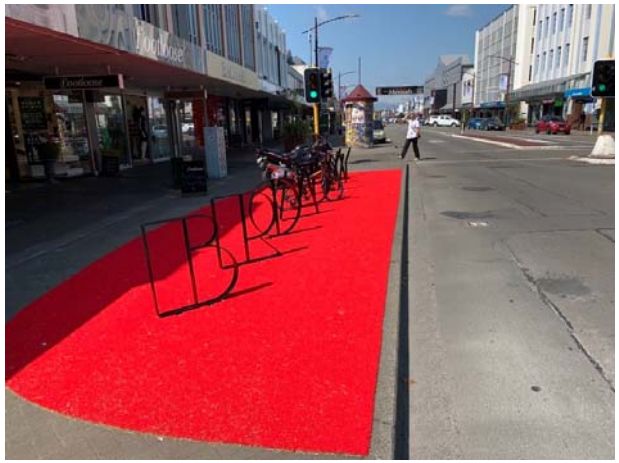


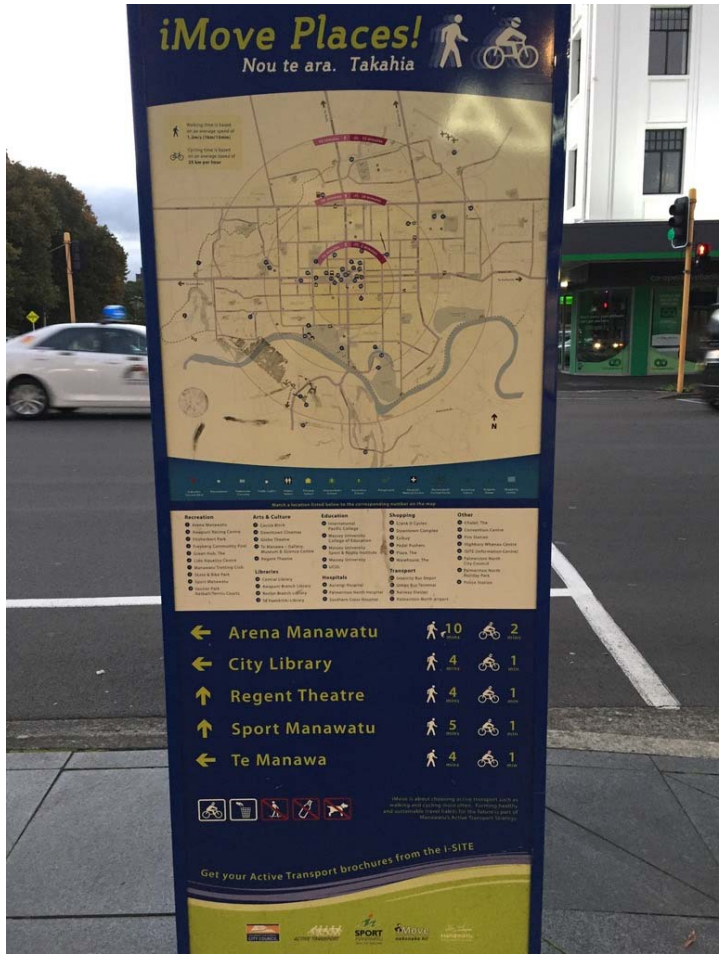
Footpath cycling

EXISTING CONDITIONS | PLANNING PROCESS | OUTCOMES | CHALLENGES

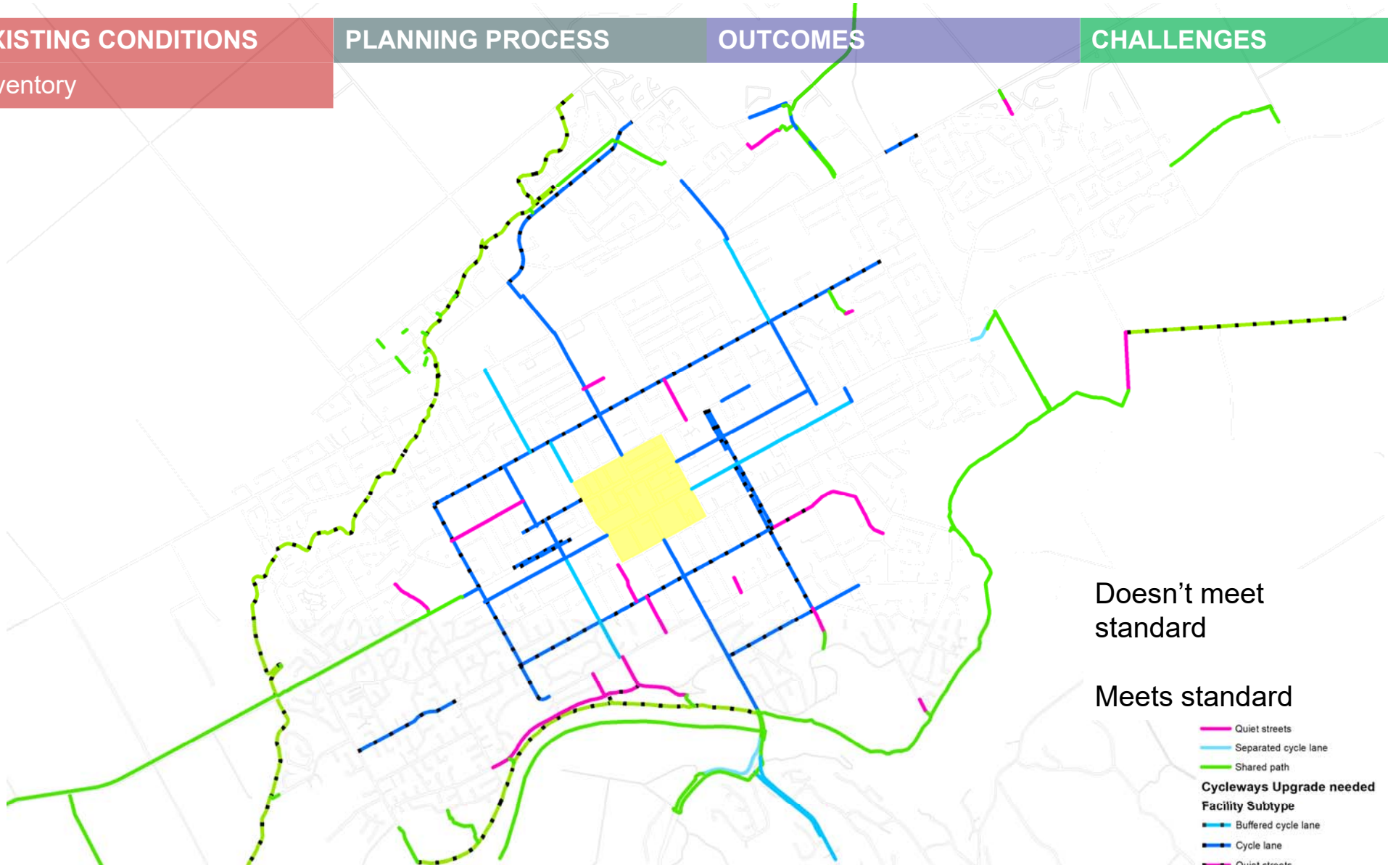
New central city streetscape

EXISTING CONDITIONS	PLANNING PROCESS	OUTCOMES	CHALLENGES
Central city streetscape			



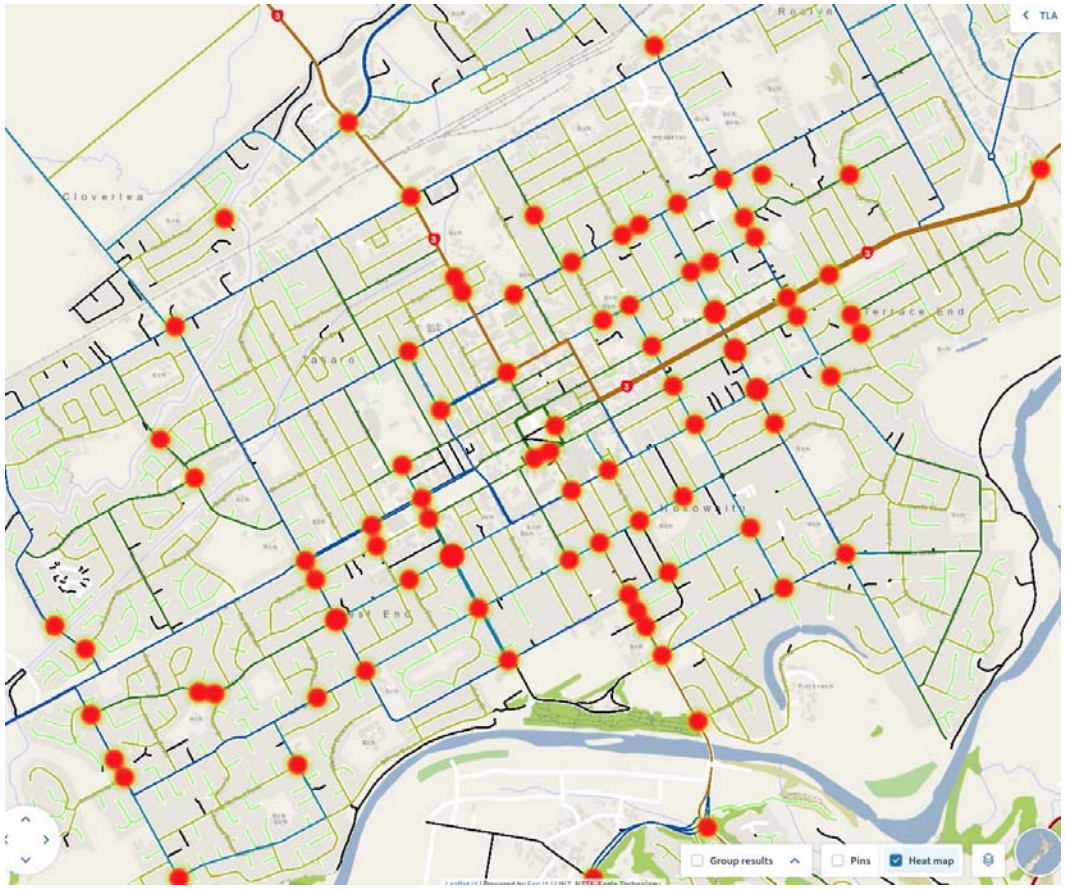


Inventory


Doesn’t meet standard
Meets standard
Quiet streets
Separated cycle lane
Shared path
Cycleways Upgrade needed
Facility Subtype
Buffered cycle lane
Cycle lane

Reported crashes

Intersection	Injury crashes (2014-18)
Church / Ruahine	10
College / Cook	9
Ferguson / Victoria	9
Church / Cook	6
Broadway / Victoria	5
Albert / Ferguson	4
Featherston / Russell	3
Plus key barriers	
Bourke / Featherston	2
Botanical / College	1
College / Fitzherbert	1
Featherston / Rangitikei	0



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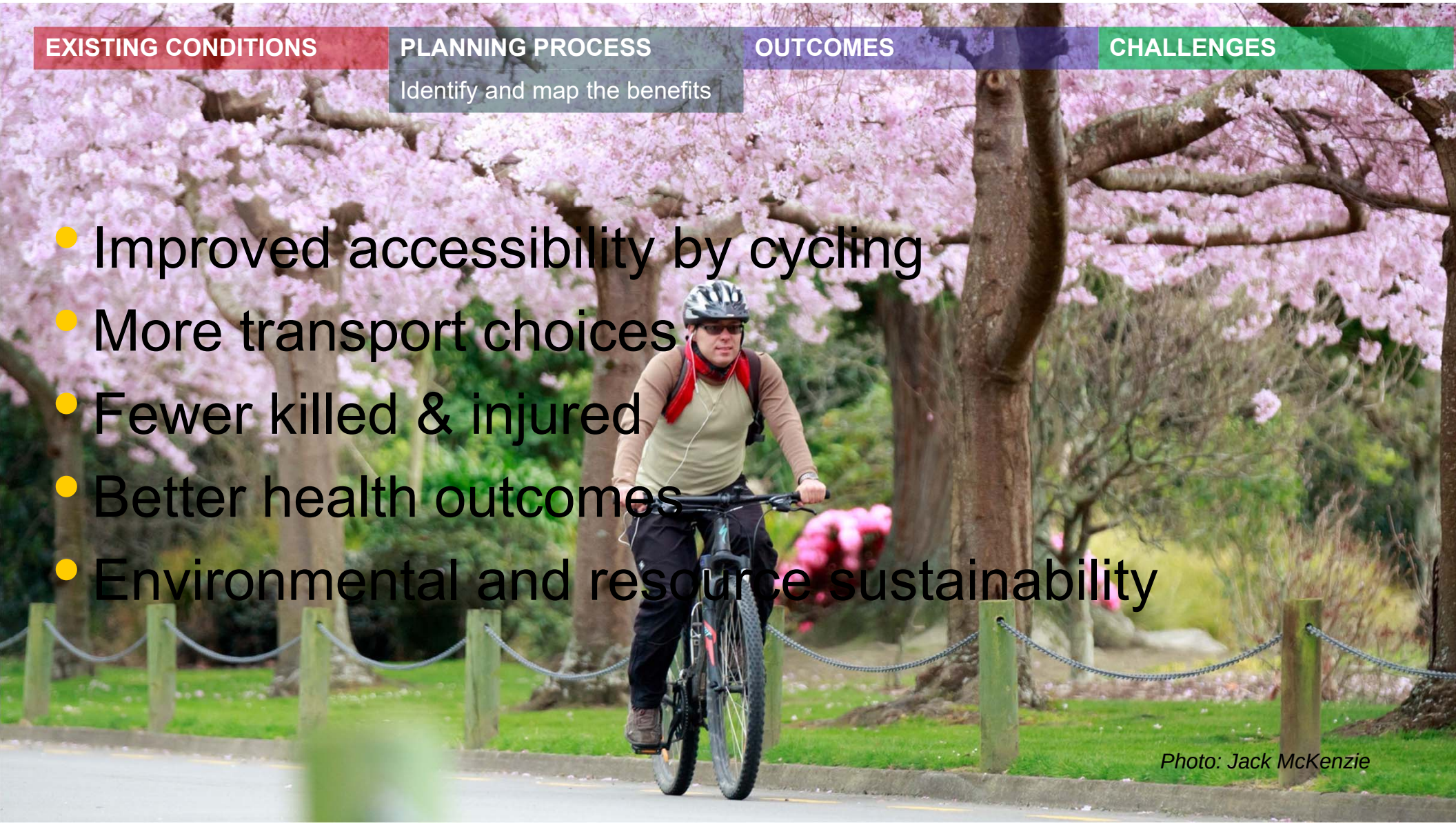
EXISTING CONDITIONS | PLANNING PROCESS | OUTCOMES | CHALLENGES

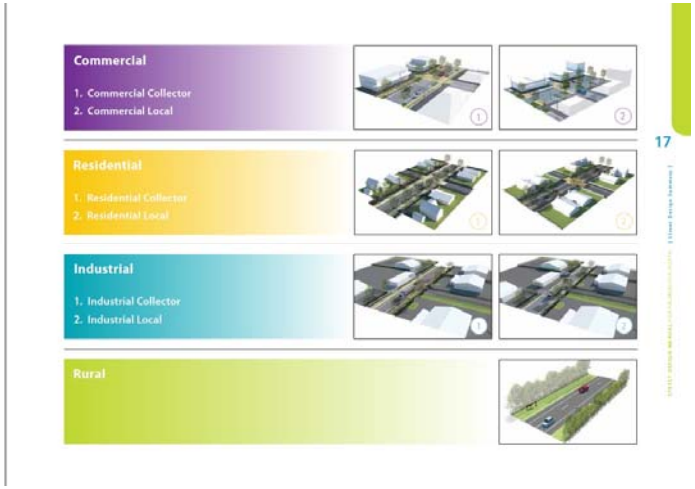
Identify and map the benefits

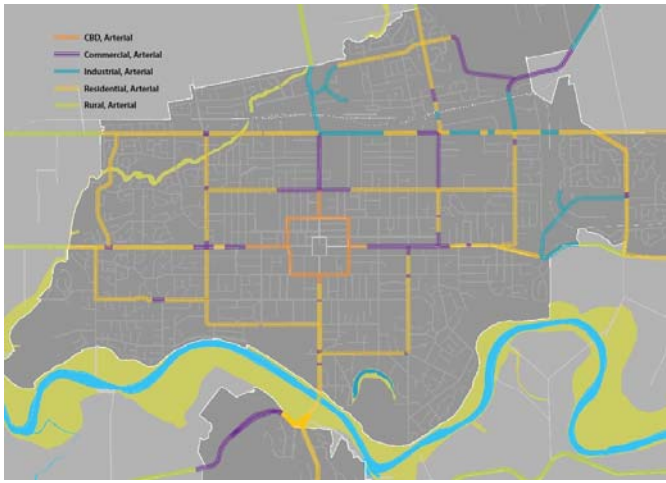


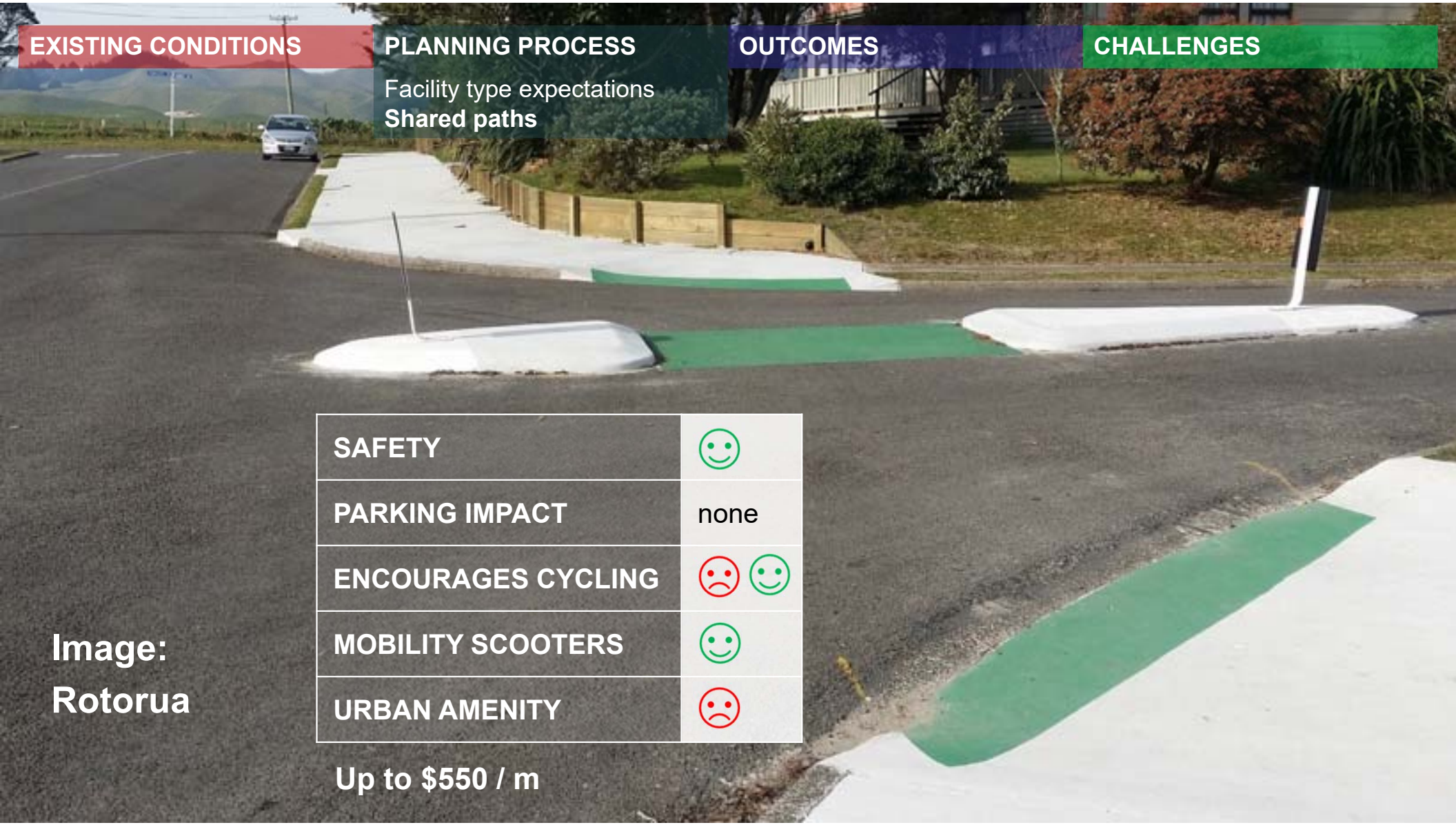
- Improved accessibility by cycling
- More transport choices
- Fewer killed & injured
- Better health outcomes
- Environmental and resource sustainability

Photo: Jack McKenzie

- PNCC Street Design Manual 2013: great ideas, but implementation challenges
- Some missing elements; major advances since then led by NZTA:
  - One Network Road Classification (ONRC)
  - Cycling Network Guidance (CNG)
  - MegaMaps – safety risk
  - Policy, legislation, and economic changes







EXISTING CONDITIONS | PLANNING PROCESS | OUTCOMES | CHALLENGES

Facility type expectations
Shared paths

SAFETY	☺
PARKING IMPACT	none
ENCOURAGES CYCLING	☹ ☺
MOBILITY SCOOTERS	☺
URBAN AMENITY	☹

Up to $550 / m

Image: Rotorua

EXISTING CONDITIONS

PLANNING PROCESS

Facility type expectations

Greenways / quiet streets

OUTCOMES

CHALLENGES

Pt. England, Auckland

$50 - 75 / m

SAFETY	☺☺
PARKING IMPACT	Minimal
ENCOURAGES CYCLING	☺
MOBILITY SCOOTERS	No change
URBAN AMENITY	☺

EXISTING CONDITIONS	PLANNING PROCESS	OUTCOMES	CHALLENGES
	Define and determine Quality of Service		

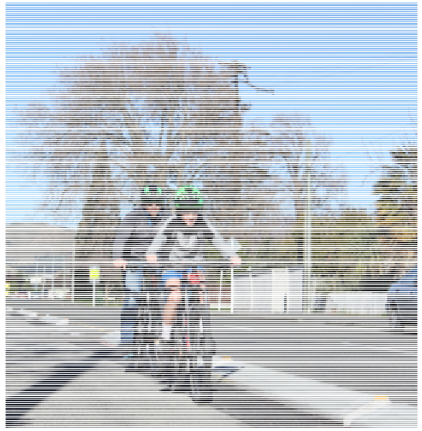
Buffered (wide) Cycle lanes
$

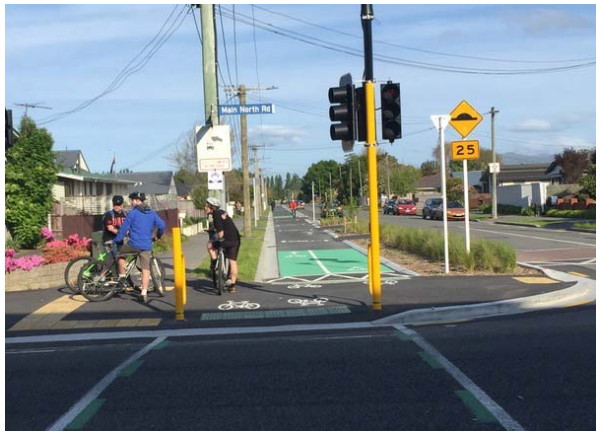
Post & Paint
$

Simple kerbs
$$

Island kerbs &/or inset parking
$$$

Full street reconstruction
$$$$





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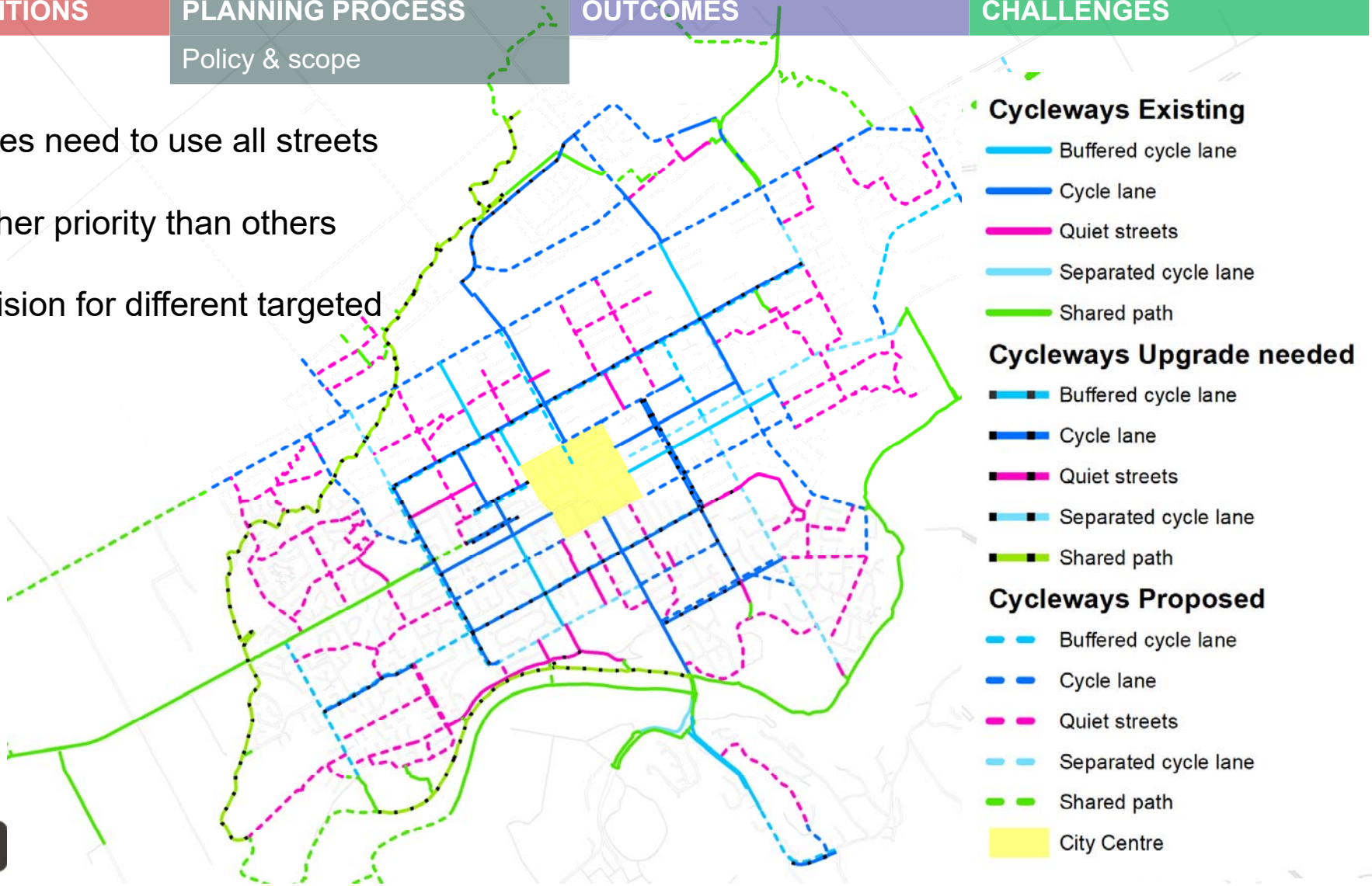
People on bikes need to use all streets

Some are higher priority than others

Different provision for different targeted users



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EXISTING CONDITIONS | PLANNING PROCESS | OUTCOMES | CHALLENGES

Find people to tell the story

WORK COMMUTES

GRAHAM

Bus driver

Rides to depot via Highbury Avenue, Botanical Road, and Tremaine Avenue.

Exercise at work is very slim so I bike to work to keep trim. As I drive my bus I pass cyclists without a fuss.

EVERYDAY TRIPS

JOE

Contractor

Bikes to daycare and then to job site.

SCHOOL TRIPS

ELSE

School student

Rides Fitzherbert Avenue every day to Palmerston North Intermediate Normal School.

RECREATION, FITNESS

RAEWYN

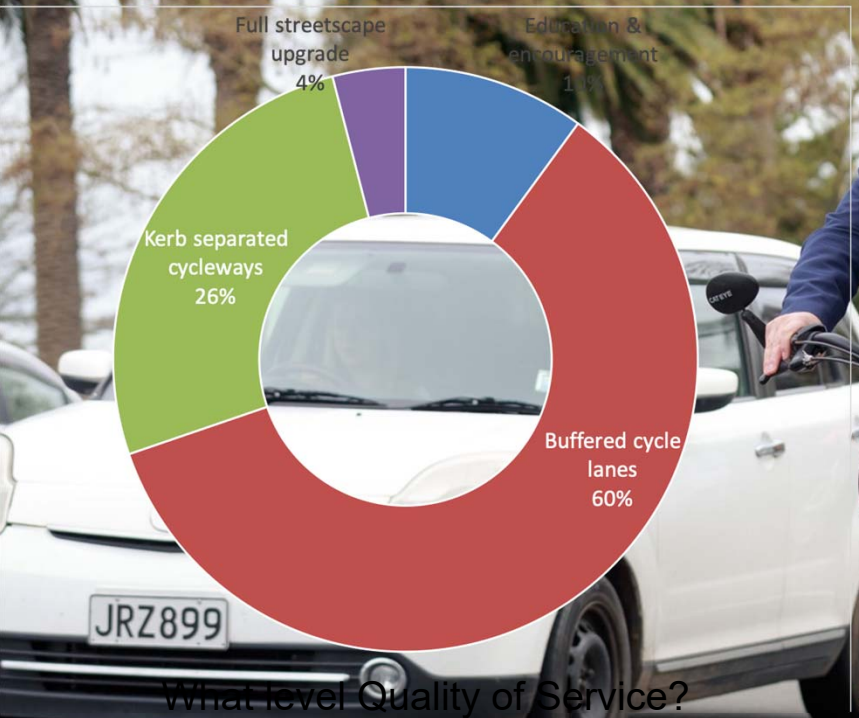
Online learning specialist

In her spare time, Raewyn coordinates the iBike4kids and women's skills programme; helps people get confident and out biking

Figure 13: These Palmerston North locals are currently riding and are role models

EXISTING CONDITIONS | PLANNING PROCESS | OUTCOMES | CHALLENGES

Optioneering



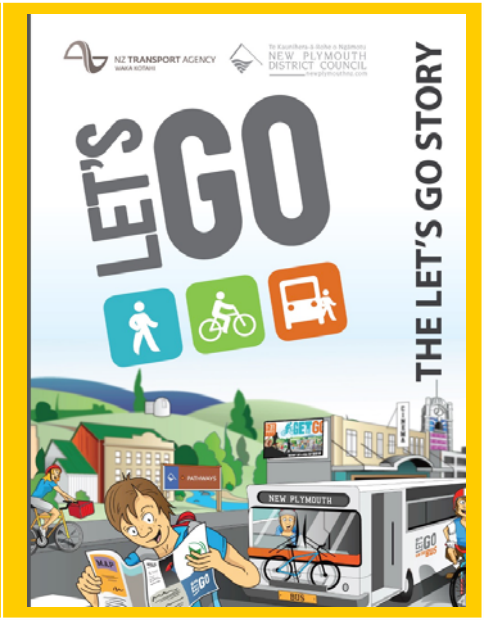
What level Quality of Service?

What strategic alternative do you prefer?

How much of the budget should go to education and encouragement?

Photo: Jack McKenzie

EXISTING CONDITIONS	PLANNING PROCESS	OUTCOMES	CHALLENGES
	Figure out the investment mix		

Infrastructure	Enforcement	Education	Information
			

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https://northlandroadsafety.co.nz/safer-journeys-northland/safe-speeds/

https://www.bikeready.govt.nz/assets/Walking-Cycling-and-Public-Transport/docs/bike-ready/BikeReady-factsheet-July-2018.pdf

EXISTING CONDITIONS | PLANNING PROCESS | OUTCOMES | CHALLENGES

Strategic alternatives

Intersections

Model communities

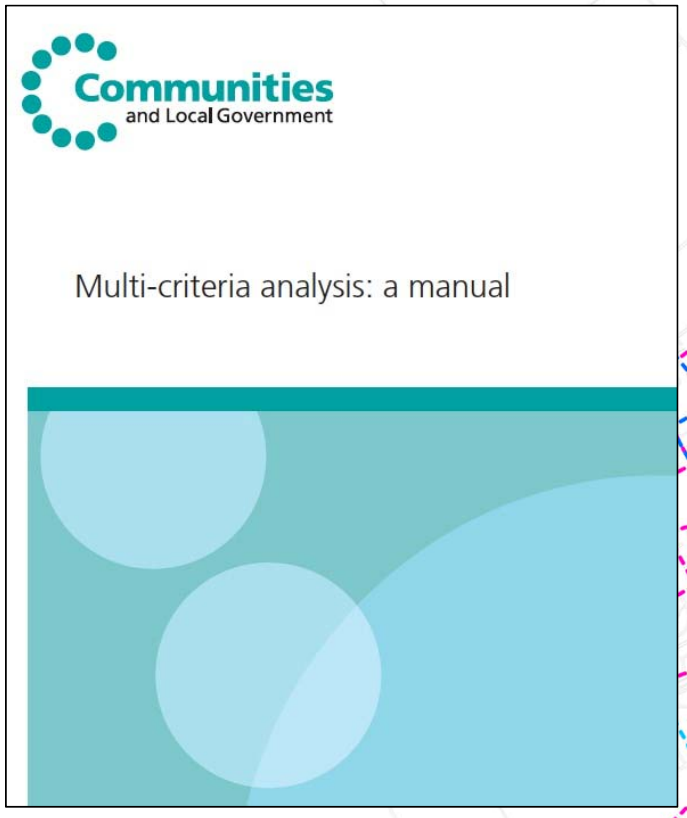
Schools focus

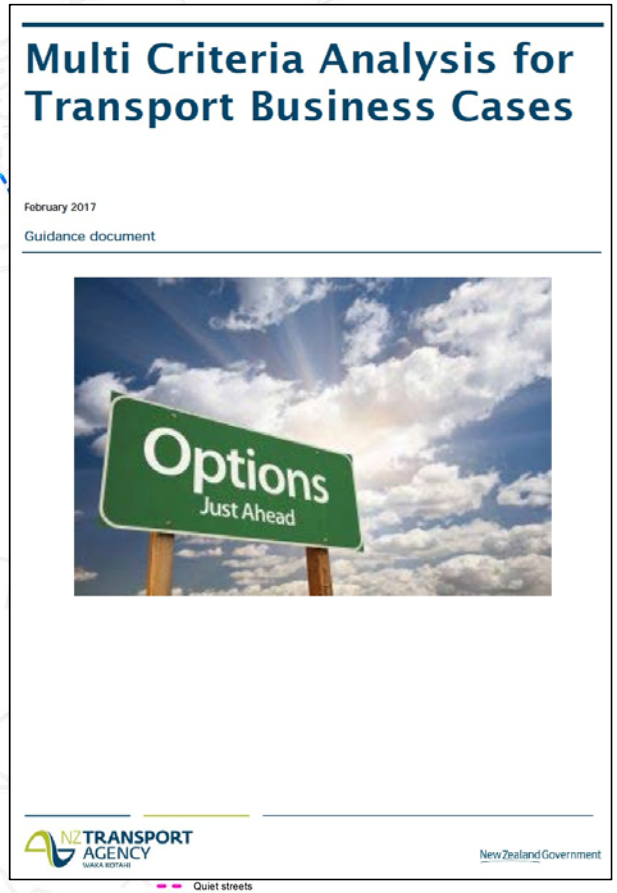
Gapfillers

Arterial routes

Local streets

Prioritisation guidance





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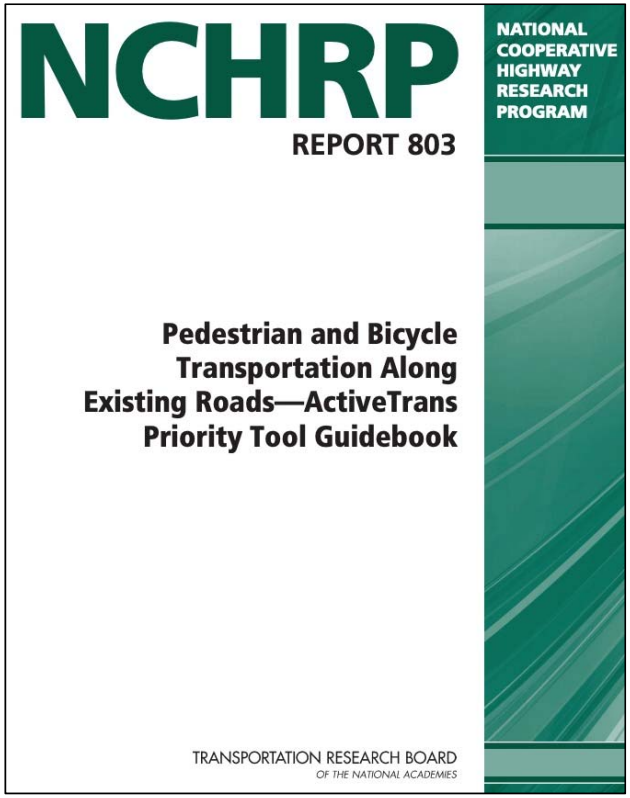
pedbikeinfo
Pedestrian and Bicycle Information Center
FACTS & FIGURES TOPICS RESOURCES WEBINARS

ActiveTrans Priority Tool

- Tool developed based on experience of 50+ US cities in planning walking and cycling networks



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http://www.pedbikeinfo.org/pdf/Tools_APT_Guidebook.pdf

Factors included in the prioritisation method

Feasibility

- Business and resident parking impacts can be mitigated
- Network operations (traffic signals, maintenance) can be mitigated
- Ease of constructability (right of way, road profile)
- Consultation requirements

Cost

Rough order capital cost is lower

Asset management

Higher priority if cycleway can be part funded through planned road surface, kerb and channel or sub-surface pipe renewals

Safety

- Reported crashes involving people on bikes
- Heavier traffic routes

Demand

- Number of residents served
- Number of age 10+ school students served

Connectivity

Leverages previous investments in cycling network and/or connects to key activity centres / central city

Equity

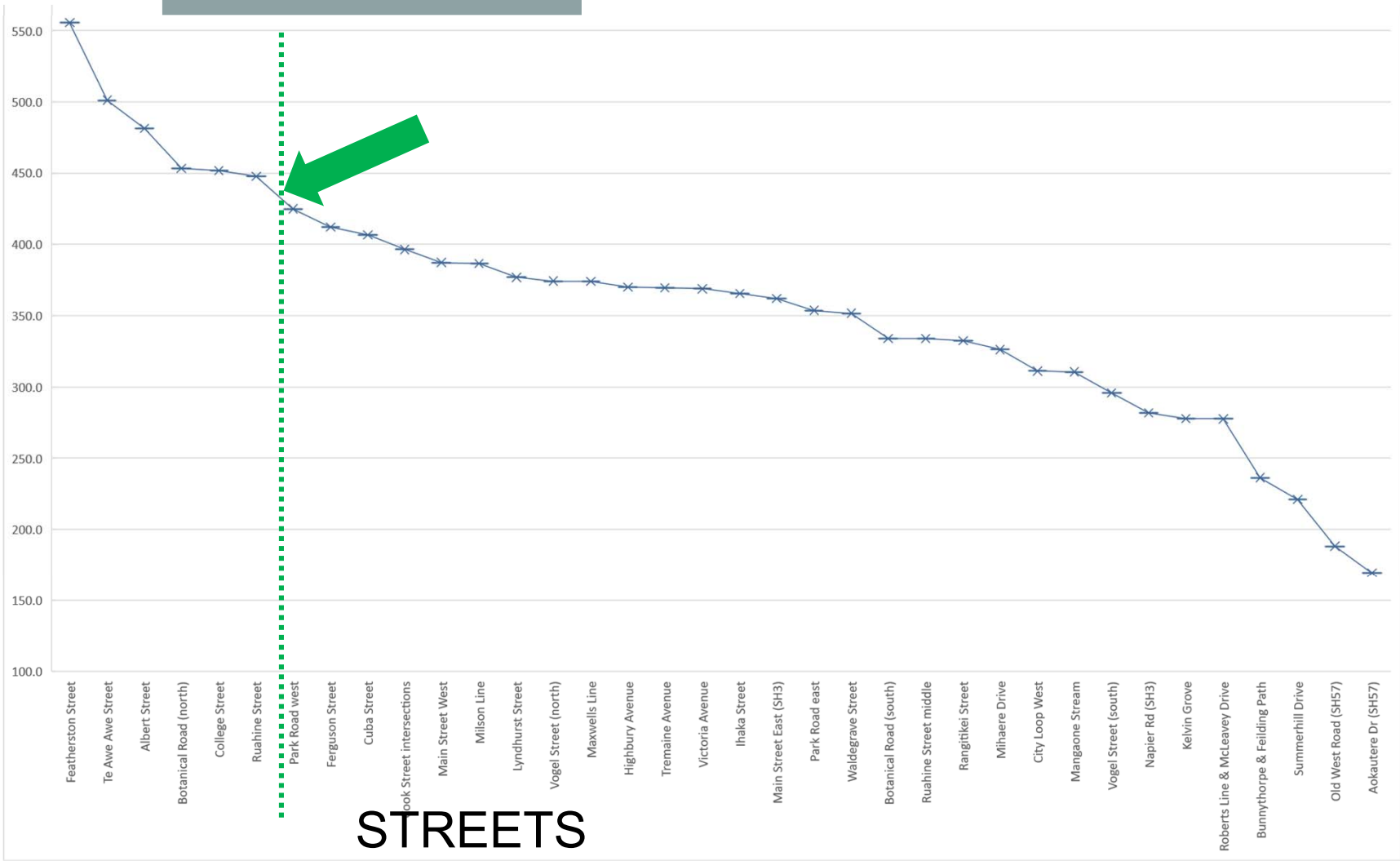
Areas of high need as defined by the NZ social deprivation index

Modal conflict

Routes that are not freight or motor vehicle priority routes (unless there is more than enough width)

EXISTING CONDITIONS | PLANNING PROCESS | OUTCOMES | CHALLENGES

Prioritisation results



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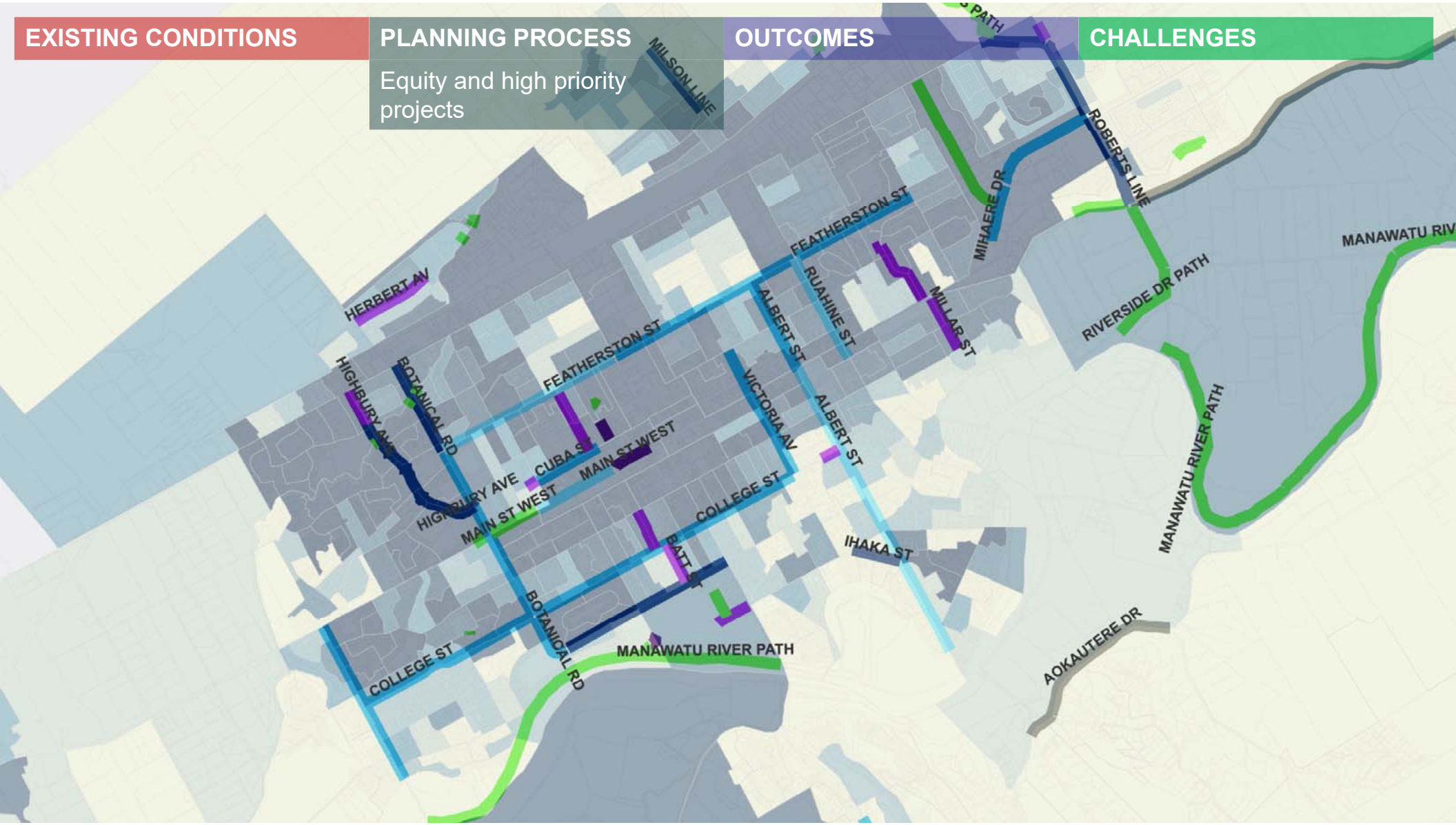
EXISTING CONDITIONS | PLANNING PROCESS | OUTCOMES | CHALLENGES

Equity and high priority projects



- Public facing plan (32 p)
- Online interactive plan & map (11 p)
- Business case (140 p)

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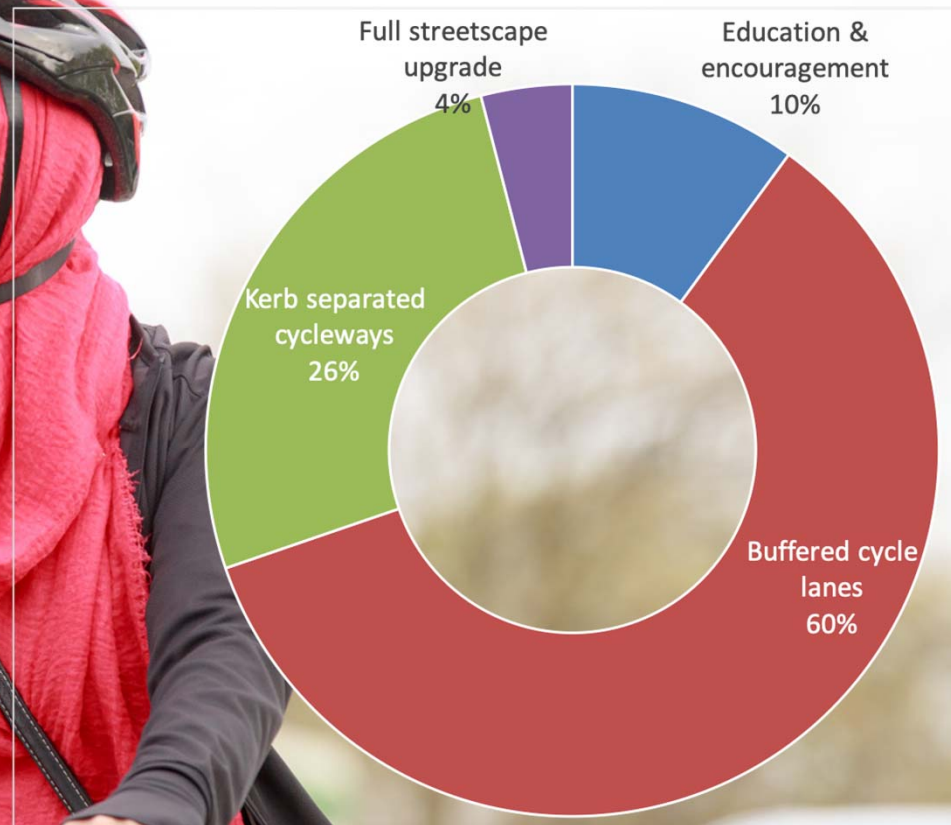
Key recommendations

- Aim for all ages and abilities, within network and transport mode constraints
- Equal emphasis on intersections and mid-block cycleways
- Support physical works with robust marketing & communications plan



EXISTING CONDITIONS | PLANNING PROCESS | OUTCOMES | CHALLENGES

Interactive online plan & map

Palmerston North Urban Cycling Network Masterplan 2019

A Story Map

3 How to provide for people on bikes

4 Separated cycleways on a major arterial

5 Separated cycleways on a minor arterial

6 Neighbourhood greenways on local streets

7 Current network: existing facilities & those needing upgrade

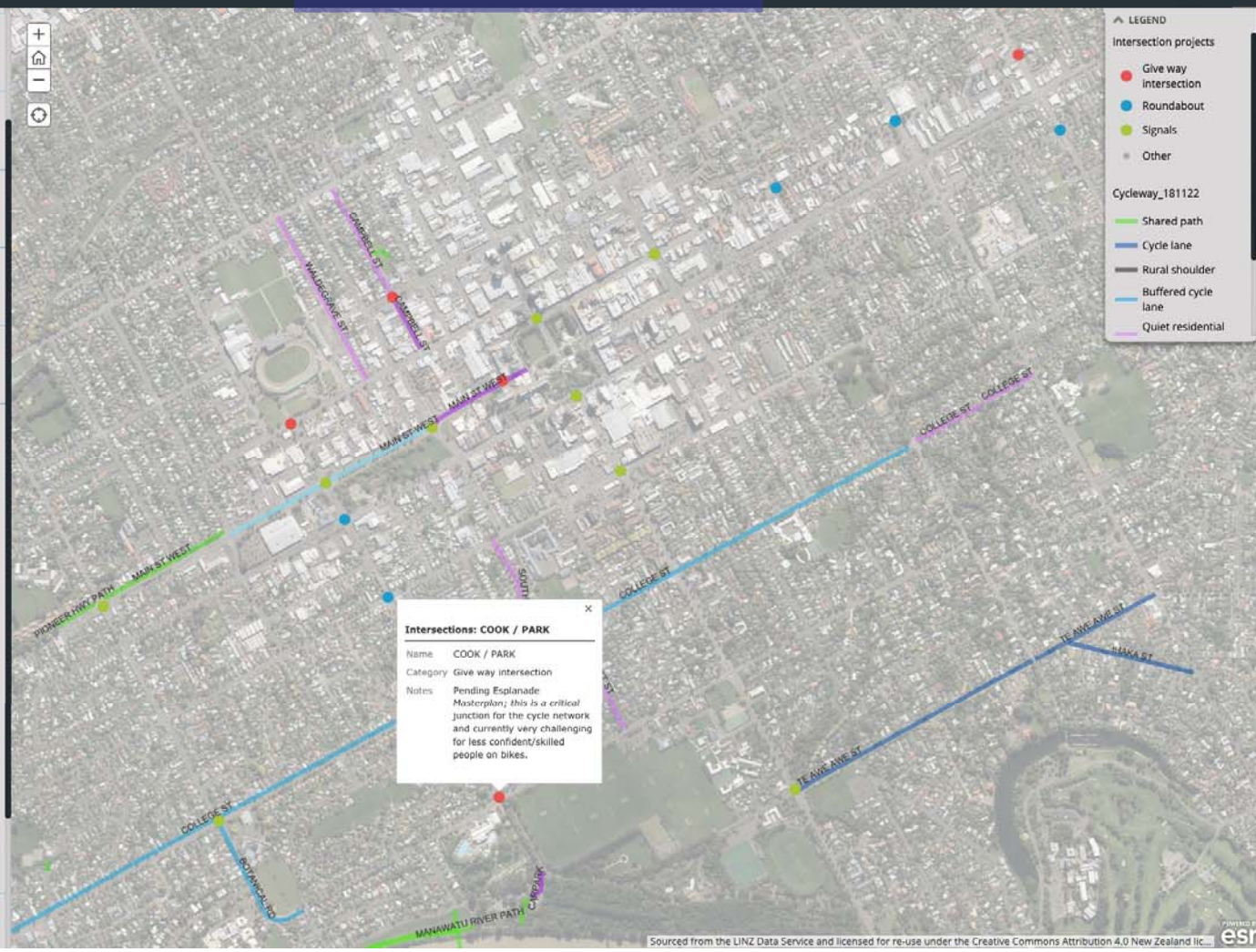
8 Near term: top priority projects

Thirty-six corridors have been evaluated. To build all of them would cost about $30M and will take time and funding. Council has allocated $2.9M for first phase implementation.

Initially, the plan suggests:

- Cook Street already has buffered cycle lanes - all this is required to complete the corridor is provision of cycle-friendly roundabouts and improved, safer access across Park Road into the Esplanade to connect to the Te Ara Kotahi bridge
- Broadway Avenue: subject to funding confirmation, Council proposes a safety-focused review of the street. Consideration should be given to the roundabout lane widths, balancing approach visibility, and potentially marking the roundabouts with sharrows and cycle lane merge treatments.
- Summerhill Drive: buffered cycle lanes are completed to link between IPU, residential areas, and the newly completed buffered cycle lanes on the hill part of Summerhill Drive.
- College Street cycleways are completed (this may not require funding from the Urban Cycleways Masterplan as funding has been separately sought from the NZTA)
- Botanical Road (College Street to Park Road): to better link to the newly opened Te Ara Kotahi bridge, cycleways are completed where options have already been discussed with school leaders and will be refined for further community discussion.
- Te Awe Awe Street cycle lanes are currently discontinuous and require people on bikes to swerve into traffic when cars are parked in the space usually used for riding. Investigation and consultation will be undertaken first to determine how to better link the existing cycle lanes, with construction following likely in year 3.
- Main Street West: separated cycleways connect the Pioneer Highway Shared Path with the central city. This will include cycling facilities at Botanical / Main signals and Pitt / Main signals.
- Campbell Street or Waldegrave Street (or both): a neighbourhood greenway is developed to include upgraded crossings of Featherson Street.
- Featherston Street: Council will be consulting on and designing the entire corridor; the first part (east of Ruahine Street) is developed.
- Old West Road and Aokautere Drive: the NZ Transport Agency plans to widen shoulders, providing a safer place for people riding and safer journeys for drivers as well.
- The Manawatu River Path downstream of the new bridge is sealed with concrete to reduce ongoing flooding-related maintenance costs and provide an all-weather surface for commuting. The length (extent) of this sealing work is to be determined, but will go at least as far as the end of Dittmer Drive.

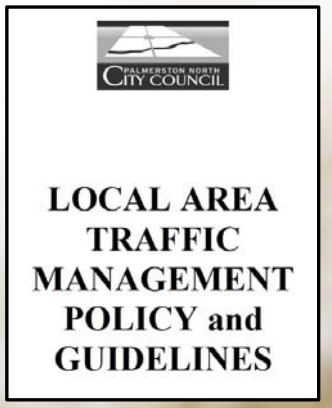
9 Medium term projects



Four main constraints

- Funding is constrained
  - Unless re-prioritise transport programme
- Intersections: no lead-in cycleways
  - Unless we reallocate space or widen streets
- Local streets: LATM Policy is dated (2003)
  - Review and adopt updated policy
- Parking: no current city-wide policy
  - Build on 2016-2018 parking plan

Photo: Jack McKenzie



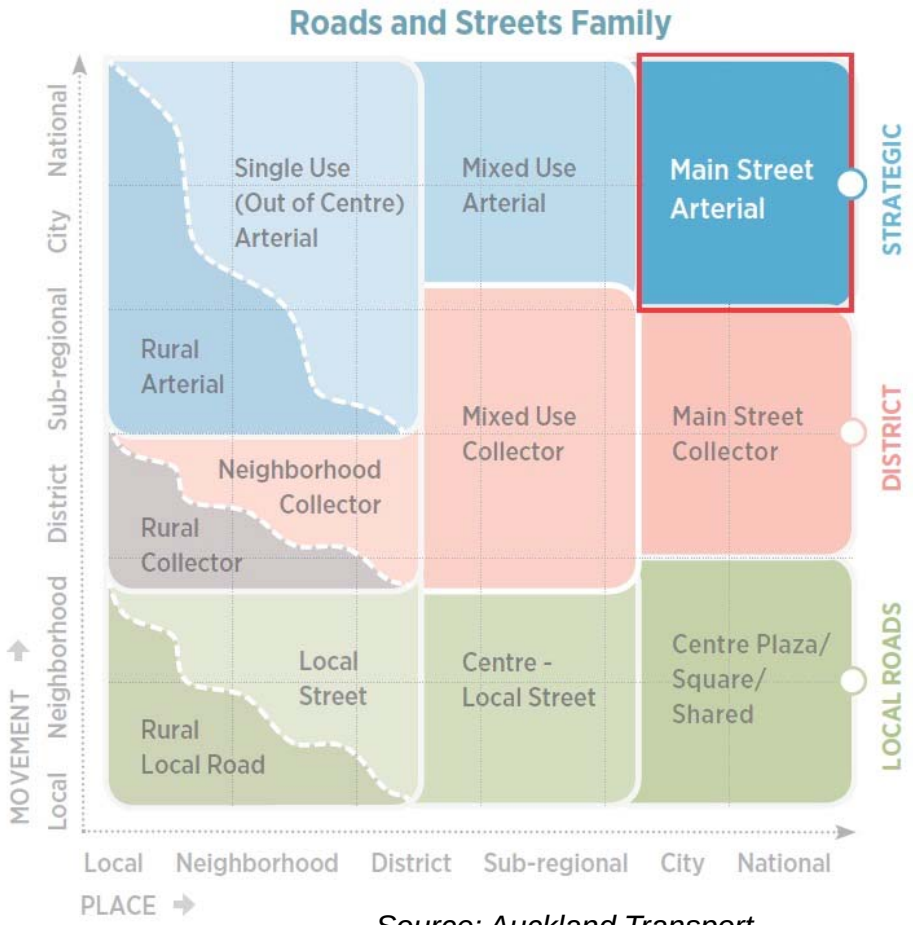
Continually improve public engagement

EXISTING CONDITIONS | PLANNING PROCESS | OUTCOMES | CHALLENGES

Culture

Photo: Glenn Connelly

- Classify streets not only by car movement but also place value
- Inform future street design and renewals
- Cycleways plan will prioritise work that should not conflict with emerging framework



Source: Auckland Transport

CONCLUSIONS

1. Telling stories helps
2. Prioritisation can be difficult and contentious
   - ➢ but there are tools to help
3. Building infrastructure is only one part of the solution

Photo: Jack McKenzie

Thanks!

john@viastrada.nz

Photo: Jack McKenzie