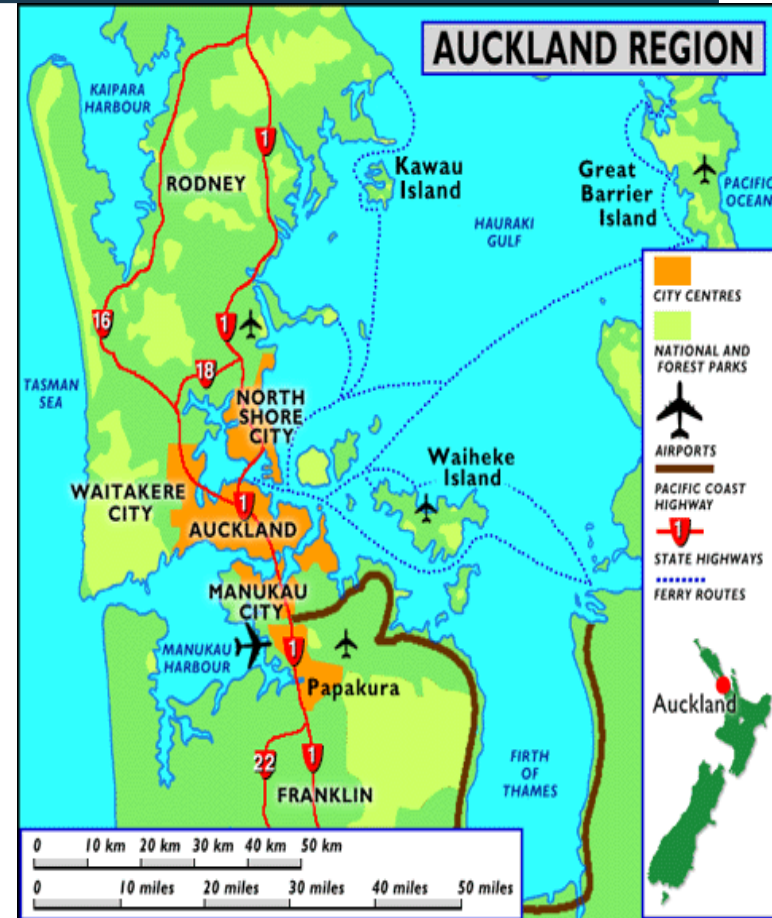


Auckland's transformation strategy in sustainable transportation

Councillor Wayne Walker
Auckland Council (New Zealand)

Auckland: a quick overview

- Population 1.57 million people, forecast to grow to 2 million by 2026
- Same geographic area as London and is made up of 10% urban and 90% rural areas within the region
- Challenging geography (isthmus, volcanos, native forest)
- Historically 7 independent cities – became Auckland Transport (AT) in 2010
- Low density suburban development
- Target: 40% reduction of GHG emissions by 2040, relative to 1990 level



Every week Auckland grows by:

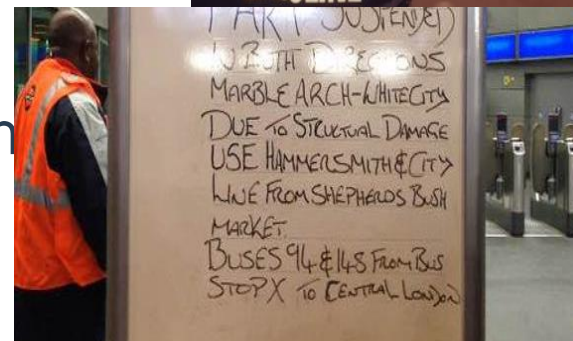
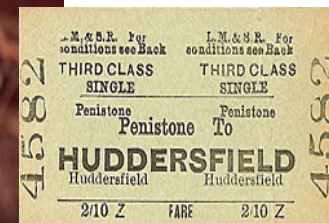
- 819 new residents
- 344 new homes every week.
- 3.5 new streets
- 8 new classrooms and teachers
- 405 new jobs

670 cars come into port every day.



Where we have come from

- Oil crisis in the 70's
- Manual ticketing from public transport
- Decline in electric trams, rail and rise in motorways, petrol and diesel as a fuel
- No real time access to information (availability, price, timetables)
- Rise of suburbia and urban sprawl, commuter towns
- A city of cars



1900



Spot the car

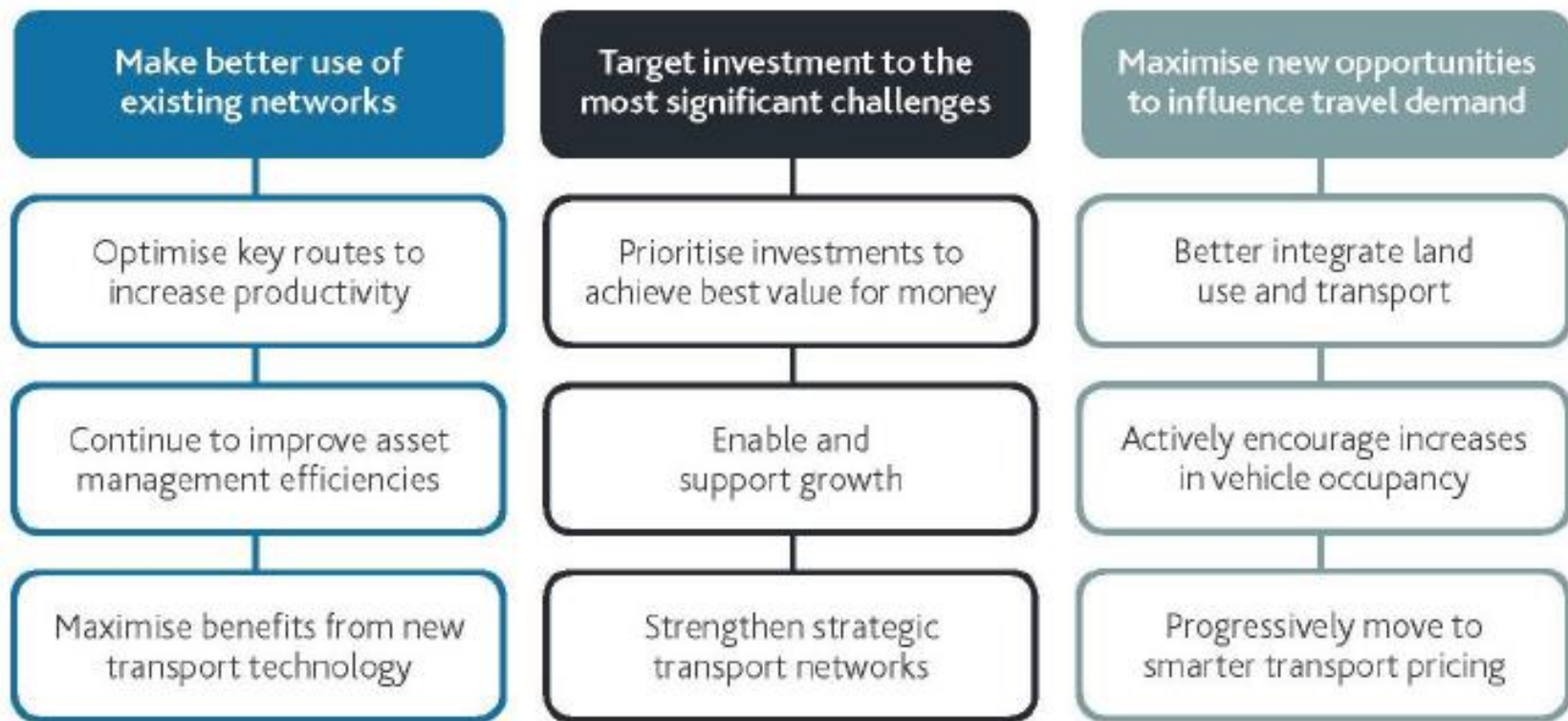
1913

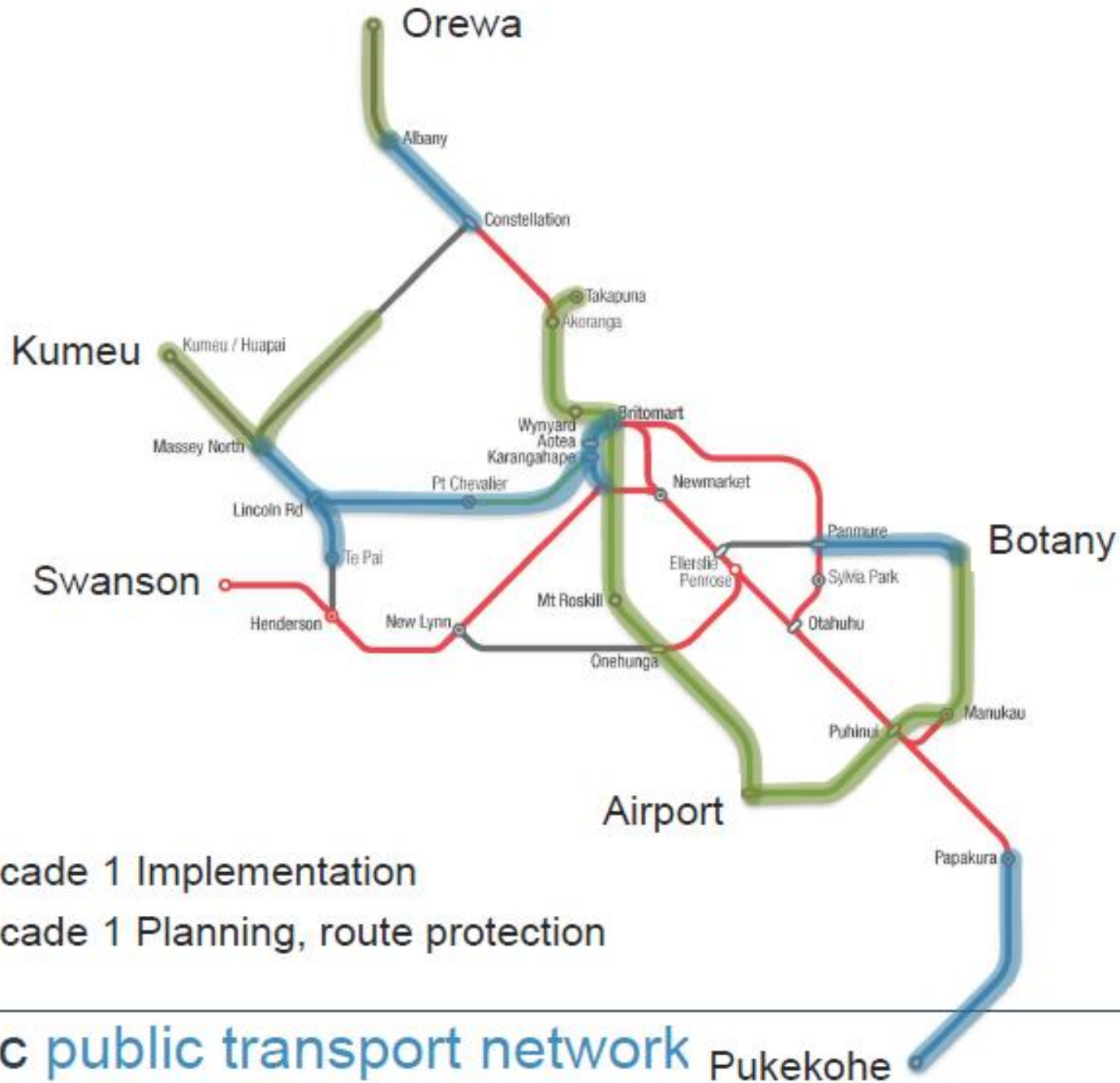


Spot the horse

Where we are at

ATAP recommended strategic approach





- Decade 1 Implementation
- Decade 1 Planning, route protection

Strategic public transport network



Auckland Transport

- City Rail Link \$3.5 billion
- Light Rail
- Congestion Pricing
- Third Harbour Crossing
- AT HOP card Open Loop
- Urban Cycleways

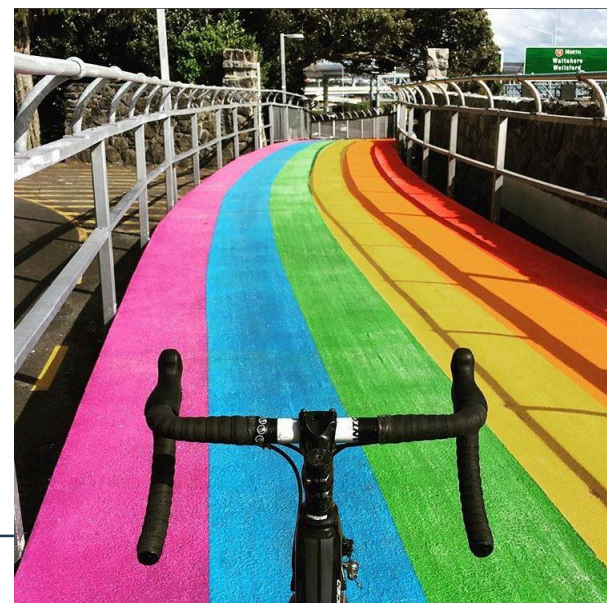


We are improving energy efficiency

- **Energy efficiency savings** - AT is replacing 45,000 of the existing traditional streetlights with LEDs. The project is expected to *save \$32 million* over the 20-year design life of the LEDs.
- **Electrification of the rail network** is *saving up to 9 million litres of diesel each year* and has reduced the harmful effects particularly of air and noise pollution from diesel trains.



We are improving our cycling environments





Aucklanders continue to cycle in greater numbers

The proportion of Aucklanders who are cycling has increased to 35%



(up 4 points on 2016 and 15 points since 2014).

And we also continue to make incremental gains in the proportion of Aucklanders cycling at least weekly

(up 1 point year on year to 14% and up 8 points since 2014).

CYCLING BEHAVIOUR
(% OF AUCKLANDERS)



Cycle share – an example of the future

ofo Bike Sharing Solution

Non-docking system + Smart phone application



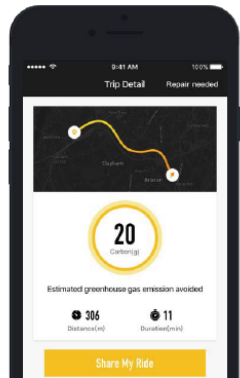
Enter the bicycle plate number on ofo APP to get an unlock code



Use the code to easily unlock the bicycle



Bikes can be left at any bike parking spaces, ready for other users to use



THE WINNING FORMULA: CYCLE SHARE

The most successful cycle share cities in the world are those with high market penetration (1 daily trip per 20 – 40 residences) and high infrastructure usage (4 to 8 daily uses per bike).



Density of 10-16 stations per kilometre



Minimum system coverage area of 10 sq. km



10-30 bikes per 1000 residents in coverage area



Durable, attractive and practical bikes



Quick and easy to use bike stations



Integration with transport systems and smartphone technology

Reducing car usage



We are improving our pedestrian environments



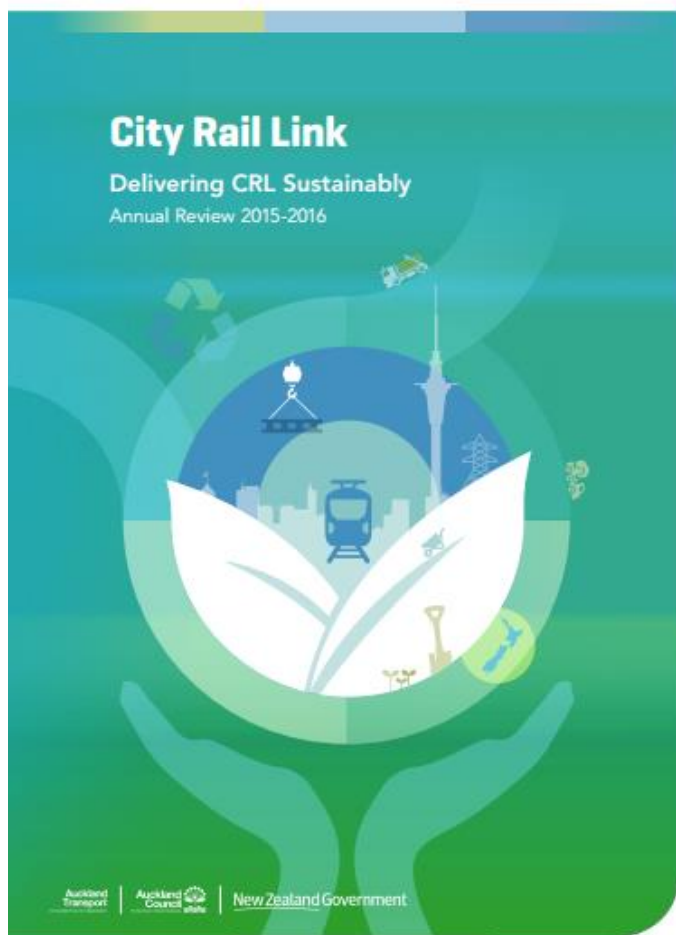
Public Transport uptake is increasing

- **Growth in Rapid Transit**
 - Rail and Northern Bus Busway (Auckland's BRT system) has increased patronage 20% per year for the last 10 years, providing congestion free alternatives to single occupancy vehicle journeys
- **The rollout of the new bus network and integrated ticketing**
 - Is making Public Transport more accessible and affordable. Its easing congestion, reducing energy and improving air quality and public safety
- **Free public transport to major events**



Design and construction of City Rail Link

- Design and construction of the City Rail Link project –



A call to action: looking forward 20-50 years?



Social Web

Mobility

Big Data

Internet of Things

The Cloud

Drones & Robotics