Auckland Transport Challenges and Opportunities

# Transport Integration and the Transport Emissions Reduction Pathway


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**Our cities are shaped by where people live, work, learn, shop and play and how they travel around.**

As transport users, we want connected trips. Transport connectivity is the key to enabling the best use of resources, reducing the overall socio-economic cost of transport infrastructure and services with an emphasis on sustainability.

# What does Integrated Transport Mean

Nearly every trip you make has more than one mode of travel — at least walking at the beginning and end, and then some combination of cycling, or travelling by bus, train, ferry or car or any other mode (including an electric bike or scooter).

For a trip to be *integrated* means a relatively seamless journey, with different segments readily connecting in close proximity (in space and time), to ensure a reasonable travel time from door to door, from origin to destination.

Well-designed integration results in cost-effective and sustainable transport of a reliable quality. The cost of the trip is affordable and value for money and the trip is safe and comfortable.

# Integrated and Sustainable Transport System

Integration is about the *ease of moving around*.

Will I be able to travel **when** I want to go?
How much **time** will the trip take?
How **comfortable** and **safe** will the trip be?
How **convenient** will the trip be?
What will the trip **cost**?
What **information** is available to help me choose my means of travel?

To achieve integration and sustainability requires professionals to design seamless connectivity, to reduce the need to travel, to reduce the number and length of trips and to reduce car dependence.


# Components of integrated transport

Integrated transport requires consideration of the following:

•The move to **'turn up and go'** transit services on high volume routes reduces reliance on timetables and improves convenience.

•From a *physical* perspective thinking about a traveller connecting from one leg of the journey to the next means designing the **shortest, easiest, most comfortable and safe connection**.

•**Ready access to reliable and timely service information** is expected in today's connected society.

•**A simple, connected *payment* system,** irrespective of whether driving, parking or using public transport and not be charged extra for connecting from one mode to another.

•Be **led by a *single agency*** responsible for policy, planning, pricing and operation across modes, to enable seamless connected journeys.

# What does sustainable transport mean?

The objectives of a sustainable transport system include:

1. ***Reduce travel demand*****,** particularly motorised modes, by reducing the need to travel, number of trips and trip lengths

2. ***Greater use of sustainable modes*** such as public transport, walking and cycling for moving people and high capacity freight

3. ***Efficient and effective use*** of existing transport systems and provision of infrastructure and services

4. ***Increasing energy efficiency*** and reducing vehicle emissions.


# How can sustainable transport integration be successfully achieved?

1. **Integrated Planning.** Coordinating planning for the various modes will ensure they readily connect at interchanges (both spatially and temporally), resulting in trips with minimum disruption, discomfort, or safety concerns.

2. **Integrated Infrastructure.** Interchanges need to ensure seamless physical connections between park and ride facilities and stations, between cycleways and public transport stations, and transport stations with retail and commercial precincts.

**3. Integrated Operations**. transport services co-ordinated to ensure seamless connections between services (bike/car to bus, bus to bus/train/ferry etc) from origin to destination.

- In high patronage areas, 'turn up and go' frequencies of 5 to 10 minutes.
- Integrated ticketing and fares.
- real-time service information.

# What does this mean for Tāmaki Makaurau?

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# The Auckland Climate Plan

## halve emissions by 2030


Net Zero Carbon Emissions

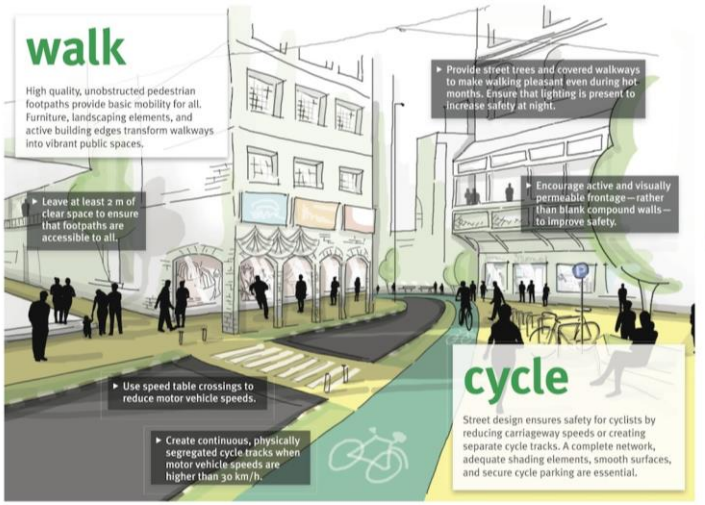
Integrated Transport System

# Imagine a Future…

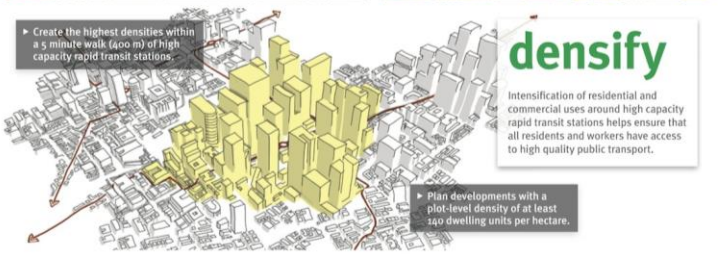
**Transit Oriented Development :**

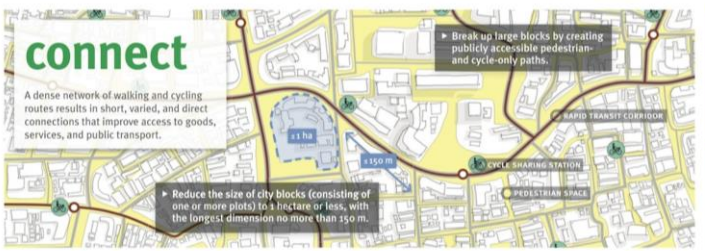
**15 minute city**

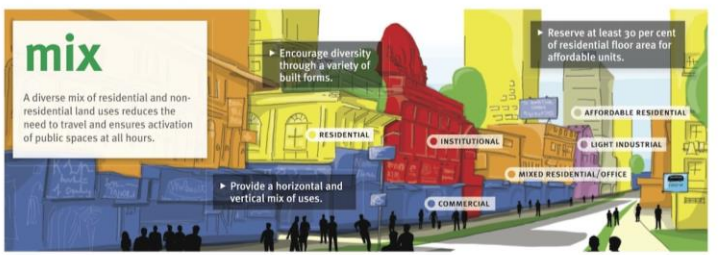
environmentally sustainable, compact, pedestrian-oriented, mixed-use communities centered around high quality public transport









Imagine an Auckland where kids can walk or ride safely to school, where public transport is efficient and equitable across the entire region, where we all have more choice in how we travel; that's the vision outlined in the proposed **Transport Emissions Reduction Pathway**

***"In a city where people once used to rely more on public transport, urban spawl and motorway development from the 1960s has locked in car dependency and resulted in Aucklanders driving much more than in many comparable cities overseas. The Pathway shows how we can give transport choices back to Aucklanders."***

# Transport Emissions Reduction Pathway


***Auckland Council's Environment and Climate Change Committee adopted the Transport Emissions Reduction Pathway on 18 Aug 2022, to give effect to Te Tāruke-ā-Tāwhiri's required 64 per cent reduction in transport emissions by 2030.***

# Tackling this challenge together as Aucklanders…

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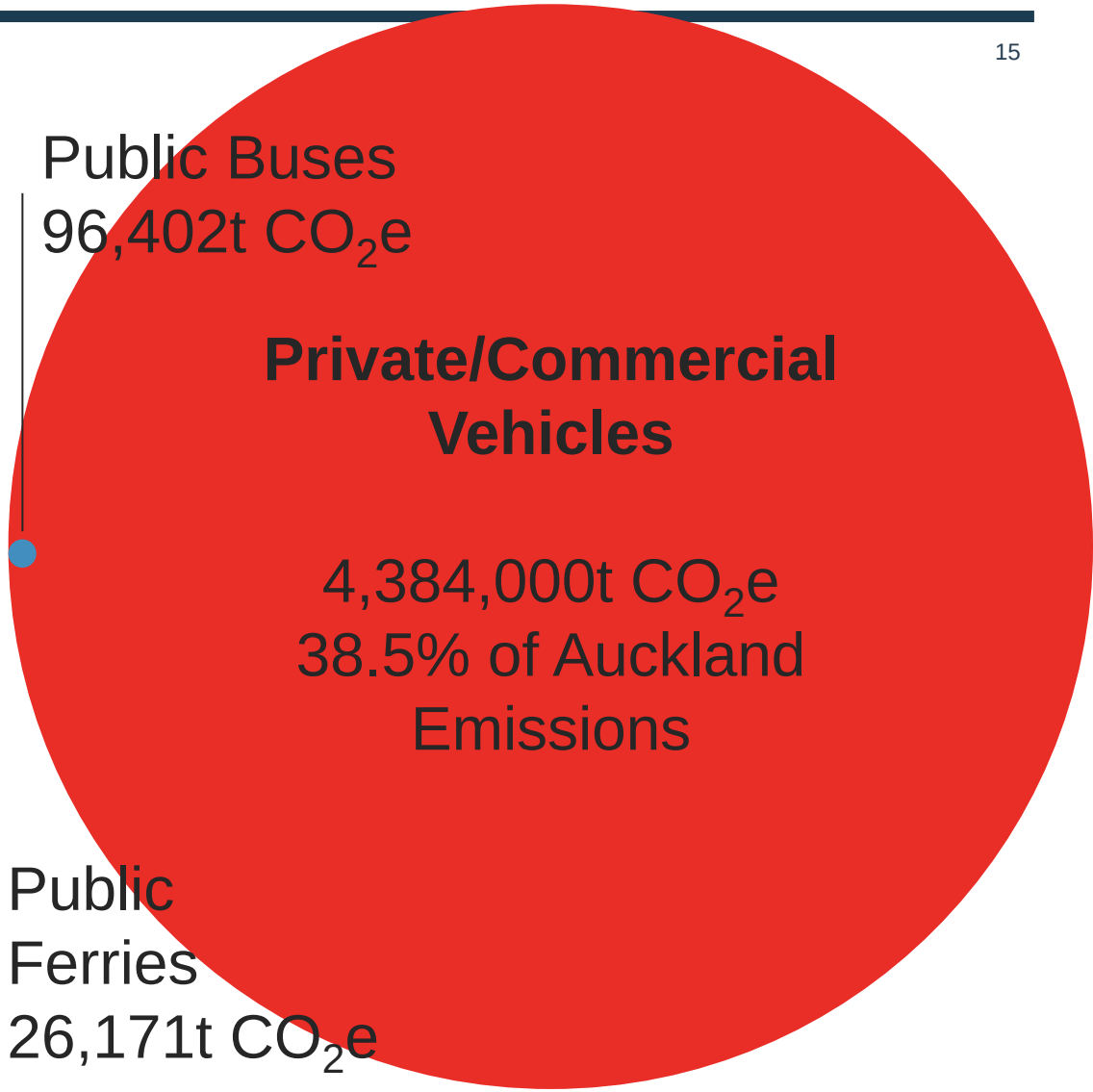
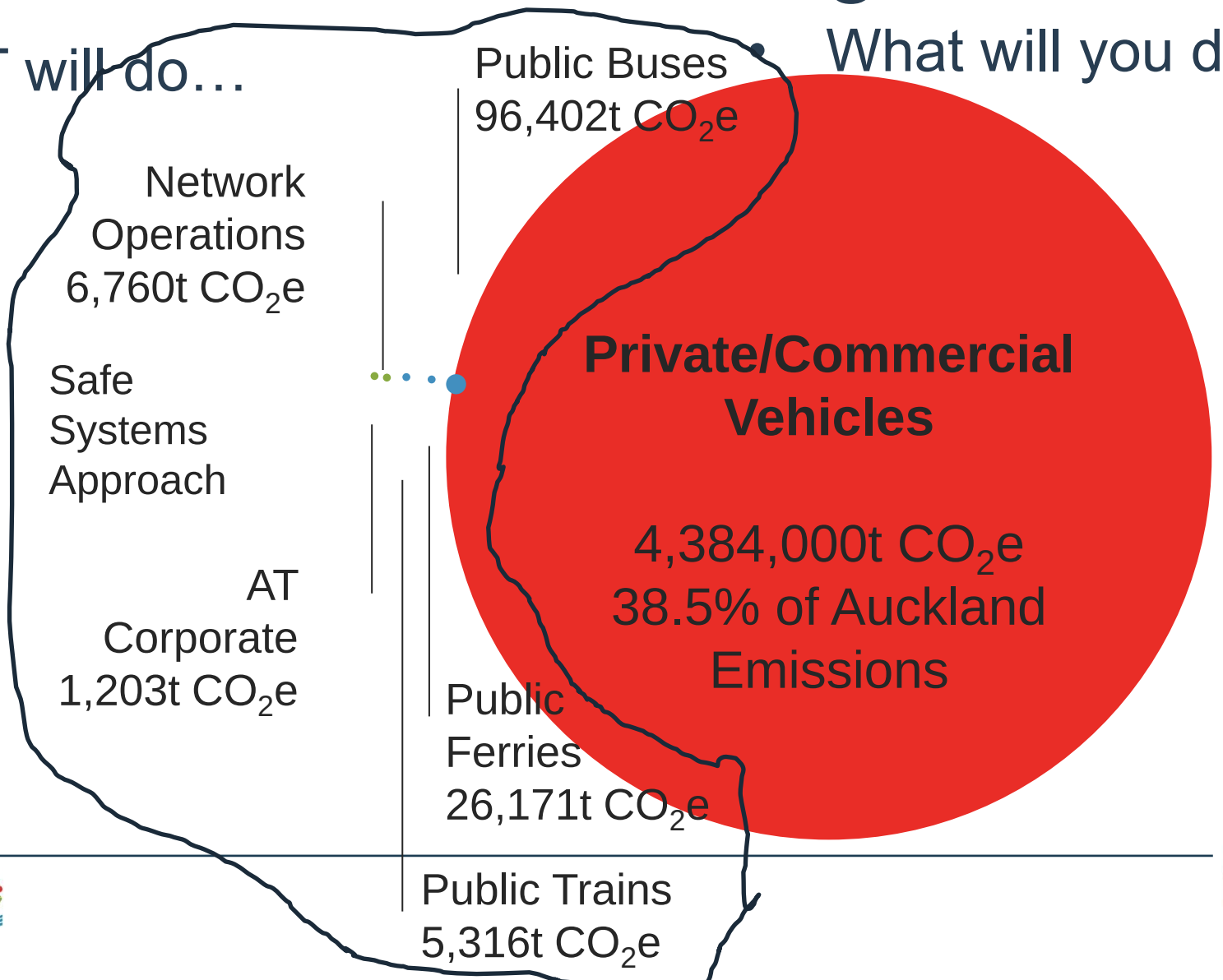
# The Carbon Challenge



# He waka eke noa
# **We are all in this together**

- What AT will do…

What will you do…



# Actions required to achieve our transport emissions targets by 2030 include:

- making the majority of our local trips (under 6km) by sustainable modes
- converting 30% of the city's vehicles to electric, especially commercial vehicles
- 20% trips by walking and cycling (10x increase)
- 23% trips are on public transport (550m boardings) 5x  increase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| | | 2019 | 2022 | What would need to happen (at minimum to meet the 64% reduction goal) | 2030 64% Reduction |
|---|---|---|---|---|---|
| Reduce reliance on cars and support people to walk, cycle and use public transport | 1 \| Supercharge walking and cycling | 1% walking <1% cycle and micro | | Upgrade pedestrian network | 3% walking 13% cycle and micro |
| | | | | Safe Speeds - treatments *Ongoing* | |
| | | | | Safe Speeds - limits | |
| | | | | Low-Traffic Neighbourhoods | |
| | | | | Core cycling network | |
| | | | | Entire cycling network | |
| | 2 \| Massively increase public transport patronage | 100m trips on public transport (COVID impacted 2022: ~60m) | | Improved capacity for inter-regional public transport *Ongoing* | 550m trips on public transport |
| | | | | (Enhanced) Frequent Isthmus Public Transport Network | |
| | | | | (Enhanced) Frequent Regional Public Transport Network | |
| | | | | Upgraded minor public transport infrastructure | |
| | 3 \| Prioritise and resource sustainable transport | - | | City Rail Link | Unlocks investment for all emissions reduction |
| | | | | Further rail enhancements (9-car, level crossings) *Ongoing* | |
| | | | | Full Eastern Busway | |
| | | | | Interim Northwestern Busway | |
| | 4 \| Reduce travel where possible and appropriate | 16b Vehicle KM travelled | | Fair fares | ~8b Vehicle KM travelled |
| | | | | Review enforcement powers | |
| | | | | Increased enforcement *Ongoing* | |
| | | | | Tactical urbanism to deliver street layout changes quickly *Ongoing* | |
| | 5 \| Safe low-traffic neighbourhoods for people | ~10km average trip length | | Congestion Pricing: City Centre / Isthmus / Arterials | ~5% average trip length |
| | | | | Parking repurposing | |
| | | | | Zero-emission zones | |
| | | | | Enhanced parking pricing | |
| | | | | Investment policies informed by Measure Sustainable Access | |
| | 6 \| Build up not out | ~10km average trip length | | Pedestrianise Queen St / Access for Everyone City Centre | ~5% average trip length |
| | | | | Measure Sustainable Access | |
| | | | | Plan Change for National Policy Statement - Urban Development | |
| | | | | Upzone around areas of high access | |
| | | | | Reassess greenfield zoning | |
| Rapidly adopt low-emissions vehicles | 7 \| Electrify private vehicles | <1% LV EVs | | Electric vehicles subsidies *Ongoing* | 32% LV EVs |
| | 8 \| Enable new transport devices | <1% mm (incl. e-bikes) | | E-bike subsidies *Ongoing* | 16% micomobility (Incl. e-bikes) |
| Begin work now to decarbonise heavy transport and freight | 9 \| Low emissions public transport | 5% PT low-emissions (12% buses 2022) | | All new buses low-emissions *Ongoing* | 75% PT low-emissions |
| | | | | Low emissions ferries *Ongoing* | |
| | | | | Pukekohe line electrified | |
| | 10 \| Efficient freight and services | 0.9Mt freight emissions 0.4Mt air travel emissions | | Mutli-modal logistics hubs *Ongoing* | -50% freight emissions -50% air travel emissions |
| | | | | Strategic freight routs | |
| Empower Aucklanders to make sustainable travel choices | 11 \| Empower Aucklanders to make sustainable transport choices | - | | Deep community engagement *Ongoing* | Behaviour change essential to all emissions reduction |

# What Auckland Transport will Do…

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# Decarbonising Transport

- **Operational Carbon:**
  electric trains/buses/ferries/LED
- **Infrastructure Carbon:**
  methods/materials/recycling


- **Private/Commercial Vehicle Carbon:**
  - Improved public transport access and speed
  - Improved walking and cycling access and safety
  - Promote Behaviour change – mode shift
  - Facilitate Transit Oriented Development
  - Supporting infrastructure for electric vehicles
  - Advocate to Government for funding, electric vehicle incentives, and congestion pricing

# What will You Do…

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# What can you do to help?

- Lead by example:
  - Become a single car household
  - Stop using you car for journeys under 2km
  - Use PT/walk/cycle more often
  - Live, work and play in your neighbourhood (15 minute cities)
  - Work from home more often
  - Become an advocate for change…

# He waka eke noa
# We are all in this together…

## Be an advocate for road space equity


# Final Food for Thought

COVID proved **behaviour change**

…(not infrastructure) is the

single most effective way to solve

Auckland's

transport congestion challenges,

reduce carbon emissions

and reduce road deaths