



# Transport:

## Looking out for future generations



**Dr Lester Levy**  
**Chairman, Auckland Transport**



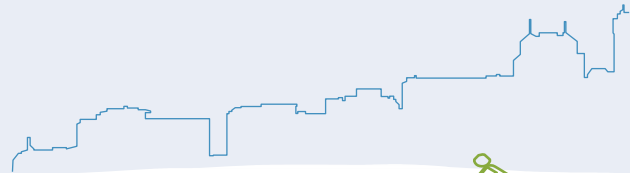
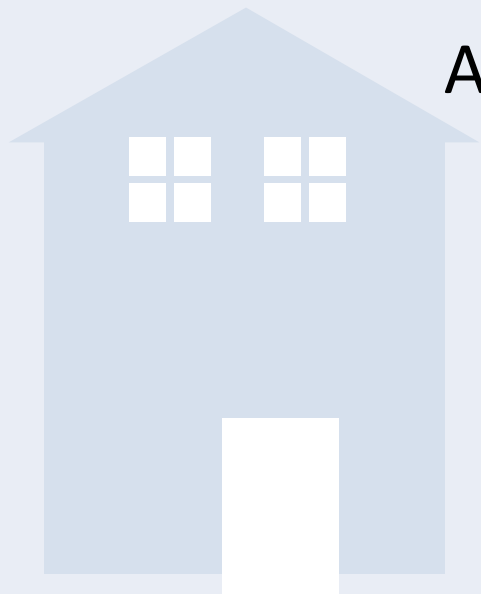
Auckland is currently home to

**1.57m people**

and this is forecast to

**GROW**

**2 million by 2033**





## Sustainability challenge for growing cities:

- meeting needs of the present
- not compromising future generations meeting their own needs



# Transport: Fundamental Shaper of Cities



- Land
- Air
- Water
- Economy
- Communities
- Eco-systems

Transport consumes non-renewable  
resources in large quantities



# AT's Footprint



- 7,302 km of roads
- 12,000 km of stormwater channel and 75,481 catch pits
- 1,020 bridges and major culverts
- 3,735 sea walls and retaining walls



# AT's Footprint

- 6,959 km of footpaths and 321 km of cycleway
- 105,347 street lights
- 2,342 bus shelters, 6 busway stations, 21 wharves and ferry facilities



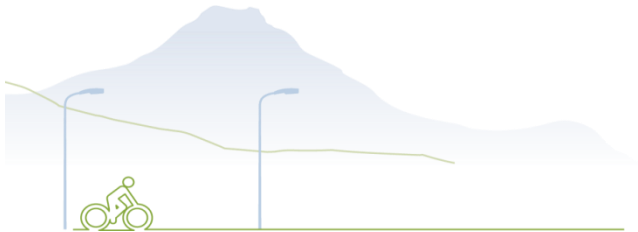
# AT's Footprint

- 41 active rail stations, associated stabling and depot
- 57 electric trains, 10 diesel multiple units
- 13 multi-storey car park buildings
- Contracting the services of 1,240 buses in the Auckland bus fleet

# AT's Sustainability Framework: Goals



- Conserve and enhance the natural environment
- Meet the social and health needs of Aucklanders
- Foster jobs, growth and economic productivity
- Celebrate Auckland's unique cultural identity





# Some examples of what AT has already achieved



Energy efficiency savings

**REPLACING  
45,000**

of the existing traditional streetlights

The project is expected to save

**\$32 million**

over the 20-year design life of the LEDs.

# Some examples of what AT has already achieved



Rail network electrification  
is saving up to



**9 million litres**

of diesel each year and is reducing the associated harmful  
effects of air and noise pollution from diesel trains

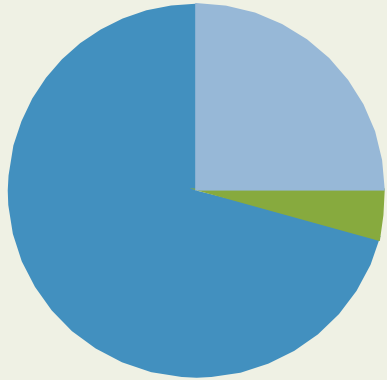


## Example: Air pollution

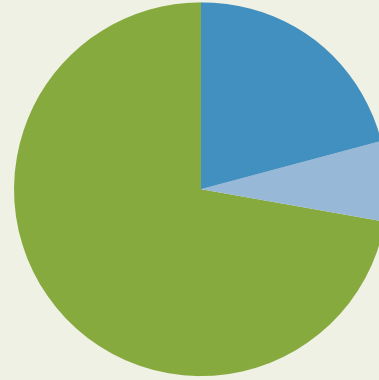
Transport contributes to air pollution  
(PM10, PM2.5, NOx)

- harmful to human health and wider ecosystems

# Auckland: Transport Impacts on Environment



**SUMMER WEEKDAY PM<sub>10</sub>**  
(TOTAL = 4.4 T/DAY)



**WINTER WEEKDAY PM<sub>10</sub>**  
(TOTAL = 4.4 T/DAY)

- Transport
- Industry
- Domestic

## Contribution of transport to PM pollution in Auckland

Source: The Health of Auckland's Natural Environment in 2015



## Example: Greenhouse gas emissions

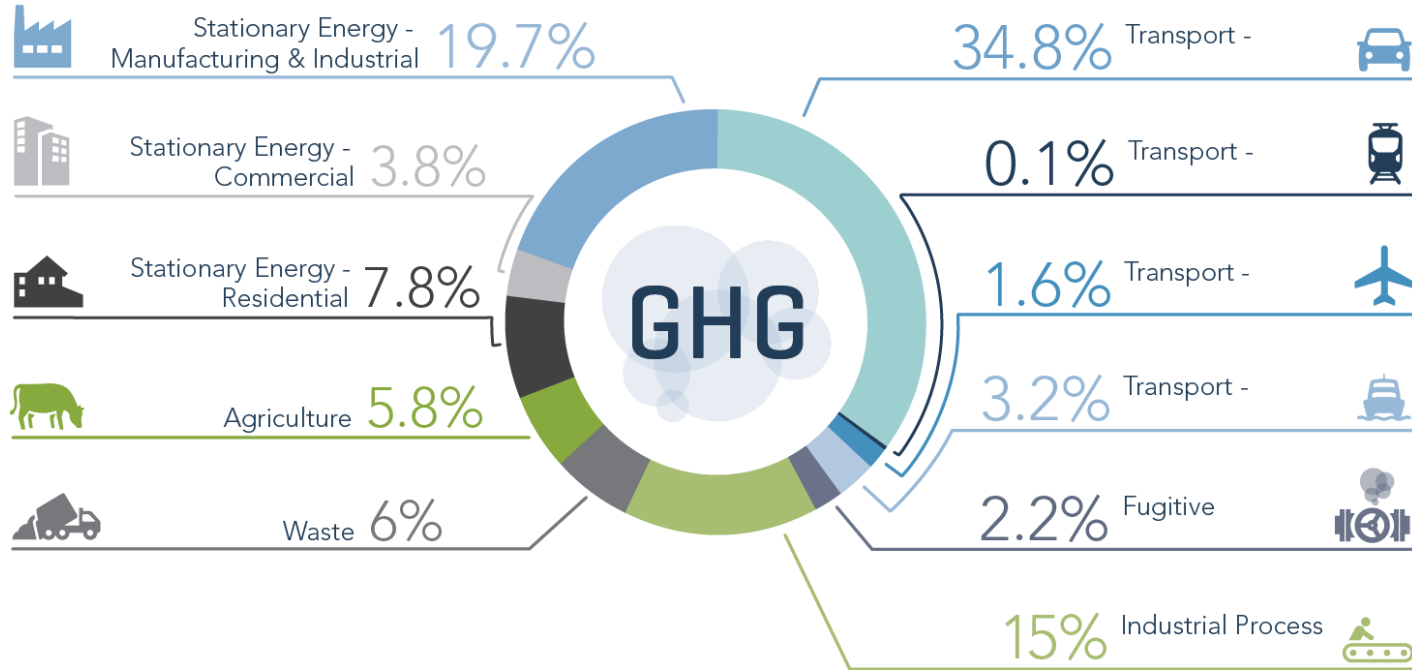
Greenhouse gas (GHG) emissions from transport are  
40% of Auckland total  
- relatively static since 2006



# Auckland: Transport Impacts on Environment



## GREENHOUSE GAS (GHG) EMISSIONS FROM AUCKLAND PLAN

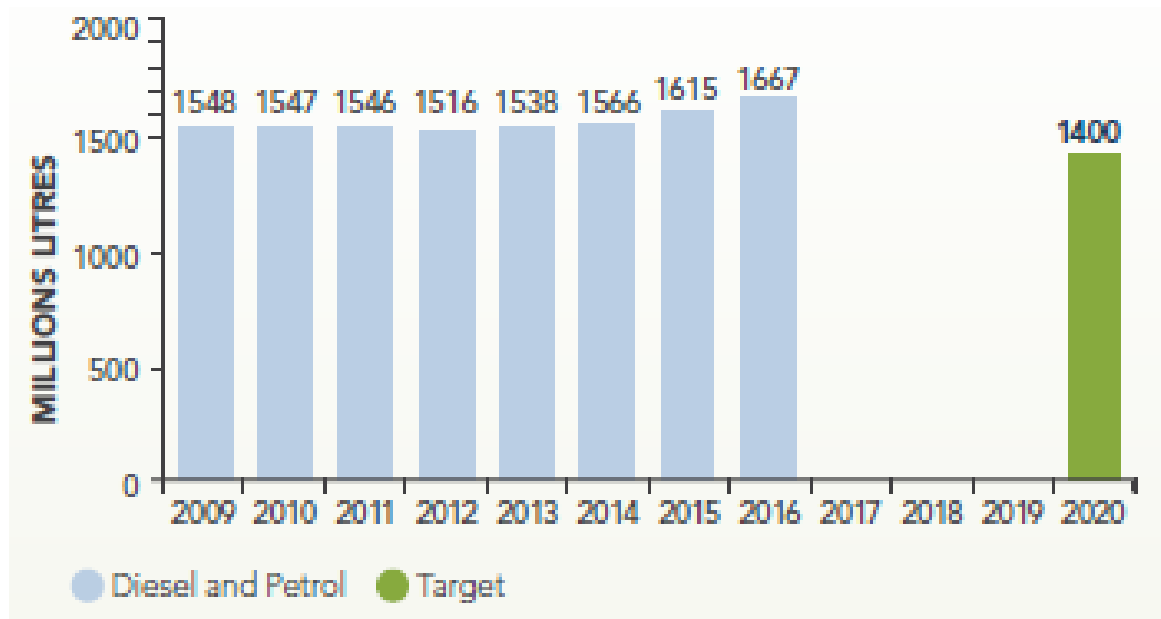




## Example: Fossil fuel use

99% of current transport fuels come from non-renewable energy such as petrol and diesel

# Auckland: Transport Impacts on Environment



## Regional Fuel Use 2009-2016

Source: Update source: The Health of Auckland's Natural Environment in 2015, Low Carbon Auckland updates



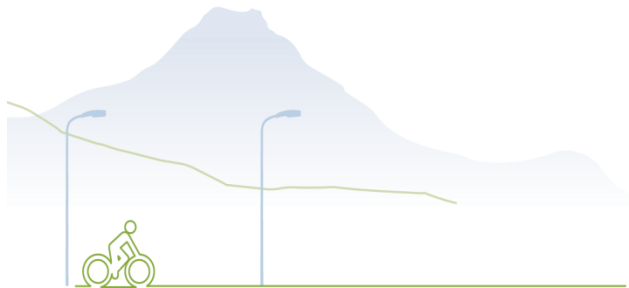
## Example: Stormwater

Stormwater contributes to the pollution of Auckland's harbours and waterways. Contaminants include copper from brake pads, zinc from tyres and fuel from combustion.



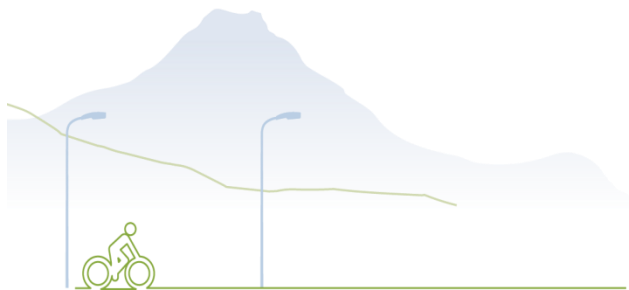
# AT's Sustainability Framework: Objectives

- Reduce pollution/emissions
- Reduce greenhouse gas emissions



# AT's Sustainability Framework: Objectives

- Reduce energy consumption
- Reduce water consumption



# AT's Sustainability Framework: Objectives

- Reduce waste generation
- Low emission transport choices
  - Increase uptake of active transport modes
  - Shift to renewable forms of energy

