# cphr | ehinz Environmental Health Indicators New Zealand



### Average age of vehicle fleet

### **HIGHLIGHTS:**

- The New Zealand vehicle fleet is getting increasingly older.
- In 2015, the average age of the light private vehicle fleet was 14.3 years. The oldest types of vehicles were trucks and buses, with an average age of over 17 years.
- New Zealand has an older light vehicle fleet than Australia, Canada and the United States.



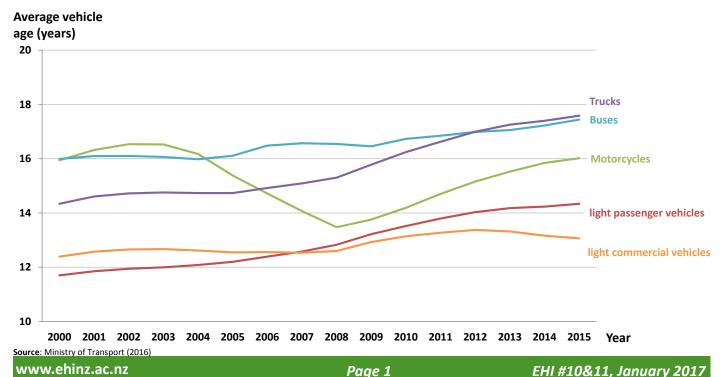
### Why the average age of vehicles is important for environmental health

The average age of a country's vehicle fleet is an indicator of the efficiency of the vehicles on the road. Older cars tend to be less efficient, and have more emissions. These emissions include carbon dioxide, carbon monoxide and particles ( $PM_{10}$ ), particularly from diesel vehicles – all of which can affect human health (Kjellström 2004). Vehicle age is also often related to vehicle safety, with newer cars having better safety features.

### An ageing vehicle fleet

In 2015, the oldest average ages were seen in the truck fleet (17.6 years) and bus fleet (17.4 years). The motorcycle fleet had an average age of 16.0 years, followed by light passenger vehicles (14.3 years) and light commercial vehicles (13.1 years).

The New Zealand vehicle fleet has grown increasingly older over the past decade. From 2014 to 2015, increasing average ages were seen for every vehicle fleet type, except for light commercial vehicles (from 13.2 years in 2014, to 13.1 years in 2015) (Figure 1).



### Figure 1: Average age of vehicle fleet in New Zealand, by vehicle type, 2000–2015

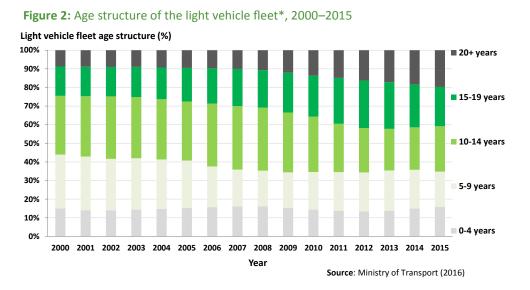
## cphr | ehinz Environmental Health Indicators New Zealand



### Average age of motor vehicles

### New Zealand's light vehicle fleet is getting older

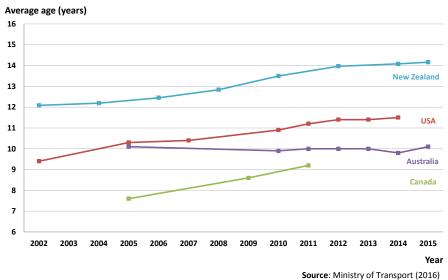
Figure 2 shows how the age structure of the light vehicle fleet (private and commercial) has changed since 2000. In 2000, 24.5 percent of the light fleet was 15 or more years old, but by 2015 this had increased to 40.9 percent, down from a peak of 42.3 percent in 2013.



## New Zealand's light vehicle fleet is old by international standards

The New Zealand light vehicle fleet is older than those in Australia, United States and Canada (Figure 3) In particular, in 2015 the New Zealand fleet was more than four years older average (14.2 years) on than Australia's vehicle fleet (10.1 years). The comparisons in Figure 3 are limited to countries with high levels of motorisation and similar patterns of development New Zealand as (Ministry of Transport 2016).





#### Notes on vehicle types

• \*Light vehicles include light passenger vehicles and light commercial vehicles:

- 'Light passenger vehicles' include passenger cars and vans.
- 'Light commercial vehicles' include the following, if under 3500kg: goods vans, trucks, utilities, buses, motor caravans.
  - 'Trucks' include the following, if over 3500kg: goods vans, trucks, utilities, motor caravans.
    - 'Motorcycles' include motorcycles and mopeds.
      - 'Buses' include buses over 3500kg.

#### REFERENCES

Kjellström T. (2004). Air Quality and Health. In Cromar N, Cameron S, Fallowfield H. (eds.). Environmental Health in Australia and New Zealand (pp.274–92). Melbourne: Oxford University Press. For more information, please contact Carolin Haenfling on ehinz@massey.ac.nz

Ministry of Transport. (2016). Annual fleet statistics 2015. Wellington: Ministry of Transport.

Page 2

EHI #10&11, January 2017