



### Average age of motor vehicles

#### **HIGHLIGHTS:**

- The New Zealand vehicle fleet is getting increasingly older.
- In 2016, the average age of the light passenger vehicle fleet was
  14.4 years. The oldest types of vehicles were trucks and buses,
  with an average age of 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

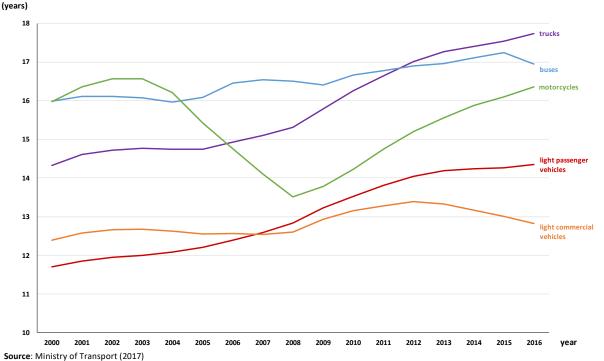
The average age of a country's vehicle fleet is an indicator of the efficiency of the vehicles on the road. Older cars tend to be less efficient, and have more emissions. These emissions include carbon dioxide, carbon monoxide and particles ( $PM_{10}$ ), particularly from diesel vehicles – all of which 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 2016, the oldest average vehicle ages were seen in the truck fleet (17.7 years) and bus fleet (17.0 years). The motorcycle fleet had an average age of 16.4 years, followed by light passenger vehicles (14.4 years) and light commercial vehicles (12.8 years).

From 2015 to 2016, increasing average ages were seen for every vehicle fleet type, except for light commercial vehicles (from 13.0 years in 2015, to 12.8 years in 2016) and buses (from 17.3 years in 2015, to 17.0 years in 2016) (Figure 1).

**Figure 1:** Average age of vehicle fleet in New Zealand, by vehicle type, 2000–2016 average vehicle age



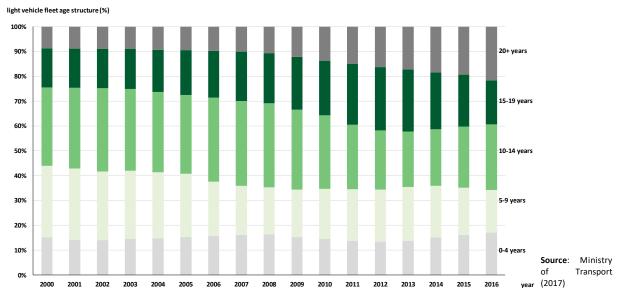


## Average age of motor vehicles

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

The New Zealand vehicle fleet has grown increasingly older over the past years (Figure 2). In 2000, 24.6 percent of the light vehicle fleet (passenger and commercial) was 15 or more years old, but by 2016 this had increased to 39.4 percent, down from a peak of 42.3 percent in 2013.

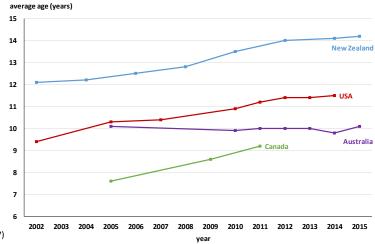
Figure 2: Age structure of the light vehicle fleet\*, 2000-2016



# 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 on average (14.2 years) 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 as New Zealand (Ministry of Transport 2017).

**Figure 3:** Average age of light vehicle fleet\*, international comparisons, 2002–2015



Source: Ministry of Transport (2017)

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.

Ministry of Transport. (2017). Annual fleet statistics 2016. Wellington: Ministry of Transport.

For more information, please contact Carolin Haenfling on ehinz@massey.ac.nz