

Average age of motor vehicles

This factsheet presents an indicator of the average age of the New Zealand motor vehicle fleet between 2000 and 2018.

Key facts



Over a third of the light vehicle fleet was older than 15 years in 2018.

14.1

The average age of the light vehicle fleet increased from 11.8 years in 2000 to 14.1 years in 2018.



Trucks and buses were the oldest types of vehicles in 2018, with an average age of 17.8 and 15.9 years, respectively.

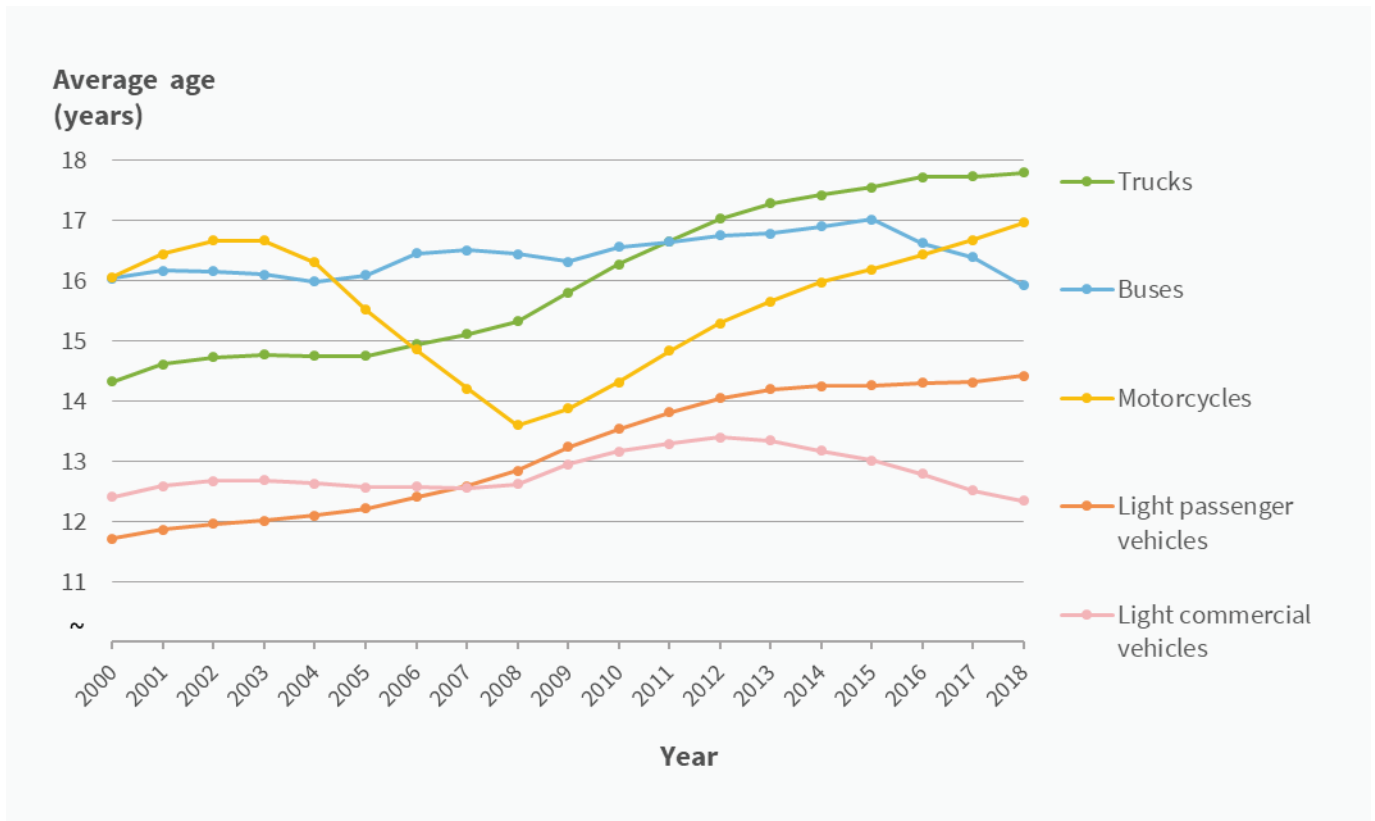
Why is the average age of vehicles important for environmental health?

The efficiency of vehicles on the road is indicated by the average age of a country's vehicle fleet. Older cars tend to be less efficient, and have more emissions. These emissions include carbon dioxide, carbon monoxide and particles (eg PM10 and PM2.5), 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

Between 2000 and 2018, the average age of light passenger vehicles, motorcycles and trucks has increased (Figure 1). In 2018, trucks had the oldest average age (17.8 years), followed by motorcycles (17.0 years), buses (15.9 years), light passenger vehicles (14.4 years), and light commercial vehicles (12.3 years).

Figure 1: Average age of vehicle fleet in New Zealand, by vehicle type, 2000-2018



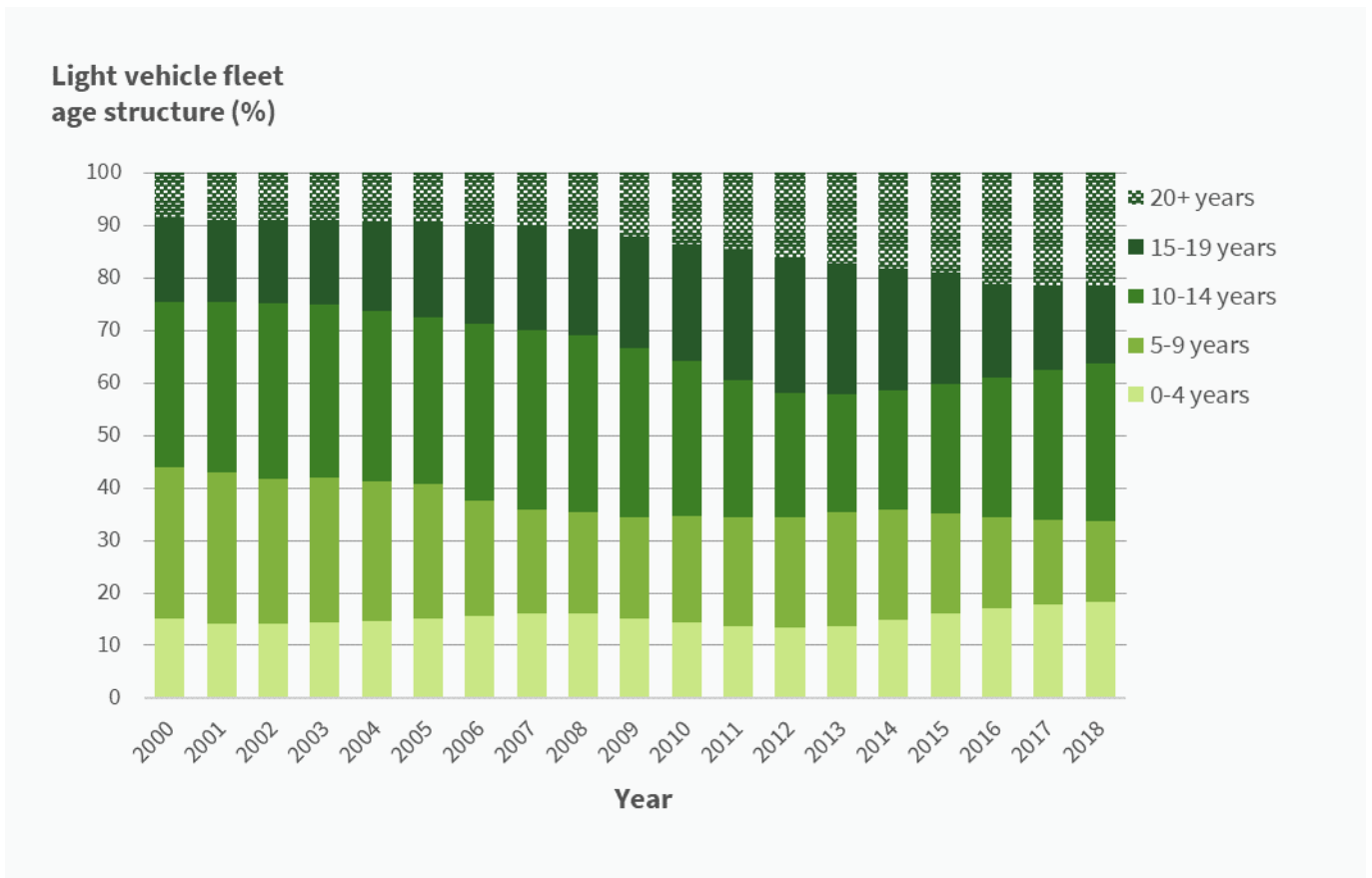
Note: Y-axis starts at an average age of 11 years.
Source: Ministry of Transport 2019

More than a third of cars are 15 years or older

In 2000 almost 25% of the light vehicle fleet was 15 years or older, in 2018 it was 36% (Figure 2). One in five cars of the light vehicle fleet was older than 20 years in 2018.

The number of light vehicle registrations has increased since 2013 (Ministry of Transport 2019). This has reduced the proportion of light vehicles 15 years or older, down from a peak of over 42% in 2013 (Figure 2).

Figure 2: Age structure of the light vehicle fleet, 2000-2018



Source: Ministry of Transport 2019

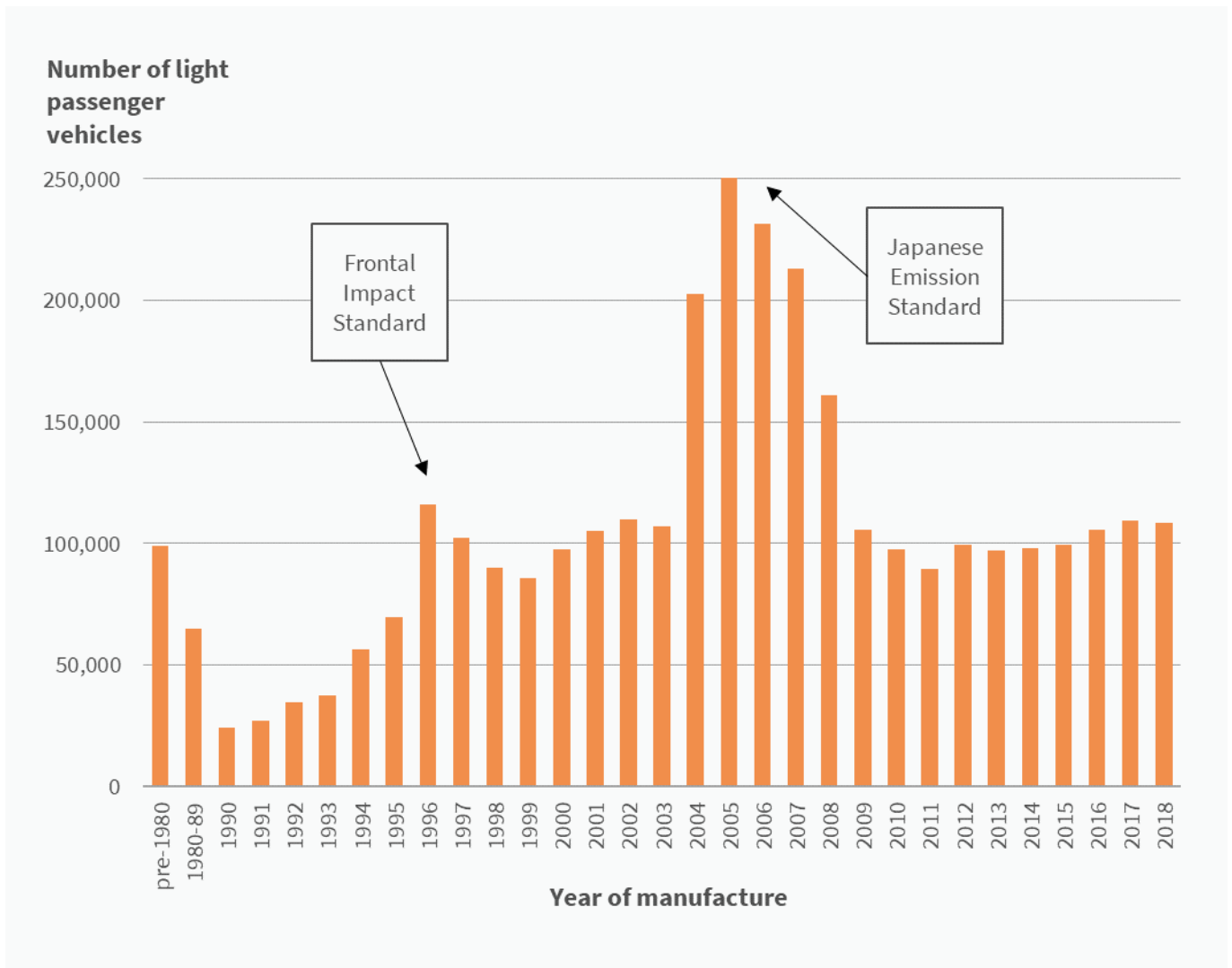
New Zealand has a large number of vehicles built in the mid-1990s

The New Zealand light passenger fleet includes a high number of cars manufactured in the mid-2000s (10-15 years old), followed by cars manufactured in the mid-1990s (20+ years old) (Figure 3). These cars tend to have lower safety standards and higher levels of harmful emissions.

The 1996 peak is associated with the Frontal Impact Standard, which saw a large number of vehicles manufactured in the mid-to late-1990s enter the New Zealand light vehicle fleet between 2000 and 2008. This rule restricts used car imports to those vehicles manufactured after or during 1996 (Ministry of Transport 2019).

The mid-2000s peak is associated with the Japanese emission standard that came into effect in 2012, which prevents many vehicles manufactured before 2005 from being registered in New Zealand (Ministry of Transport 2019).

Figure 3: Light passenger vehicle fleet in December 2018, year of manufacture, 1968-2018



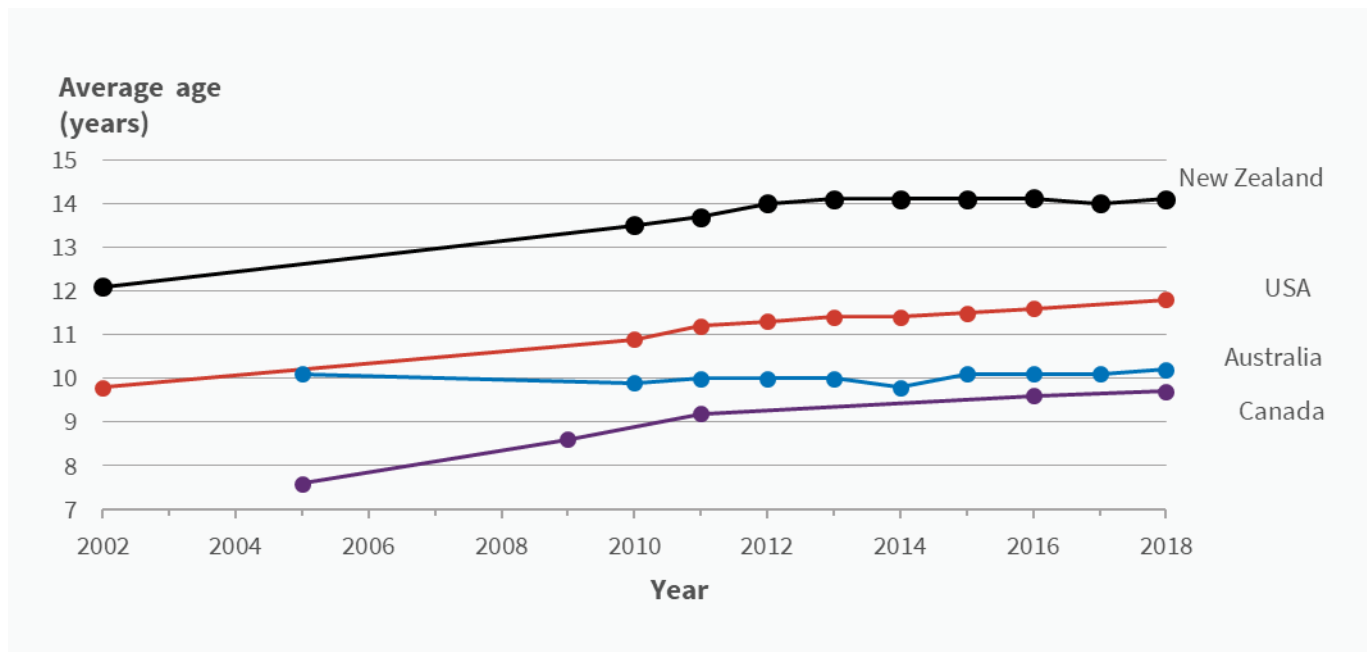
Note: Number of cars as at December 2018
Source: Ministry of Transport 2019

New Zealand’s light vehicle fleet is old by international standards

The New Zealand light vehicle fleet is older than the fleet in the United States, Australia, and Canada (Figure 4). In 2018, the New Zealand light vehicle fleet was more than four years older on average (14.1 years) than Canada’s vehicle fleet (9.7 years).

Increasing average ages across the light vehicle fleet may be due to an improved mechanical reliability (Ministry of Transport 2019).

Figure 4: Average age of light vehicle fleet, international comparisons, 2002-2018



Note: The comparisons in Figure 4 are limited to countries with high levels of motorisation and similar patterns of development as New Zealand (Ministry of Transport 2019). Y-axis starts at an average age of 7 years.

Source: Ministry of Transport 2019

Data for this indicator

Average age of vehicle fleet

This indicator presents the average age (in years) of vehicles in the New Zealand vehicle fleet. Six categories of vehicles are used:

- Light vehicle fleet includes:
 - Light passenger vehicles (passenger cars and vans)
 - Light commercial vehicles (the following if under 3,500 kg: goods vans, trucks, utilities, buses, and motor caravans)
- Trucks (the following if over 3,500 kg: goods vans, trucks, utilities, and motor caravans)
- Buses (those over 3,500 kg)
- Motorcycles (including mopeds).

Data for this indicator comes from the Ministry of Transport's Annual vehicle fleet statistics. Data for each year is a snapshot of the month December. For additional information, see the metadata link below.

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. 2019. *Annual vehicle fleet statistics 2018*. Wellington: Ministry of Transport.

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