Average age of motor vehicles

This factsheet presents an indicator of the average age of the New Zealand motor vehicle fleet between 2000 and 2019.

Key facts

In 2000, just 8.8% of the light vehicle fleet was older than 20 years. By 2019, this had more than doubled to 21.7%.

14.1

The average age of the light vehicle fleet increased from 11.8 years in 2000 to 14.1 years in 2019.

Trucks and motorcycles were the oldest types of vehicles in 2019, with an average age of 17.8 and 17.3 years respectively.

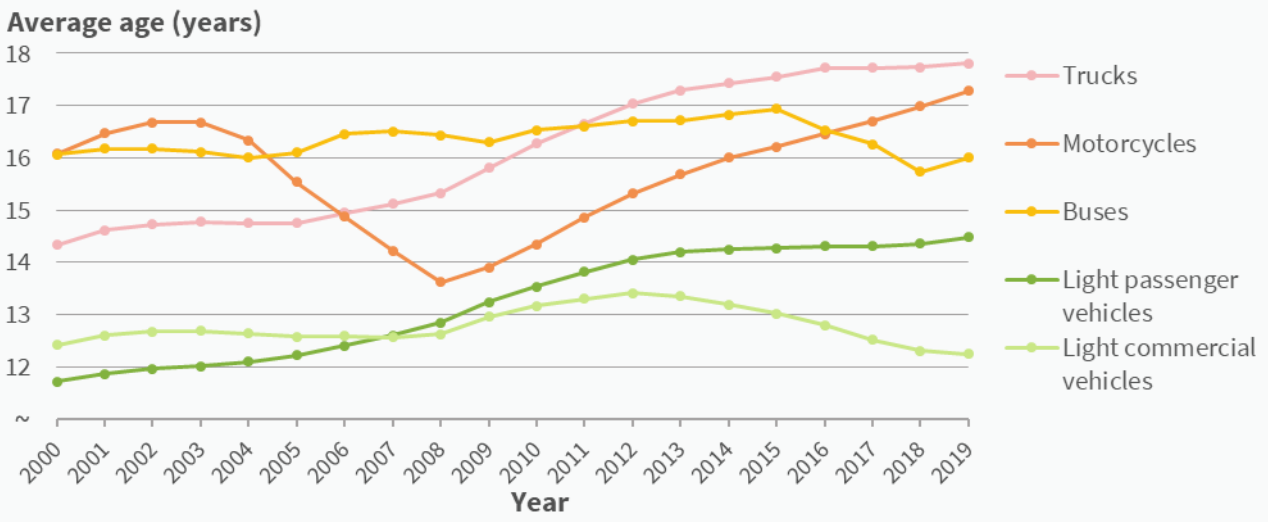
Why is the average age of vehicles relevant to environmental health?

The average age of a country's vehicle fleet is an indicator of the efficiency of vehicles on the road. Older cars tend to be less fuel-efficient and produce more emissions. These emissions include carbon dioxide, carbon monoxide, nitrogen dioxide and particulate matter (e.g. PM_{10} and $PM_{2.5}$), particularly from diesel vehicles – all of which can affect human health (Kjellström 2004). Vehicle age is also often related to vehicle safety, with newer models having more and better safety features installed.

The vehicle fleet continues to age

Between 2000 and 2019, the average age of light passenger vehicles, motorcycles and trucks increased (Figure 1). Since 2011, trucks were the oldest vehicles on the road, with an average age of 17.8 years in 2019. Motorcycles were second-oldest (17.3 years) followed by buses (16.0 years), light passenger vehicles (14.5 years) and light commercial vehicles (12.2 years). The dip in the average age of motorcycles coincides with peaks in the hospitalisation and mortality rates for motorcycle accidents. It is possible that the reduction in average age might be due in part to older motorcycles being written off at a greater rate in crashes that led to death or injury. For more information, see the '**Road traffic injury deaths & hospitalisations**' indicators.

Figure 1: Average age of the New Zealand vehicle fleet, by type, 2000–2019

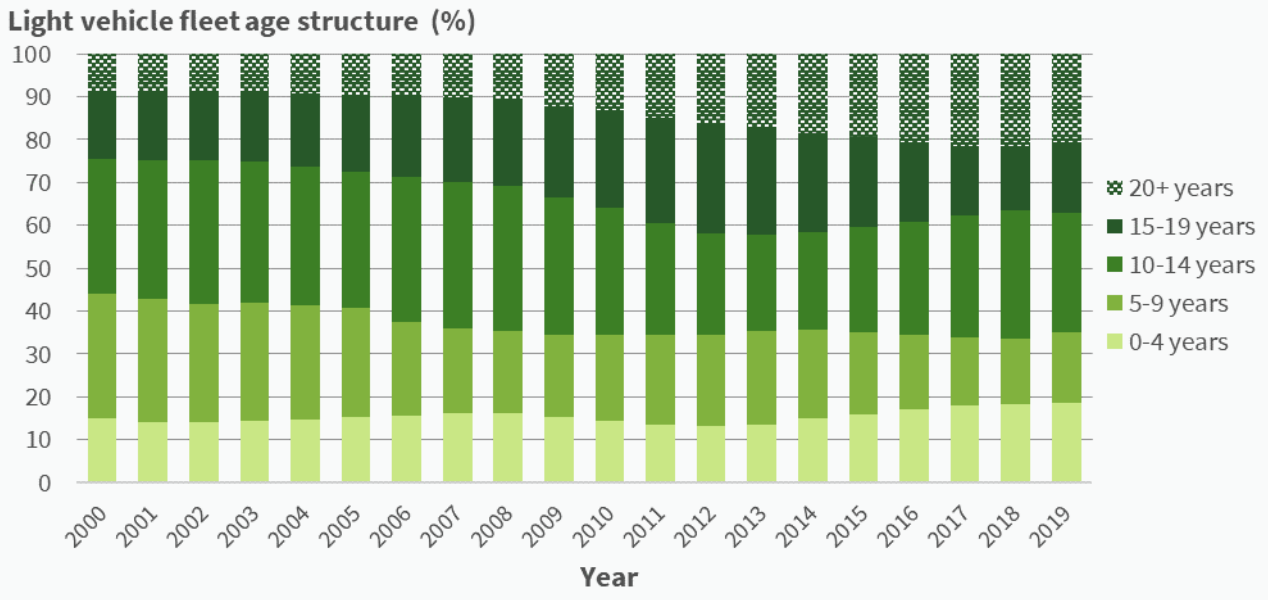


Source: Ministry of Transport (2020)

More than a third of cars are 15 years old or more

In 2000, just 8.8% of the light vehicle fleet was older than 20 years. By 2019, this had more than doubled to 21.7% (Figure 2).

Figure 2: Age structure of the light vehicle fleet, 2000–2019

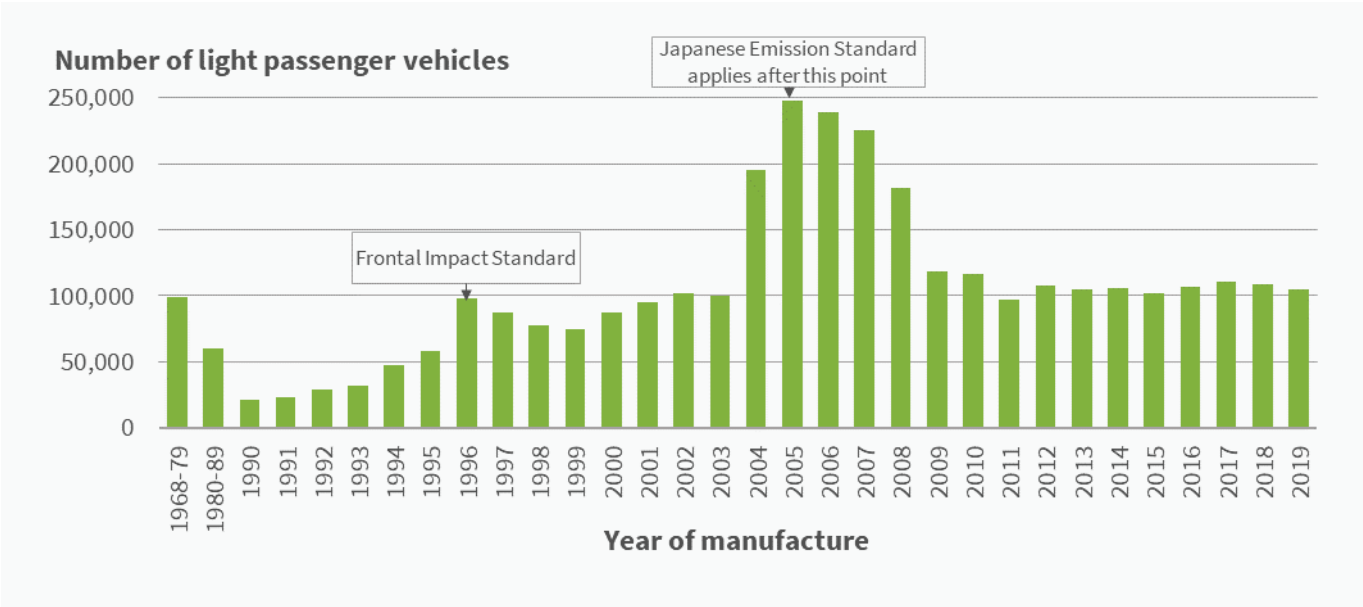


Source: Ministry of Transport (2020)

New Zealand has many vehicles dating from the mid-2000s

The New Zealand light passenger fleet includes a large number of cars manufactured in the mid- to late-2000s (making them 10–15 years old), and also a high number of cars manufactured in the mid-1990s (20+ years old) (Figure 3).

Figure 3: Light passenger vehicle fleet in December 2019, by year of manufacture, 1968–2019



Source: Ministry of Transport (2020)

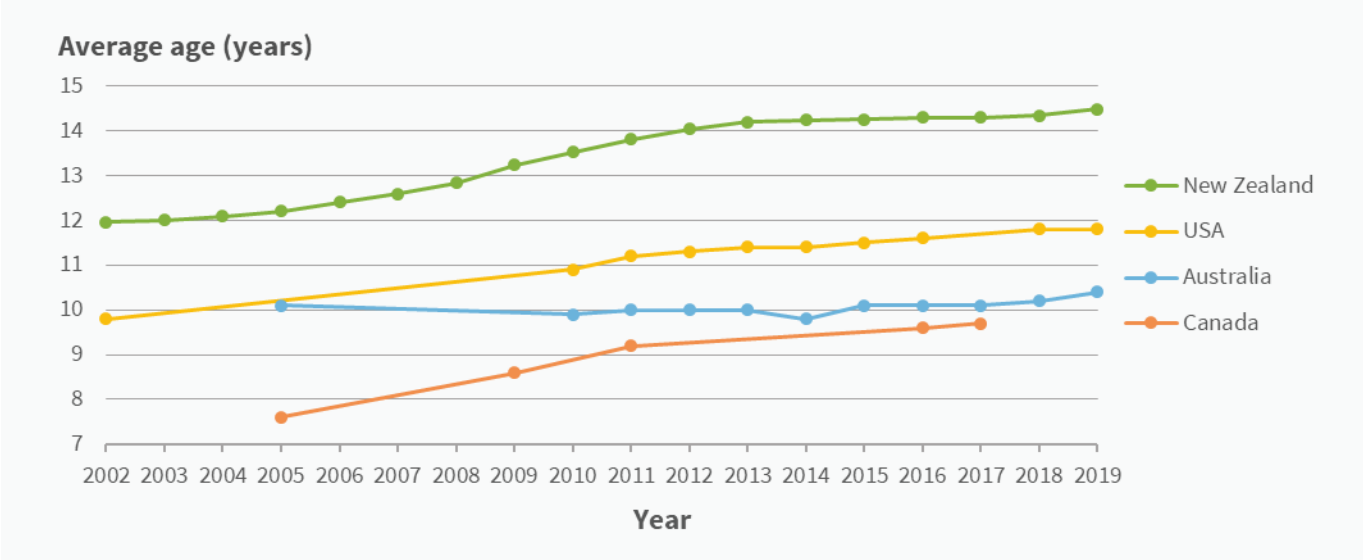
The peak in vehicle numbers manufactured in 1996 is associated with the Frontal Impact Standard, which restricted used-car imports to those manufactured during or after 1996. As a result, a large number of vehicles manufactured in the mid- to late-1990s entered the light vehicle fleet between 2000 and 2008 (Ministry of Transport 2019).

The mid-2000s peak is linked to the Japanese Emission Standard, which came into effect in 2012, and prevented most vehicles manufactured before 2005 from being registered in New Zealand.

The light vehicle fleet is old by international standards

The New Zealand light vehicle fleet is around 2–4 years older on average than its counterparts in the United States, Australia and Canada (Figure 4). The increase in the average age of the New Zealand fleet, and those of other countries over the past 17 years, is due in part to improvements in mechanical reliability, allowing vehicles to stay in service longer (Ministry of Transport 2020).

Figure 4: Average age of light vehicle fleet, international comparisons, 2002–2019



Note: The comparisons above are limited to countries with high levels of motorisation and similar patterns of development as New Zealand. More recent data for Canada is not available.
Source: Ministry of Transport (2020)

Data for this indicator

Data for this indicator comes from the Ministry of Transport's Annual vehicle fleet statistics. Data for each year is a snapshot taken at the end of the month of December. The age of a vehicle is based on its date of manufacture.

The following categories of vehicles are used:

- Light vehicles, which includes:
  - Light passenger vehicles (passenger vehicles weighing up to 3,500 kg)
  - 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, utility vehicles, and motor caravans)
- Buses (those over 3,500 kg, including minibuses)
- Motorcycles (including mopeds and quadbikes/ATVs)

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.

Ministry of Transport. 2020. Annual vehicle fleet statistics 2019. Wellington: Ministry of Transport.

Other related topics include:

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Particulate matter

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Further information

For descriptive information about the data Metadata Sheet

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