

# Average age of motor vehicles

This report describes the average age of the registered motor vehicle fleet in Aotearoa New Zealand, up until 2023. These findings are an analysis of data published by the Ministry of Transport.

# Key facts

- In 2023, 43.6% of light vehicles were at least 15 years old. The New Zealand light vehicle fleet is consistently around 2–4 years older on average than the fleets in similar countries.
- In keeping with the steady increases over the past 20 years, the average ages of all types of vehicles in the fleet, except trucks, increased between 2022 and 2023.
- Motorcycles are the oldest vehicle types, at 18.2 years old, on average. Motorcycles have been rapidly ageing since 2007 and now have the highest average age that any vehicle class has ever reached.

# Why is the age of motor vehicles important for 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 (eg PM<sub>2.5</sub> and PM<sub>10</sub>), particularly from diesel vehicles – all of which can affect human health.

It has been estimated that motor vehicle emissions caused 2,247 premature deaths in 2016 (Kuschel et al. 2022) – compared to 327 deaths from road traffic accidents that year (Ministry of Transport 2023). Evidence also shows that diesel engine fumes can cause lung cancer (IARC 2023). Vehicle age is often also related to vehicle safety, with newer models having more and better safety features installed.

# The vehicle fleet continues to age

Between 2022 and 2023, the average age of all types of vehicles except trucks increased (Figure 1). Trucks were the oldest type of vehicle from 2011 until 2021, when they were exceeded by motorcycles. In 2023, trucks and motorcycles had average ages of 17.8 years and 18.6 years, respectively.

The average age of buses continued to rise, reaching 16.8 years in 2023. After a period of only very slight increases between 2014 and 2019, the average age of light passenger vehicles increased in each of the past four years and was 15.0 years in 2023. Light commercial vehicles continued to have the lowest average age, at 12.8 years old.

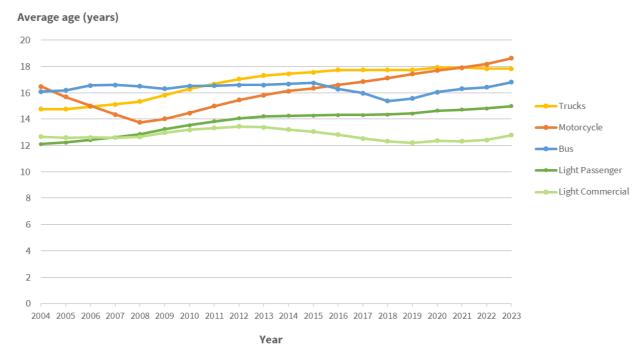
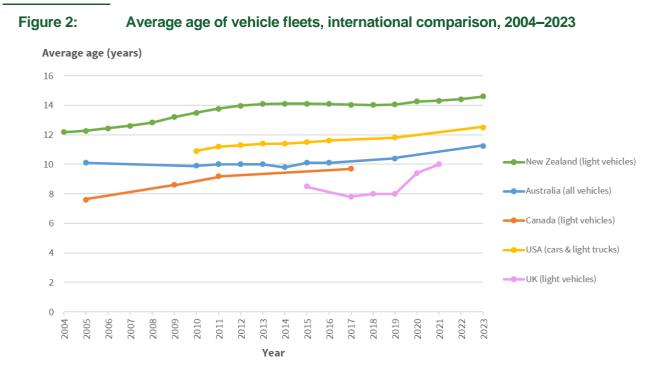


Figure 1: Average age of the New Zealand vehicle fleet, by type, 2004–2023

Source: Ministry of Transport 2025

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

The New Zealand light vehicle fleet has consistently been around 2–4 years older on average than its counterparts in the United States, Australia, Canada and the United Kingdom (Figure 2).

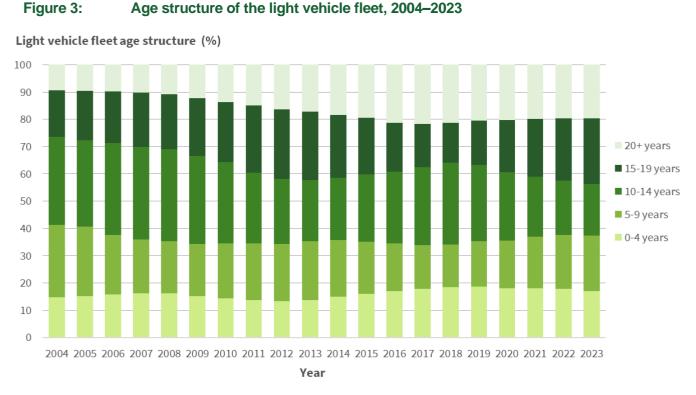


Notes: The comparisons above are limited to countries with high levels of motorisation and similar patterns of development as New Zealand. For countries that use different categorisations, the closest type to light vehicles has been used. Vehicle type definitions can be found in the 'Data for this indicator' section at the end of this report.

Source: Ministry of Transport 2025, ACEA 2023, BITRE 2024, US DoT 2025

# Almost half of all cars are 15 years old or more

In 2023, 43.6% of the light vehicle fleet was aged 15 years or more, a much higher percentage than 20 years ago in 2004 (26.4%) (Figure 3). The percentage of the light vehicle fleet older than 20 years increased rapidly between 2008 and 2017 but stayed at around 20% for the past few years, with 19.7% for 2023. A further 23.9% of the fleet was aged 15–19 years.



Source: Ministry of Transport 2025

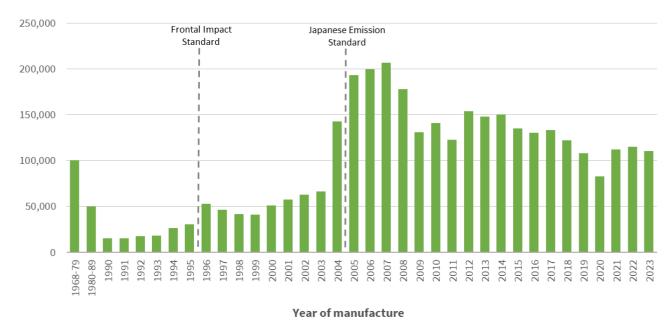
# New Zealand has many vehicles dating from the mid-2000s

The age distribution of the light passenger fleet as of December 2023 shows that many vehicles were manufactured in the mid-to-late 2000s (Figure 4).

The small number of vehicles manufactured before 1996 (8% of the current fleet) is associated with the Frontal Impact Standard, which restricted used imports to those manufactured during or after 1996.

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. Around a quarter (25.5%) of the light passenger fleet was manufactured before 2005.

### Figure 4: Age structure of the light vehicle fleet, as at December 2023

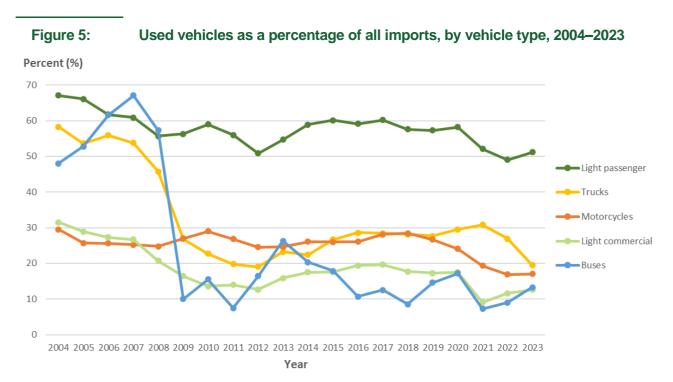


Number of light passenger vehicles

Source: Ministry of Transport 2025

## About half of imported light passenger vehicles were used vehicles

Imported light vehicles are far more likely to be used than any other type, with 51.2% being 'used' in 2023 (Figure 5). Since 2009, most vehicles of other types have been imported new, so used vehicles made up a much smaller percentage of vehicle imports in 2023 for trucks (19.5%), motorcycles (17.0%), buses (13.3%) and light commercial vehicles (12.6%).



Source: Ministry of Transport 2025

## Data for this indicator

This factsheet is an analysis of the most recent data from the Ministry of Transport's annual vehicle fleet statistics, published in February 2025.

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)

The data includes all vehicles on the Motor Vehicle Register, excluding those exempt from having a license (not used on roads) and those with an expired license (if the license has not been renewed within 6 months).

Vehicle imports are counted as 'new' if they haven't been registered in any country before New Zealand, or 'used' if registered previously.

For additional information, see the Metadata sheet.

## References

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IARC (International Agency for Research on Cancer). 2023. *List of classifications by cancer sites with sufficient or limited evidence in humans, IARC Monographs Volumes 1–133.* URL: <u>https://monographs.iarc.who.int/wp-content/uploads/2019/07/Classifications\_by\_cancer\_site.pdf</u> (accessed 11/03/2024)

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