

Average age of motor vehicles

This factsheet presents information describing the average age of the New Zealand motor vehicle fleet between 2000 and 2020.

The New Zealand vehicle fleet continues to age, exacerbated by fewer vehicles entering or leaving the fleet during the coronavirus pandemic.



In 2020, 38.4% of light vehicles were at least 15 years old. This proportion keeps rising as vehicles enter the fleet at older ages and are kept in service for longer.

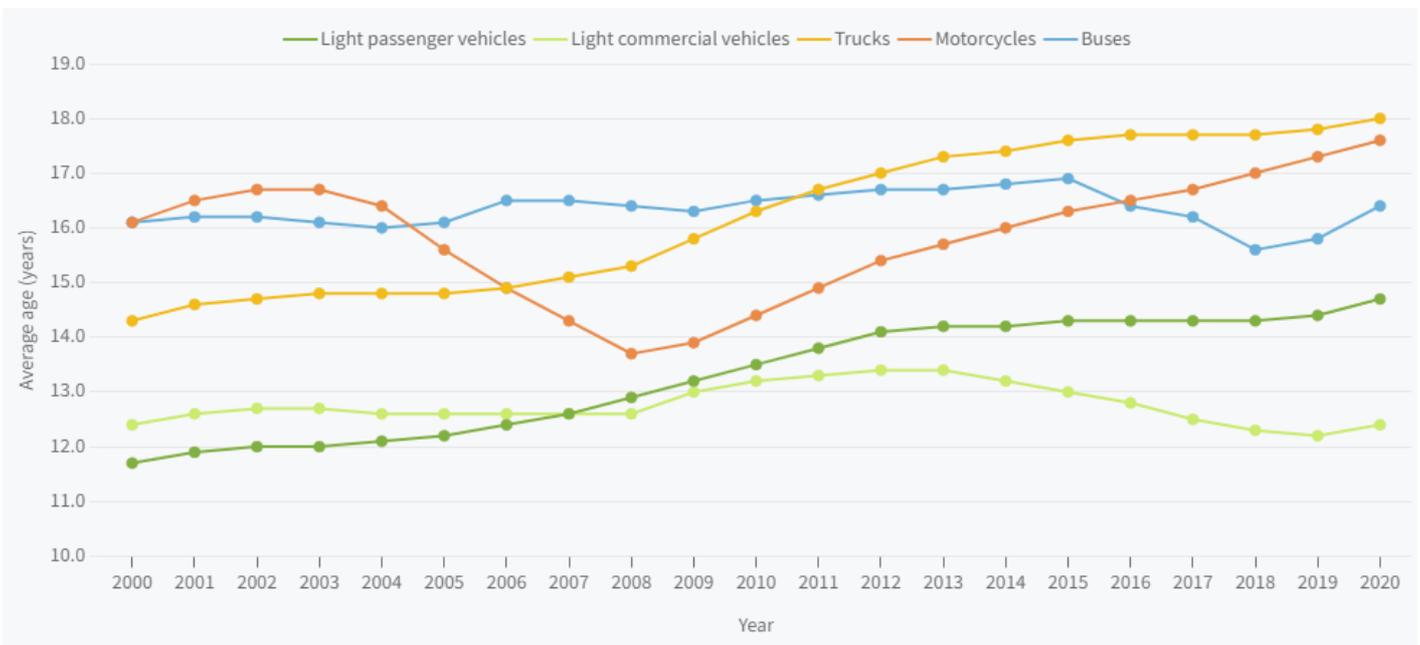


Trucks and motorcycles are the oldest vehicle types. Respectively, they were 18.0 and 17.6 years old, on average.

The vehicle fleet continues to age

Between 2000 and 2020, the average age of all vehicles, except light commercial vehicles, increased (Figure 1). Since 2011, trucks have been the oldest vehicles on the road, with an average age of 18.0 years in 2020. Motorcycles were the second oldest (17.6 years) and may soon overtake trucks as the oldest vehicles if the present trends continue. The average age of buses, which had been decreasing, increased sharply from 2018 to 2020, rising to 16.4 years. Light vehicles were relatively young, with passenger vehicles 14.7 years old on average and commercial vehicles the youngest of all, at 12.4 years old.

Figure 1 Average age of the New Zealand vehicle fleet, by type, 2000–2020

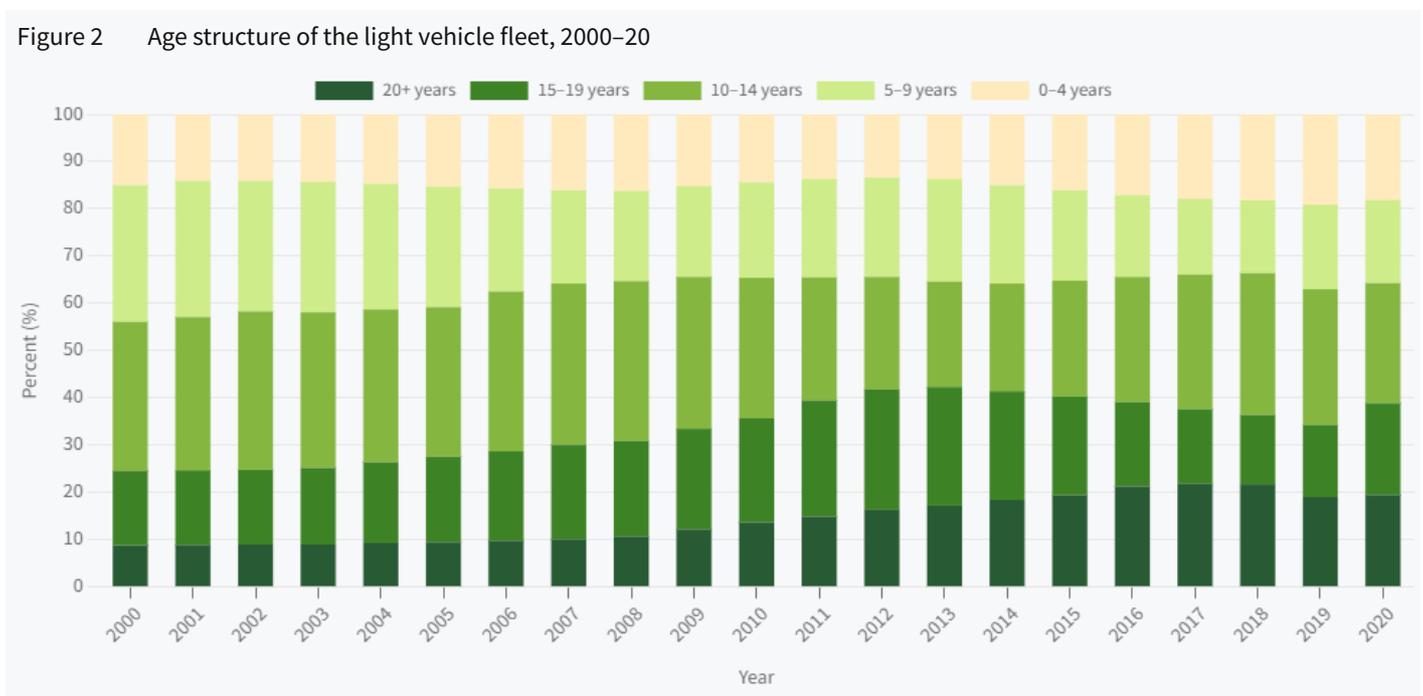


Source: Ministry of Transport, 2021

Between 2019 and 2020, the average ages of all vehicle types increased sharply. As comparatively few vehicles entered the fleet at this time (see the 'Number of motor vehicles' factsheet), this may be due to fewer than the usual number of vehicles being scrapped due to the Covid-19 pandemic.

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 2020, this had more than doubled to 19.5% (Figure 2). A further 19.3% of the fleet was aged 15–19 years. In total, 38.8% of the light fleet was aged at least 15 years, compared to 24.6% in 2000.



Source: Ministry of Transport 2021

The age structure of the light fleet continues to skew towards older vehicles as they remain in service for longer. In 2001, most used light imports would stay in service for around 15 years before being scrapped. In 2020, they would not typically leave the fleet until they were over 20 years old. The persistence of older vehicles in the fleet can be attributed to the improved survivability of vehicles built after the late 1990s and owners deferring the replacement of older vehicles in poor economic times.

While new imports are getting younger, used imports are aging

The ageing effect of vehicles staying in service longer is compounded by the prevalence of used imports, which are getting steadily older on arrival in New Zealand. Since 2000, the average age of used imports entering the fleet has increased among all vehicle types except buses, though new imports of all types have also gotten younger. Consequently, the difference in age between used and new imports has grown significantly. For example, in 2000, the average used light passenger import was 5.2 times older than a new import, in 2020 it was 10.2 times older.

Table 1 Average age of new and used imports on arrival in New Zealand

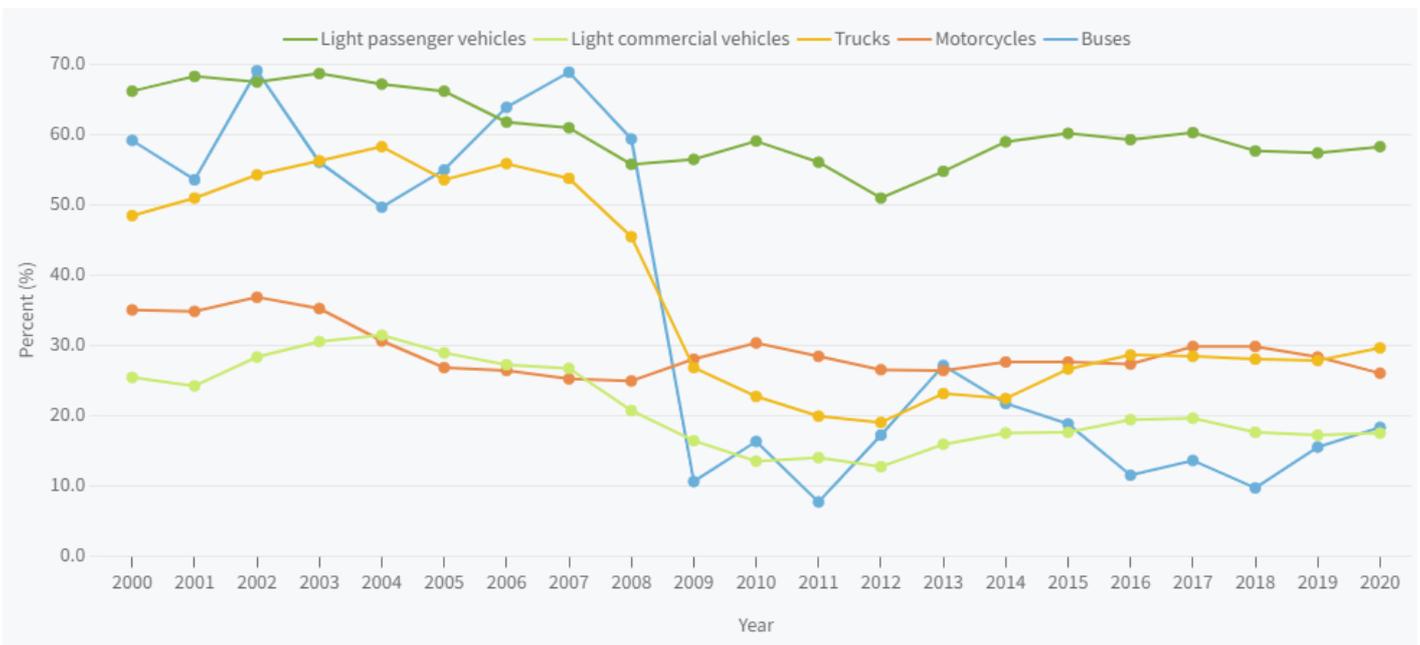
Type	Condition	2000		2020	
		Age (years)	New:Used (1:n)	Age (years)	New:Used (1:n)
 <i>Light passenger</i>	New	1.4	5.2	1.0	10.2
	Used	7.3		10.2	
 <i>Light commercial</i>	New	1.4	5.6	1.0	9.3
	Used	7.9		9.3	
 <i>Motorcycles</i>	New	4.9	2.9	2.5	6.4
	Used	14.3		16.0	
 <i>Trucks</i>	New	2.6	3.4	1.3	7.2
	Used	8.8		9.4	
 <i>Buses</i>	New	1.5	7.0	0.6	13.6
	Used	10.5		8.2	

Source: Ministry of Transport 2021

However, the issue of ageing used imports keeping the average age of vehicles up is confined mainly to the light passenger fleet, the only class where used vehicles make up more than half of those entering the fleet annually (Figure 3). All other vehicle types are mostly imported new - though in far lower numbers than light passenger types, which account for three-quarters of 2020's imports.

The rapid drop in used truck and bus imports after 2007 is due to the Vehicle Exhaust Emissions rule. This rule prevented the import of older used diesel vehicles, which explains why the effects are most obvious in fleets that are almost exclusively diesel powered. See the '[Number of motor vehicles](#)' factsheet for more information.

Figure 3 Used vehicles as a percentage of all imports, 2000–20

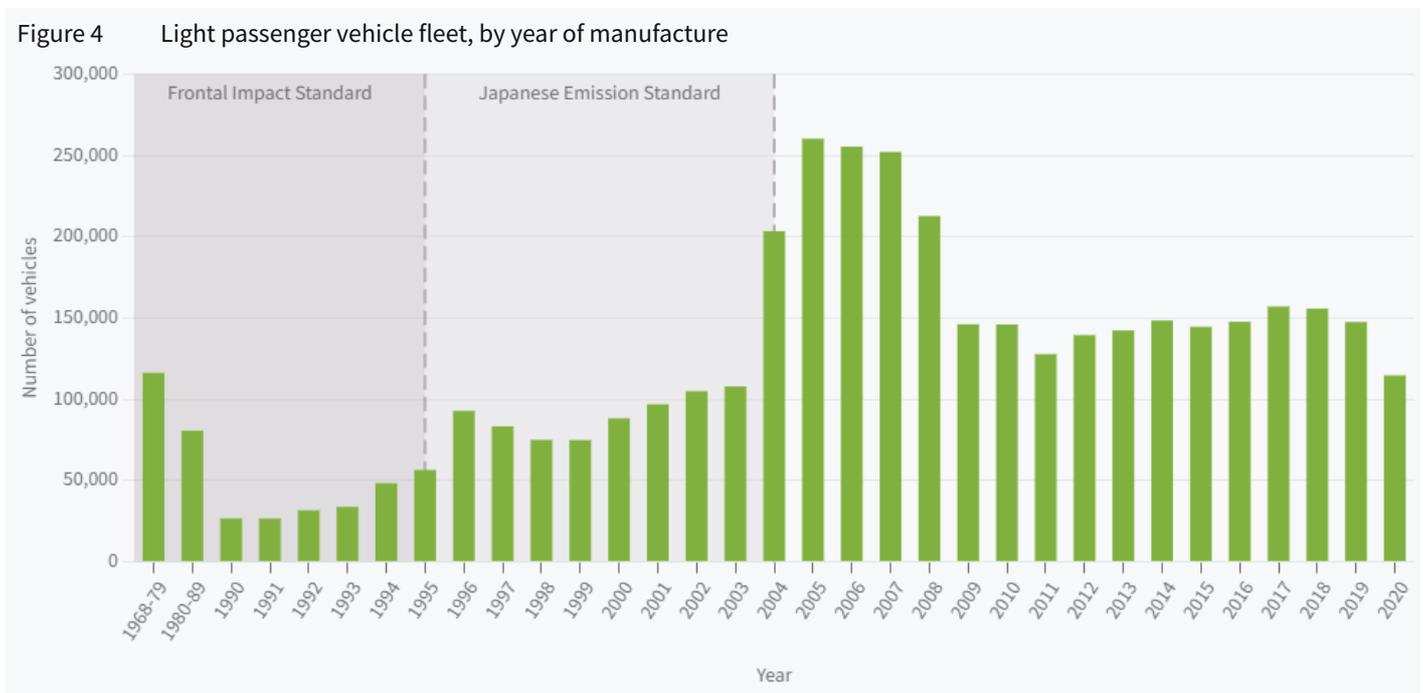


Source: Ministry of Transport 2021

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

The longevity of older vehicles in the light passenger fleet is demonstrated by the continued presence of many cars manufactured in the mid to late 2000s, making them 12–16 years old (Figure 4).

The small number of vehicles manufactured before 1996 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.

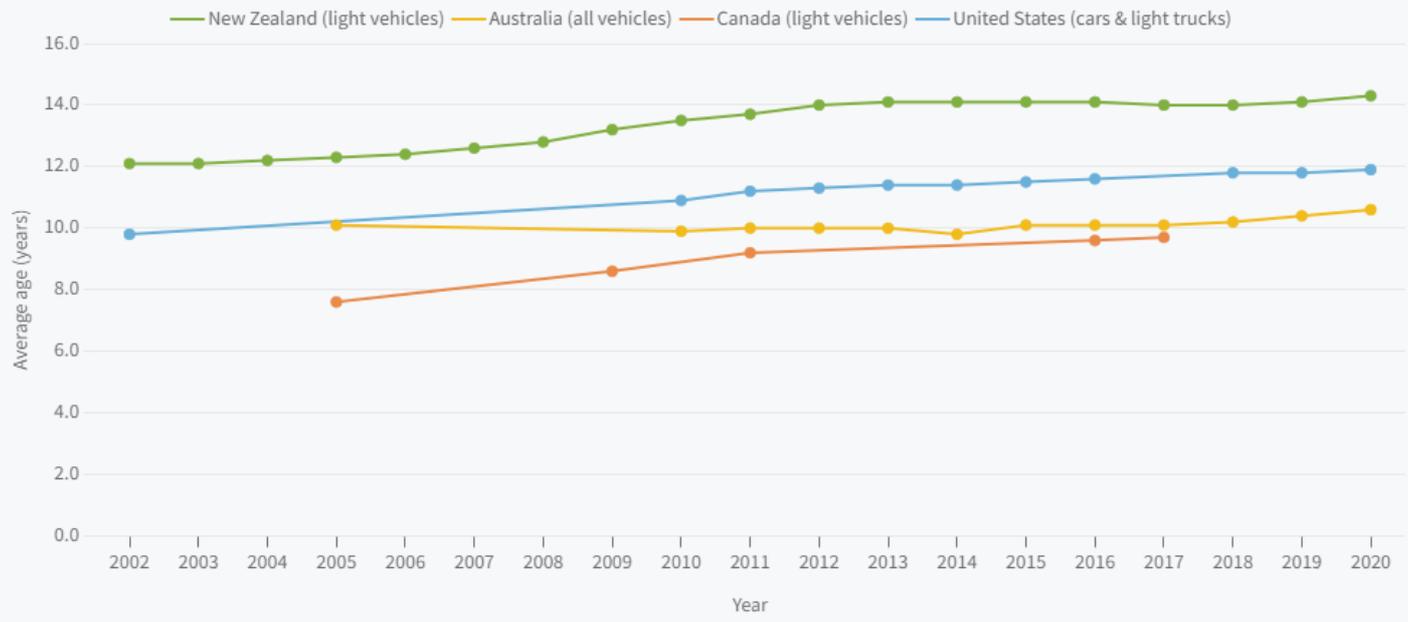


Source: Ministry of Transport 2021

The light fleet is old by international standards

The increasing age of used imports, the longevity of older vehicles, and the prevalence of older vehicles in the fleet combine to keep the New Zealand light vehicle fleet consistently around 2–4 years older on average than its counterparts in the United States, Australia, and Canada (Figure 4).

Figure 4 Average age of vehicle fleets, international comparison, 2002–20



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 2021

[Interactive regional dashboard](#)



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 December 2021. 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)

For additional information, see the metadata link below.

References

Ministry of Transport. 2021. *Annual vehicle fleet statistics 2020*. Wellington: Ministry of Transport.

Other related topics include:

[Household travel time by mode of transport](#) [Main mode of transport to work](#) [Number of motor vehicles](#)
[Unmet need for GP services due to lack of transport](#) [Road traffic injury deaths and hospitalisations](#)

Disclaimer

Environmental Health Intelligence NZ – Rapu Mātauranga Hauora mo te Taiao - Aotearoa, makes no warranty, express or implied, nor assumes any legal liability or responsibility for the accuracy, correctness, completeness or use of any information that is available on this factsheet.

Contact

✉ ehinz@massey.ac.nz

Citation

Environmental Health Intelligence NZ, 2022. *Average age of motor vehicles* {Factsheet}. Wellington: Environmental Health Intelligence NZ, Massey University.

Further information

For descriptive information about the data  [Metadata Sheet](#)

🔍 [Visit our website](#)

✉ [Subscribe to our newsletter](#)

