HIGHLIGHTS:

- In 2014 there were 3.7 million vehicles in New Zealand – the highest number ever.
- Diesel vehicle numbers continue to increase, and now make up 17% of all light vehicles in New Zealand.
- New Zealand’s vehicle ownership per 1,000 people was higher than in Australia, Japan, the United Kingdom and the United States.

Relevance of motor vehicles to environmental health

Vehicle use can impact on human health through air pollution, motor vehicle crashes, road traffic noise and greenhouse gases. In particular, vehicles emissions from burning petrol and diesel affect outdoor air quality. Vehicles release carbon monoxide, particulate matter (PM), nitrogen dioxide and other gases, which can lead to health problems (Kjellström 2004). Diesel vehicles are disproportionately more polluting than petrol vehicles in terms of particulate matter and total nitrogen oxides (Sridhar, Wickham and Metcalfe 2014). Recent evidence also shows that diesel engine fumes can cause lung cancer (Benbrahim-Tallaa et al 2012).

Additionally, vehicles emit carbon dioxide, contributing to climate change. Road traffic noise can also affect health, particularly through high blood pressure (van Kampen and Babisch 2012). Motor vehicle crashes also cause around 300 deaths in New Zealand each year.

More vehicles on our roads

There were about 3,672,000 vehicles in New Zealand in 2014—the highest ever number, and a 3.1% increase from 2013 (3,563,000 vehicles). Light passenger vehicles were the most common type of vehicle (2,880,000 vehicles, 78% of the fleet), followed by light commercial vehicles (474,000 vehicles, 12% of the fleet) (Figure 1). Increases in numbers were seen for all vehicle types since 2013.

Figure 1: Number of vehicles in New Zealand, by vehicle type, 2000–2014

Notes on vehicle types

- '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.
Diesel vehicle numbers continue to increase

The number of diesel vehicles has increased steadily since 2000, particularly light diesel vehicles (Figure 2).

**Figure 2: Number of diesel vehicles in New Zealand, by vehicle type, 2000–2014**

Number of diesel vehicles

Source: Ministry of Transport (2015)

Note: Light vehicles include light passenger vehicles and light commercial vehicles.

In 2014, diesel vehicles made up 17.0% of the light vehicle fleet (571,703 vehicles), up from 11.7% in 2000 (Figure 3). The truck and bus fleet almost entirely consist of diesel vehicles.

**Figure 3: Percentage of vehicles that are diesel in New Zealand, by vehicle type, 2000–2014**

Source: Ministry of Transport (2015)

Note: Light vehicles include light passenger vehicles and light commercial vehicles.

Car ownership per capita continues to increase in New Zealand

In 2014, New Zealand’s car ownership rate was 744 light vehicles per 1000 people, higher than the previous peak in 2007 (Figure 4). Ownership rates were highest in Canterbury, Nelson-Marlborough and Southland (Figure 5).
New Zealand’s car ownership rate is one of the highest in the world

Internationally, New Zealand had the 6th highest car ownership in the world, with 597 passenger cars per 1000 people in 2011 (Figure 6) (World Bank 2014).

Figure 6: Number of light vehicles per 1000 population, international comparison, 2011

Note: Passenger cars refer to road motor vehicles (other than two-wheelers) that are intended for carrying passengers, and designed to seat no more than nine people (including the driver).


References


