

Main mode of travel to work

This report presents an analysis of 2023 Census data on the main mode of travel to work. Using active transport and/or public transport has benefits for reducing air pollution, improving health, and reducing greenhouse gas emissions that contribute to climate change.

Key facts

- More than four in five commuters (84.7%) used a car, van or truck as their main mode of travel to get to work in 2023.
- In 2023, women had a higher use of public transport (7.6% of commuters) than men (5.0%) as their main means of travel to work. Men and women had similar use of active transport (7.6% and 7.2% respectively).
- People aged 15–29 years had the highest use of active transport (9.5% of commuters) and public transport (9.2%).
- The highest use of active transport was in Nelson (17.1%) and Wellington (13.2%), while Wellington had the highest use of public transport (19.1%).

Active and public transport modes have benefits for environmental health

Active transport, such as walking and cycling, has benefits for both health and the environment. The health benefits include increasing physical activity and producing less (or no) air and noise pollution. A key environmental benefit is the reduction in greenhouse gases that contribute to climate change (WHO 2011). Studies have shown that active commuting (such as walking or cycling to work) is associated with a reduction in cardiovascular risk (Celis-Morales et al 2017; Patterson et al 2020).

Use of public transport also increases physical activity, reduces air pollution (by not taking a private vehicle), is safer than travelling by private vehicle (Frith et al 2015), and can improve mental health (Martin et al 2014; Mytton et al 2016).

Data for this indicator comes from the New Zealand Census of Population and Dwellings. The Census collects the one main way (defined as the one used for the longest distance) that adults aged 15+ years used to travel to work (for example, by bicycle, bus, walking or jogging). The question has changed over time to reflect changing work patterns. Up to and including the 2013 Census, the question was about travel on Census day specifically. In 2018 and 2023, the question asked people to answer in relation to where they worked in the 7-day period up to and including the Sunday before Census day. Those who responded that they mostly worked away from home were asked to indicate the one main way that they usually travelled to work (that is, the one used for the greatest distance).

More than four in five commuters used a motor vehicle to get to work

In 2023, the main means of travel for most commuters (84.7%) was a car, truck or van. Overall, 7.4% of commuters used active transport (defined as walking, jogging or cycling). This included 5.1% of commuters who walked or jogged to work, and 2.3% of commuters who cycled to work. A further 6.3% of commuters used public transport (public buses, trains or ferries) (Figure 1).

Figure 1: Main means of travel to work on Census day, among commuters, 2023 (number and percentage of commuters)



Notes: 'Car, truck or van' includes driving or being a passenger in a private car, truck, van or company bus. 'Active transport' includes walking, jogging and cycling. 'Public transport' includes public buses, trains or ferries. Source: 2023 Census

Women and young adults have the highest use of active transport and public transport

In 2023, women had a higher use of public transport (7.6% of commuters) than men (5.0%) as their main means of travel to work. Men and women had similar use of active transport (7.6% and 7.2%, respectively) (Figure 2).

By age group, young adults aged 15–29 years had the highest use of active transport (9.5%) and public transport (9.2%). In contrast, people aged 65 years and over had the lowest use of active transport (6.3%) and public transport (3.5%).

Figure 2: Use of active or public transport among commuters, by gender and age group, 2023



Notes: 'Active transport' includes walking, jogging and cycling. 'Public transport' includes public buses, trains or ferries. Source: 2023 Census

Highest level of active and public transport in the Wellington region

There were substantial regional differences in the use of active transport (walking, jogging or cycling) and public transport (bus or train) in 2023 (Figure 3). Commuters in the Wellington region had the highest level of public transport use (19.1%), and the second highest level of active transport use (13.2%). Nelson had the highest use of active transport (17.1%).

Overall, regions with higher rates of using either active transport or public transport included Wellington, Nelson, Otago, West Coast and Auckland. By comparison, less than 6% of commuters used active or public transport in Northland, Gisborne and Hawke's Bay.

Figure 3: Use of active or public transport among commuters, by regional council, 2023 (percentage of commuters)



Notes: 'Active transport' includes walking, jogging and cycling. 'Public transport' includes public buses, trains or ferries. Regional Council is based on the usual residence address. Source: 2023 Census

Data for this indicator

Data for this indicator comes from the New Zealand Census of Population and Dwellings. The Census collects the one main way (defined as the one used for the longest distance) that adults aged 15+ years used to travel to work (for example, by bicycle, bus, walking or jogging). In the 2023 Census, people were asked to respond in relation to where they worked in the 7-day period up to and including the Sunday before Census day. Those who responded that they mostly worked away from home were asked to indicate the one main way that they usually travelled to work. People who did not go to work or who worked from home were excluded from the results.

Because of the change in question wording (previously, people were asked about travel on the day of the Census specifically) and poor data quality in 2018, no time series comparison has been included in this surveillance report.

For additional information, see the Metadata sheet.

References

Celis-Morales CA, Lyall DM, Welsh P, et al. 2017. Association between active commuting and incident cardiovascular disease, cancer, and mortality: prospective cohort study. *British Medical Journal*, 357.

Frith B, Burton J, Trotter M, et al. 2015. *The role public transport can play in safer journeys, and, in particular, to advance the Safe System approach*. NZ Transport Agency research report 581. Wellington: Ministry of Transport.

Martin A, Goryakin Y, Suhrcke M. 2014. Does active commuting improve psychological wellbeing? Longitudinal evidence from eighteen waves of the British Household Panel Survey. *Preventive Medicine*, 69: 296-303.

Mytton O T, Panter J, Ogilvie D. 2016. Longitudinal associations of active commuting with wellbeing and sickness absence. *Preventive Medicine*, 84: 19-26.

Patterson R, Panter J, Vamos EP, et al. 2020. Associations between commute mode and cardiovascular disease, cancer, and all-cause mortality, and cancer incidence, using linked Census data over 25 years in England and Wales: a cohort study. *Lancet Planetary Health*, 4: 186–94.

WHO. 2011. *Health in the green economy: health co-benefits of climate change mitigation.* Geneva: World Health Organization. URL: <u>https://www.who.int/publications/m/item/health-in-the-green-economy-co-benefits-to-health-of-climate-change-mitigation---household-energy-sector-in-developing-countries</u>

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