

Metadata: Main mode of transport to work on Census day

Information topic	Details
Indicator name	Main mode of transport to work on Census day
Domain	Transport domain
Rationale	<p>The activities of walking and cycling are beneficial for our health and for the environment. These benefits include increasing our physical activity, producing less air pollution and producing no greenhouse gases (British Medical Association 2012). Using active transport (such as walking and cycling) is an easy way to get some physical activity each day.</p> <p>Public transport also increases physical activity, reduces air pollution (by not taking a private vehicle), is safer than travelling by private vehicle, and can improve mental health.</p>
Indicator definition and units	<p>Percentage of commuters aged 15 years and over who used public transport or active forms of transport (walking, jogging or cycling) as their main means to travel to work on Census day. Main mode of travel is defined as the transport mode used to travel the longest distance to their place of employment. See below for definition of commuters.</p>
Data source	New Zealand Census of Population and Dwellings
Numerator and denominator	<p>Numerator: Number of commuters who used different transport modes as their main means of travel (ie to travel the longest distance) to get to their place of employment on Census day. Transport modes include walking, jogging, cycling, using a public bus or train, and using a private or commercial vehicle (car, van or truck).</p> <p>Denominator: Number of commuters. <i>Commuters</i> are defined as the employed usually resident population aged 15 years and over who travelled to work on Census day (ie excludes people who did not work on Census day, or who worked from home).</p>
Census question	<p>2013 Census question 41:</p> <p>On Tuesday 5 March, what was the one main way you travelled to work – that is, the one you used for the greatest distance?</p> <ul style="list-style-type: none"> • Worked at home • Did not go to work on Tuesday 5 March • Public bus • Train • Drove a private car, truck or van • Drove a company car, truck or van • Passenger in a car, truck, van or company bus • Motorbike • Bicycle • Walked or jogged

	<ul style="list-style-type: none"> • Other, for example <i>TAXI, FERRY, PLANE</i>. Print the main way you travelled to work:
Time periods available:	<p>Every census year: 2001, 2006, 2013</p> <p>Results between census years have been compared, and differences noted.</p>
Population coverage:	<p>The subject population for the Census data is the employed census usually resident population aged 15 years and over. For the purposes of this indicator, the subject population excludes people who did not travel to work on Census day, who worked from home, or who provided no response or a response that could not be classified ('Not elsewhere classified').</p>
Reporting variables	<p>Results are presented by sex, age group and regional council.</p>
Limitations of indicator and data sources	<p>This data relates to the main means of travel on census day, and therefore the indicator has several limitations.</p> <ul style="list-style-type: none"> • It does not necessarily indicate a person's usual mode of travel to work. • It only relates to the main means of travel, that is, the longest distance. It does not take into account secondary modes of transport. • It does not include people who did not go to work on census day. • Some people did not respond to the question, or did not provide the type of information asked for; they were coded as 'Not elsewhere classified' (3.7% in 2013) and excluded from the analysis. <p>Statistics New Zealand have rated the quality of this variable as 'high' and 'fit for use', with minor data quality issues only.</p> <p>In terms of time trends, Statistics New Zealand have noted that the 2013 data is fully comparable with the 2006 census data, and highly comparable with the 2001 Census data. However, there have been minor changes in collection, definitions and classifications since the 2001 Census. For example, in 2001, the motorbike category was worded 'motorbike or power cycle' but for 2006 and 2013 was just 'motorbike'. Furthermore, in 2001, multiple responses were dealt with by selecting the first mode; in 2006 and 2013, the response was 'response unidentifiable'. However, these changes are not likely to have affected the data, as the use of power cycles is rare, and the number of multiple responses to this question is very low.</p> <p>Active transport modes, such as biking, walking and jogging, may also be influenced by the weather conditions on Census day. Historic weather data suggests that Census day has been relatively consistent, with fine conditions, in the main centres in 2001, 2006 and 2013 (Table 1).</p>

	<p>Table 1: Weather conditions on Census day in New Zealand (max temperature, precipitation, wind speed)</p> <table border="1"> <thead> <tr> <th>City</th> <th>6 March 2001</th> <th>7 March 2006</th> <th>5 March 2013</th> </tr> </thead> <tbody> <tr> <td>Auckland</td> <td>23°C, 0.0mm, 8km/h</td> <td>23°C, 0.0mm, 14km/h</td> <td>23°C, 0.0mm, 16km/h</td> </tr> <tr> <td>Wellington</td> <td>19°C, 0.0mm, 10km/h</td> <td>20°C, 0.0mm, 37km/h</td> <td>17°C, 0.0mm, 19km/h</td> </tr> <tr> <td>Christchurch</td> <td>19°C, 0.0mm, 6km/h</td> <td>19°C, 0.0mm, 16km/h</td> <td>21°C, 0.0mm, 10km/h</td> </tr> </tbody> </table> <p>Source: https://www.wunderground.com/global/NZ.html</p>	City	6 March 2001	7 March 2006	5 March 2013	Auckland	23°C, 0.0mm, 8km/h	23°C, 0.0mm, 14km/h	23°C, 0.0mm, 16km/h	Wellington	19°C, 0.0mm, 10km/h	20°C, 0.0mm, 37km/h	17°C, 0.0mm, 19km/h	Christchurch	19°C, 0.0mm, 6km/h	19°C, 0.0mm, 16km/h	21°C, 0.0mm, 10km/h
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Related indicators	<p>Number of motor vehicles Household travel by mode of transport Active transport to and from school Unmet need for a GP due to lack of transport</p>																
For more information	<p>http://www.stats.govt.nz/Census/2013-census/info-about-2013-census-data/information-by-variable/main-means-of-travel-to-work.aspx</p>																
References	<p>British Medical Association. 2012. <i>Healthy transport = healthy lives</i>. http://bma.org.uk/transport</p>																