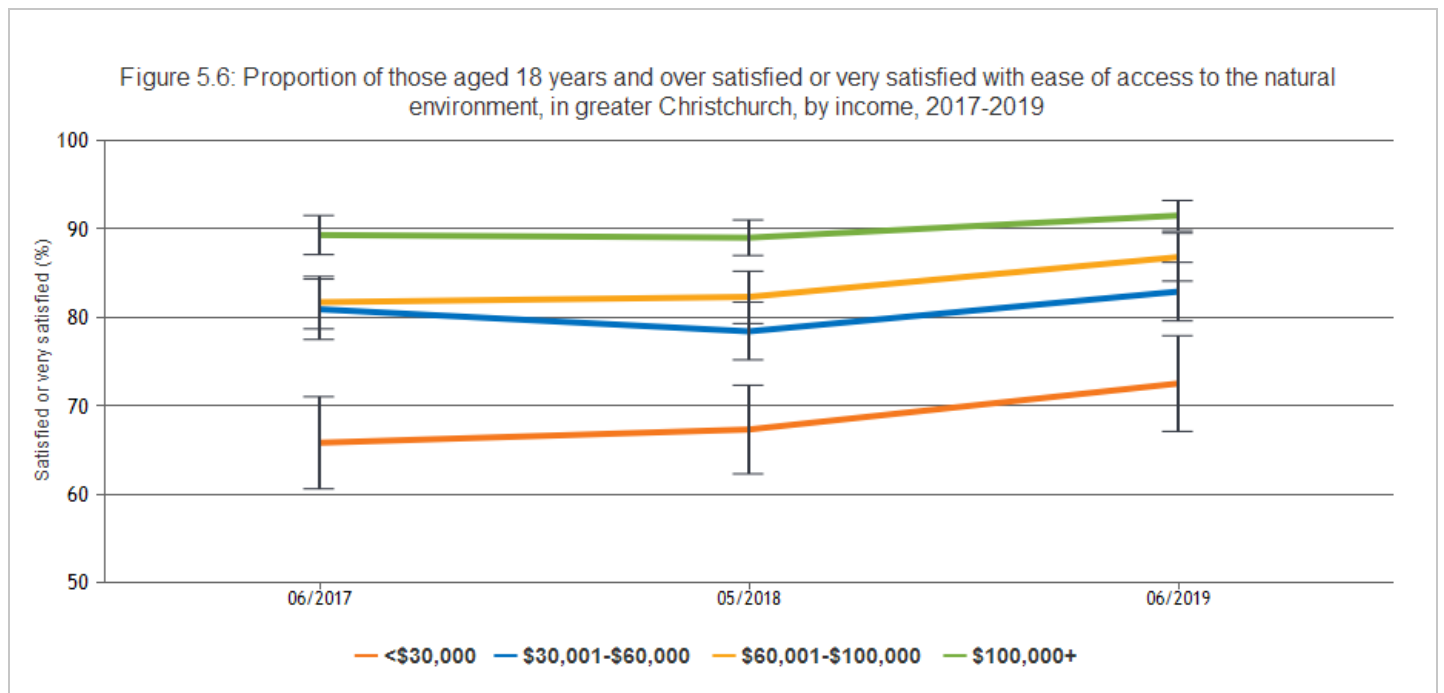


## Access to natural environment: Breakdown by income

Downloaded from <https://www.canterburywellbeing.org.nz/our-wellbeing/environment/access-to-natural-environment/#ink-breakdown-by-income> on 07/07/2022 4:36 AM



The figure shows some statistically significant differences between income groups in the proportion of respondents who indicated that they were satisfied or very satisfied with their ease of access to the natural environment, from 2017 to 2019. There is a clear pattern of increasing satisfaction with increasing income. In 2019, 91.5 percent of respondents in the \$100,000+ annual household income group were satisfied with their ease of access to the natural environment compared with 72.5 percent of respondents in the <\$30,000 income group. The difference between these two groups was statistically significant at all three time-points.

### Data Sources for Access to natural environment

**Source:** Canterbury District Health Board.

**Survey/data set:** Canterbury Wellbeing Survey to 2019. Access publicly available data from the Community and Public Health (Canterbury DHB) website [www.cph.co.nz/your-health/wellbeing-survey/](http://www.cph.co.nz/your-health/wellbeing-survey/)

**Source data frequency:** Annually.

Metadata for the Access to natural environment indicator is available at <https://www.canterburywellbeing.org.nz/index-data>

## REFERENCES

---

This is the full reference list for **Environment**.

- 1 Handy SL, Boarnet MG, Ewing R, Killingsworth RE (2002) How the built environment affects physical activity. *American Journal of Preventive Medicine* 23: 64-73.
- 2 Perdue WC, Stone LA, Gostin LO (2003) The Built Environment and Its Relationship to the Public's Health: The Legal Framework. *American Journal of Public Health* 93: 1390-1394.
- 3 Sallis JF, Spoon C, Cavill N, Engelberg JK, Gebel K, et al. (2015) Co-benefits of designing communities for active living: an exploration of literature. *Int J Behav Nutr Phys Act* 12: 30.
- 4 Björk J, Albin M, Grahn P, Jacobsson H, Ardö J, et al. (2008) Recreational values of the natural environment in relation to neighbourhood satisfaction, physical activity, obesity and wellbeing. *Journal of Epidemiology and Community Health* 62: e2.
- 5 Blaschke P (2013) Health and wellbeing benefits of conservation in New Zealand. *Science for Conservation* 321.
- 6 Juan de Dios Ortúzar, Willumsen LG (2011) *Modelling Transport*. New York: Wiley.
- 7 CERA (2012) *CERA Wellbeing Survey 2012 Report, prepared by AC Nielsen for the Canterbury Earthquake Recovery Authority*. AC Nielsen and the Canterbury Earthquake Recovery Authority.
- 8 Cameron MP, Cochrane W, McNeill K, Melbourne P, Morrison SL, et al. (2012) Alcohol outlet density is related to police events and motor vehicle accidents in Manukau City, New Zealand. *Aust N Z J Public Health* 36: 537-542.
- 9 Livingston M, Chikritzhs T, Room R (2007) Changing the density of alcohol outlets to reduce alcohol-related problems. *Drug and Alcohol Review* 26: 557-566.
- 10 Popova S, Giesbrecht N, Bekmuradov D, Patra J (2009) Hours and days of sale and density of alcohol outlets: Impacts on alcohol consumption and damage: A systematic review. *Alcohol and Alcoholism* 44: 500-516.
- 11 Cameron MP, Cochrane W, Gordon C, Livingston M (2013) *The locally-specific impacts of alcohol outlet density in the North Island of New Zealand, 2006-2011. Research report commissioned by the Health Promotion Agency*. Wellington: Health Promotion Agency.
- 12 Browne M, Bellringer M, Greer N, Kolandai-Matchett K, Langham E, et al. (2017) *Measuring the burden of gambling harm in New Zealand: Central Queensland University and Auckland University of Technology*.
- 13 Abbott M, Bellringer M, Garrett N (2018) *New Zealand National Gambling Study: Wave 4 (2015). Report number 6*. Auckland, New Zealand: Auckland University of Technology, Gambling & Addictions Research Centre.
- 14 Rook H, Rippon R, Pauls R, Doust E, Prince J (2018) *Gambling harm reduction needs assessment*. Wellington, New Zealand: Sapere research group.
- 15 Kristiansen S, Trabjerg Camilla M (2016) Legal gambling availability and youth gambling behaviour: A qualitative longitudinal study. *International Journal of Social Welfare* 26: 218-229.
- 16 Welte JW, Barnes GM, Tidwell M-CO, Hoffman JH (2009) Legal gambling availability and problem gambling among adolescents and young adults. *International Gambling Studies* 9: 89-99.
- 17 Pearce J, Mason K, Hiscock R, Day P (2008) A national study of neighbourhood access to gambling opportunities and individual gambling behaviour. *J Epidemiol Community Health* 62: 862-868.
- 18 Binde P (2013) Why people gamble: A model with five motivational dimensions. *International Gambling Studies* 13: 81-97.
- 19 Wardle H, Keily R, Astbury G, Reith G (2014) 'Risky places?': mapping gambling machine density and socio-economic deprivation. *J Gamb Stud* 30: 201-212.
- 20 Beckert J, Lutter M (2009) The inequality of fair play: Lottery gambling and social stratification in Germany. *European Sociological Review* 25: 475-488.
- 21 Orford J, Wardle H, Griffiths M, Sproston K, Erens B (2010) The role of social factors in gambling: Evidence from the 2007 British Gambling Prevalence Survey. *Community, Work & Family* 13: 257-271.
- 22 Abbott M, Binde P, Hodgins D, Korn D, Pereira A, et al. (2013) *Conceptual Framework of Harmful Gambling: An International Collaboration*. Guelph, Ontario: Problem Gambling Research Centre (OPGRC).
- 23 Easton B (2002) Gambling in New Zealand: an economic overview. In: Curtis B, editor. *Gambling in New Zealand*. Palmerston North:

Dunmore Press. pp. 45-58.

- 24 Department of Internal Affairs Gambling in Pubs and Clubs (Class 4). Wellington: The Department of Internal Affairs.
- 25 Canterbury District Health Board (2019) *Canterbury Wellbeing Survey, June 2019: Report prepared by Nielsen for the Canterbury District Health Board and partnering agencies*. Christchurch: Canterbury District Health Board.
- 26 Environment Canterbury Regional Council (2019) *Air Quality in the Canterbury Region- Winter 2019 Update: Environment Canterbury Environmental Snapshot Report*. Christchurch: Environment Canterbury Regional Council.
- 27 World Health Organization (2013) *Health effects of particulate matter*. Copenhagen: World Health Organization.
- 28 World Health Organization (2005) *WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide: Global update 2005, Summary of risk assessment*.