Environment: Gambling machines

Gambling can lead to significant health, social, and economic implications for individuals and families [12]. Harms associated with gambling may include addiction, social isolation, depression, suicide, relationship breakdown, lowered work productivity, job loss, bankruptcy, and crime, including family violence [12]. National statistics demonstrate that the harms of gambling disproportionately affect Māori, Pacific people, and those living in low socioeconomic areas [13, 14].

Studies of the detrimental effects of gambling have confirmed a link between the geographic accessibility of gambling establishments and the prevalence of problem gambling [15-17]. People living close to all types of gambling premises have a higher chance of becoming problematic gamblers than those living at a distance from gambling premises [18]. Gambling machine establishments (specifically 'Class 4 venues' or 'non-casino' pubs and clubs) are typically clustered within socioeconomically deprived areas [19-21] and this has been shown to widen existing social and health inequalities [20, 22]. Gambling tends to be 'economically regressive', meaning that it increases inequality by diverting money from a larger group (typically of lower socioeconomic status) to a smaller group (of higher socioeconomic status) [23].

Gambling machine density has reduced steadily in New Zealand since the early 2000s, in large part due to the adoption of 'sinking lid' policies by many Territorial Authorities (when an existing 'pokie' venue closes, consent is not granted for another to be established) [24].

This indicator presents gambling machine density (the number of gambling machines per 10,000 population), in greater Christchurch and New Zealand from 2008 to 2022. Note internet or live casino games are not captured by this measure. Gambling machine proceeds, per annum, per 10,000 population aged 15 years and over, are also described.

Figure 4.1: Gambling machine density (per 10,000 population aged 15 years and over), in greater Christchurch and New Zealand, 2008–2022
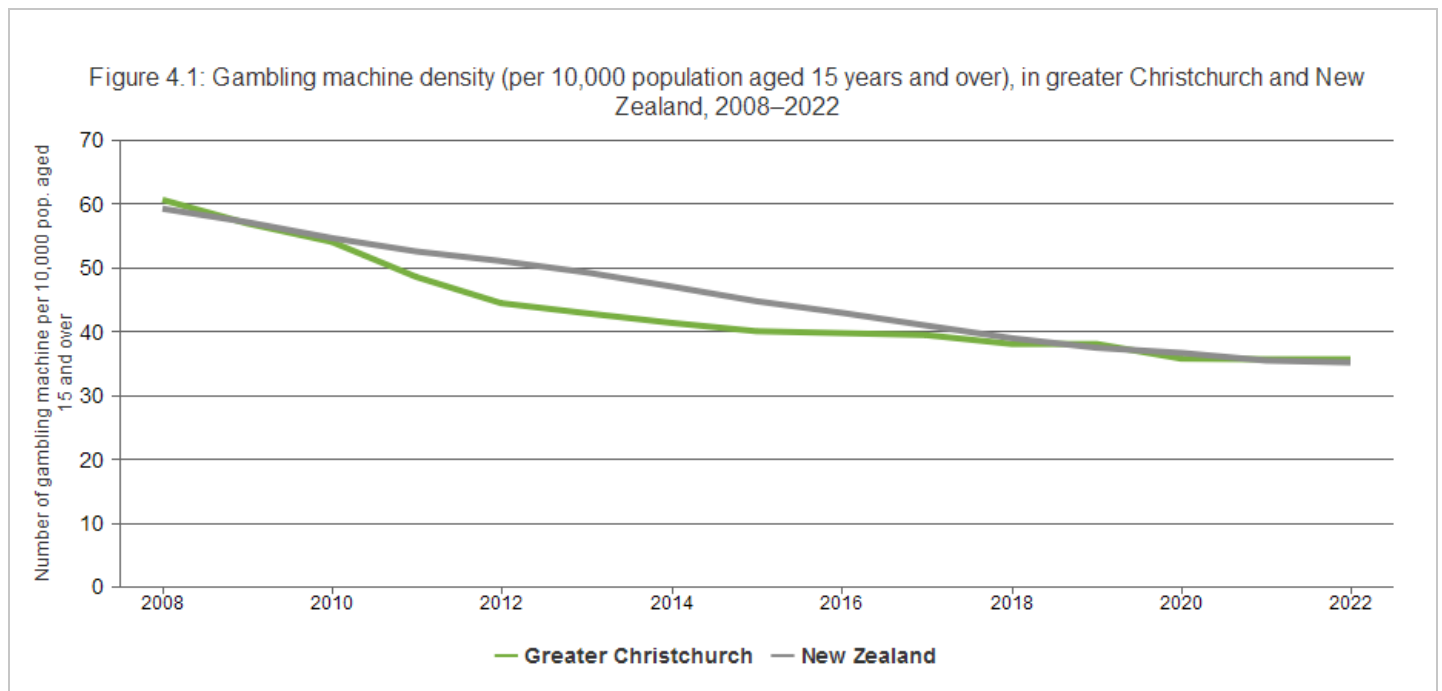
The figure shows that gambling machine density in greater Christchurch has declined substantially over the time period shown, from 60.7 machines per 10,000 population in 2008 to 35.7 machines per 10,000 population in 2022 (unchanged since 2020). This pattern is broadly in line with gambling machine density across New Zealand.

Similarly, gambling machine proceeds, per annum, per 10,000 population aged 15 years and over have declined across greater Christchurch and New Zealand over the same period (data not shown). For greater Christchurch, gambling machine proceeds have declined from $2.62M per 10,000 population aged 15 years and over, in 2008 ($262 per person) to 2.35M per 10,000 population aged 15 years and over, in 2022 ($235 per person). For New Zealand, gambling machine proceeds have declined from $2.71M to $2.44M per 10,000 population between 2008 and 2022.

Breakdown by Territorial Authority

Figure 4.2: Gambling machine density (per 10,000 population aged 15 years and over), by Territorial Authority and for New Zealand, 2008–2022
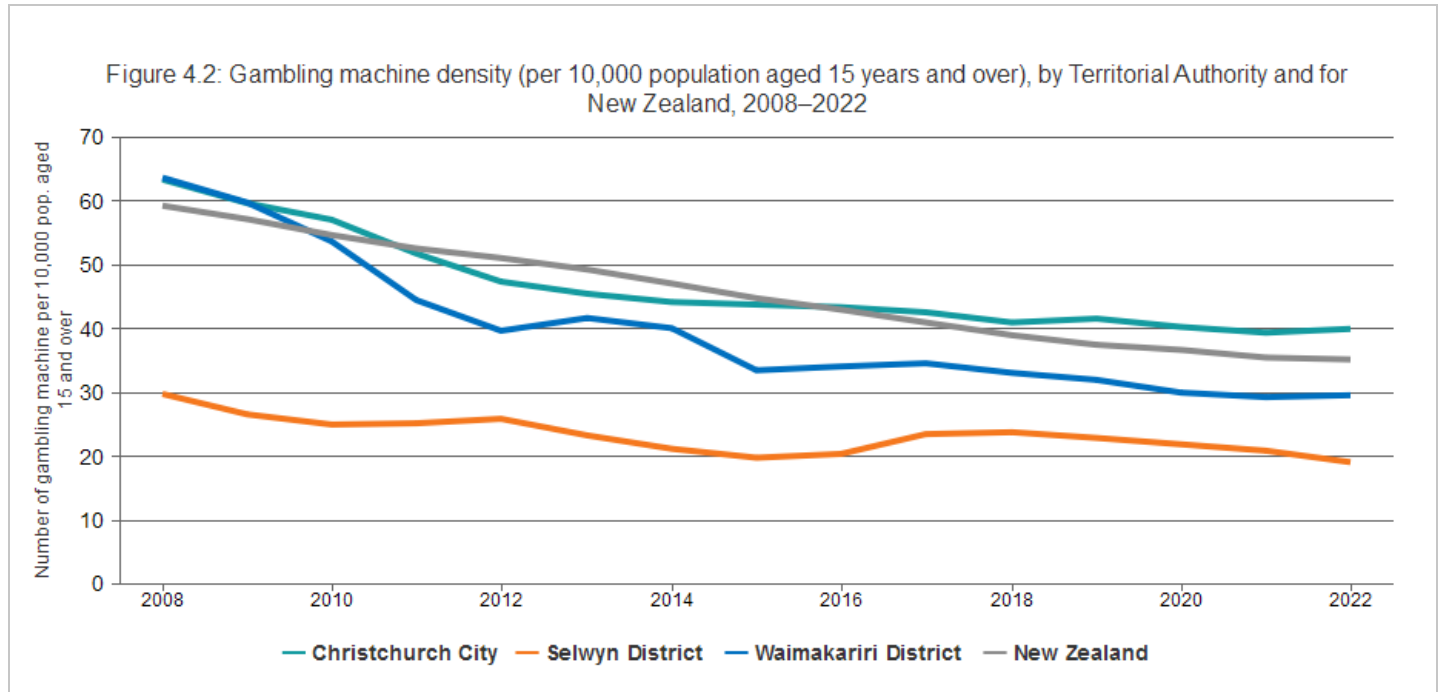
The figure shows the gambling machine density per 10,000 population for Christchurch City, and the Selwyn and Waimakariri districts, from 2008 to 2022. The pattern is one of declining density overall, in keeping with the national picture. The figure shows that the gambling machine density in Selwyn District has been consistently substantially lower than the other Territorial Authorities, over the time series shown (in 2022, Selwyn 19.1; Waimakariri 29.6; Christchurch City 40; and New Zealand 35.2 machines/10,000 population).

In 2022, gambling machine proceeds (data not shown) were highest in Christchurch City (equivalent to $275 per person aged 15 years and over) and lowest in Selwyn District ($88 per person). Gambling machine proceeds for the Waimakariri District were approximately midway between Christchurch City and Selwyn District in 2022 ($171 per person).

Data Sources

Source: Department of Internal Affairs.
Survey/data set: Administrative data to December 2022. Access publicly available data from the Department of Internal Affairs website
https://catalogue.data.govt.nz/dataset/gaming-machine-profits-gmp-dashboard.
Source data frequency: Quarterly.

Metadata for this indicator is available at https://www.canterburywellbeing.org.nz/our-wellbeing/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. *International Journal of Behavioral Nutrition and Physical Activity* 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   de Dios Ortúzar J, Willumsen LG (2011) *Modelling Transport*. New York: Wiley.

7   Bennett H, Jones R, Keating G, Woodward A, Hales S, et al. (2014) Health and equity impacts of climate change in Aotearoa-New Zealand, and health gains from climate action. *New Zealand Medical Journal* 127.

8   Royal Society Te Apārangi (2017) *Human Health Impacts of Climate Change for New Zealand: Evidence Summary* Wellington.

9   Canterbury Earthquake Recovery Authority (2012) *CERA Wellbeing Survey 2012 Report, prepared by AC Nielsen for the Canterbury Earthquake Recovery Authority*. AC Nielsen and the Canterbury Earthquake Recovery Authority.

10 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.

11 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.

12 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.

13 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.

14 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.

15 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.

16 Rook H, Rippon R, Pauls R, Doust E, Prince J (2018) *Gambling harm reduction needs assessment*. Wellington, New Zealand: Sapere Research Group.

17 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.

18 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.

19 Pearce J, Mason K, Hiscock R, Day P (2008) A national study of neighbourhood access to gambling opportunities and individual gambling behaviour. *Journal of Epidemiology and Community Health* 62: 862-868.

20 Binde P (2013) Why people gamble: A model with five motivational dimensions. *International Gambling Studies* 13: 81–97.

21 Wardle H, Keily R, Astbury G, Reith G (2014) 'Risky places?': Mapping gambling machine density and socio-economic deprivation. *J Gambl Stud* 30: 201-212.

22 Beckert J, Lutter M (2009) The inequality of fair play: Lottery gambling and social stratification in Germany. *European Sociological Review* 25: 475–488.

23 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.

24 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).

25 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.

26 Department of Internal Affairs Gambling in Pubs and Clubs (Class 4). Wellington: The Department of Internal Affairs.

27 Canterbury DHB (2019) *Canterbury Wellbeing Survey, June 2019: Report prepared by Nielsen for the Canterbury District Health Board and partnering agencies*. Christchurch: Canterbury District Health Board.

28 Environment Canterbury Regional Council (2018) *Air Quality in the Canterbury Region- Winter 2018 Update: Environment Canterbury Environmental Snapshot Report*. Christchurch: Environment Canterbury Regional Council.

29 World Health Organization (2013) *Health effects of particulate matter*. Copenhagen: World Health Organization.

30 World Health Organization (2005) *WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide: Global update 2005, Summary of risk assessment*.

31 McNamara KE, Buggy L (2017) Community-based climate change adaptation: a review of academic literature. *Local Environment* 22: 443-460.

32 Ebi KL, Semenza JC (2008) Community-based adaptation to the health impacts of climate change. *American Journal of Preventive Medicine* 35: 501-507.