

Health and Wellbeing Data Profile

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Acronyms, Abbreviations & Terms

Age adjusted	Age adjusted estimate or rate. Adjustment to data to account for effects of age (eg. more older residents in one location compared to another, so inflated rate of arthritis).
ABS	Australian Bureau of Statistics
AECD	Australian Early Development Census
AIHW	Australian Institute of Health and Welfare
ASR	Age-standardised Suicide Rate
CPH	Census of Population & Housing (ABS)
Crude	Crude estimate or rate (ie data not adjusted for effects of age) see also 'Age adjusted'
EGM	Electronic gaming machine
ERP	Estimated resident population
DoH	Victorian Department of Health
LGA	Local government area
LGBTQIA+	Lesbian, gay, bisexual, trans and gender diverse, queer, intersex, asexual and others
MAV	Municipal Association of Victoria
NHMRC	National Health and Medical Research Council
PHIDU	Public Health Information Development Unit
SA1	ABS Statistical Area level 1 – defined as location containing between 200 and 800 residents
SA2	ABS Statistical Area level 2 – defined as location containing between 3,000 and 25,000 residents, made up of multiple SA1s, which represents a community that interacts socially and economically
VAHI	Victorian Agency for Health Information
VGCCC	Victorian Gambling & Casino Control Commission
VPHS	Victorian Population Health Survey

Executive Summary

The Victorian Public Health and Wellbeing Act 2008 requires councils to develop a municipal public health and wellbeing plan every 4 years. This document fulfils this purpose and is aimed at providing a snapshot into the recent state of health and wellbeing across the Cardinia Shire and its liveability. The report draws on the most recent evidence that is available from highly reputable sources including:

- National and state government reports and datasets
- Government funded agencies and institutions
- Government funded leading not-for-profit organisations
- Cardinia Shire's biennial Liveability Survey

Key findings are summarised below and are prefaced, where notable, with a + for a positive outcome and – for a negative outcome. The prefacing does not indicate statistical significance, however.

Where appropriate, comparisons between outcomes from previous years are incorporated, as well as with state or nation-wide findings or findings across Melbourne's ten interface councils¹ where feasible.

Key Findings

DEMOGRAPHICS

The majority of Cardinia Shire's population (118,199 in 2021) is concentrated in the Pakenham and Officer precincts. Less dense populations are generally situated in other smaller townships.

The resident population increased by approximately 25% from 2016 to 2021 and was forecast to grow to approximately 130,000 in 2024-25 and to approximately 160,000 by 2034².

The population's cultural and ethnic mix also increased up to the last census and First Nation Australian residents accounted for approximately 1% of the population, which was in line with the average of other interface councils and Victoria, while slightly higher than that of Greater Melbourne.

The most common country of birth outside Australia and England was India, followed by Sri Lanka, and Punjabi and Sinhalese were the most common languages other than English used at home.

From the 2016 to the 2021 census, an increase of seven percentage points in the proportion of Cardinia residents speaking a language other than English was reported (12% versus 19%). Punjabi and Sinhalese are the most spoken languages other than English (3.1% and 1.8%) followed by Hindi (.9%) and Mandarin (.8%).

In 2023, 21% of residents reported restrictions to some activities due to disability or impairment³, which was generally in line with that for all Victoria (20%), while 6% reported requiring assistance for core activities⁴.

MENTAL HEALTH AND WELLBEING

In 2023, 75% of Cardinia's adult residents self-reported their physical health to be good, very good, or excellent compared to the State average of 78%².

¹ The 10 municipalities that form a ring around the Melbourne metropolitan area (see: [Interface Councils Liveability Policy May 2018.indd](#) for the list)

² Source: Population and household forecasts, 2021 to 2034, prepared by .id (informed decisions), September 2024

³ Source: Victorian Population Health Survey, 2023

⁴ Source: Cardinia Shire Liveability Survey, 2023

- Dental health was reported to be worse in Cardinia in 2023 than the State average, with 29% of residents reporting to have fair or poor dental health compared to 23%. 43% of residents reported delaying visiting the dentist due to the cost compared to 32.3% Victoria-wide².

In 2021 Cardinia shire had the second highest rate of infectious disease of the ten interface councils

61% of Cardinia residents reported having no long-term health conditions in the 2021 census, which was approximately three percentage points less than the average of the other interface councils.

The leading causes of death, between 2018 and 2022, were coronary heart disease, dementia incl. Alzheimer's and lung cancer; the rates were slightly less (.9) than the national rates.

For the 2023-2024 period, the proportion of five-year-old children resident in Cardinia Shire who were fully vaccinated was in line with that Victoria-wide (95%)⁵.

In 2021 9% of Cardinia Shire's resident population reported suffering a long-term mental health condition, 1.8 percentage points greater than the average for the other interface councils⁶.

22% of Cardinia Shire residents reported 'high' or 'very high' levels of psychological stress in 2023 compared to 20% Victoria-wide².

While the rate of suicide in the Shire for 2016-2023 has generally been in line with the National rate, it is consistently slightly higher than the State-wide rate (12.3% vs 10.6%)⁷.

24% of residents reported having experienced loneliness which was similar to the average of interface councils and Victoria. The highest proportion of these were 18-24 year olds².

75% of residents reported their satisfaction with life as high or very high, slightly lower than Victorians overall (77%)².

According to the 2021 census, the rate of homelessness in the Shire was 574 per 100,000 residents, slightly less than the median for all ten interface councils (649) though higher than in 2016 (461).

52% of residents reported having completed year 12 or equivalent, 57% had completed a diploma or vocational qualification and 31% had completed a university qualification⁵.

- In 2024, it was reported that the proportions of 1st year primary school residents deemed vulnerable on 1 or more and 2 or more developmental domains had increased since 2021 by 5% and 4% respectively. These increases were greater than the reported increases state and nation wide and deemed as statistically significant.

SOCIAL COHESION

- There was a decrease in the proportion of residents reporting they felt completely or mostly connected to their community, from 23% in 2021 to 17% in 2023³.

- 42% of residents reported that they definitely felt valued by society compared to 48% state-wide.

23% of residents reported having experienced one or more types of discrimination in the previous 12 months. The most common were: age (6.8%), cultural background (6.8%), gender (6.2%) and weight/body shape (5.9%)³.

- 56% of residents agreed that multiculturalism 'definitely makes life in their area better' compared to 67% of all Victorians².

SAFETY

In 2023, 18% of residents reported they or their family had experienced negative effects from crime or safety issues, 14% from anti-social behaviour and 6% from vandalism³. These findings are similar to those reported in 2021, though there was a slight drop in reported vandalism (8% in 2021).

⁵ Federal Dept. of Health & Aged Care

⁶ Australian Bureau of Statistics

⁷ Australian Institute of Health & Welfare

The rate of criminal offences (per 100,000 residents) in the Shire has been slowly increasing since March 2022 and, as of March 2025, has slightly surpassed the average of the ten interface councils⁸.

- The one criminal offence category that has notably increased from 2021 to 2024 is that of property & deception. Within this offence category, 'stealing from a motor vehicle' has risen as a proportion of property offences from 18% over 2021 – 2024 to 25% in the year ending March 2025.

From January 2023 through September 2024 there were 561 road accidents in Cardinia Shire, with 727 injuries and 9 fatalities as a result.

- 5 of the 9 fatalities were in the North-West 'Hills' area⁹. Cardinia Shire had noticeably more motorcycle fatalities than the average across the ten interface councils (6 vs 1.6)¹⁰.

More recent data covering the full calendar year shows that there were 11 fatalities in 2024:

- + Resident ratings of the safety of the footpaths they use in the Shire has been slowly but steadily increasing³.

- + Greenhouse gas emissions from Cardinia Shire are slowly but steadily decreasing with the exception of that from natural gas in the commercial sector¹¹.

HEALTHY EATING AND ACTIVE LIVING

61.5% of the reported daily intake of fruit and vegetables of Cardinia Shire adult residents did not meet recommended guidelines, in line with that Victoria-wide².

- + The proportion of residents reporting consumption of sugar sweetened drinks has decreased overall and consumption daily or on most days decreased slightly from 15.5% in 2021 to 13.5% in 2023².

- In 2023, while 34% of residents reported 2.5 hours or more per week of moderate-to-strenuous physical activity (recommended), 66% of residents reported less than 2.5 hours compared to 64% state-wide, ².

- + Cardinia Shire residents who reported sitting for 7 or more hours per day was less than that of Victorians generally (25% vs 33% age adjusted).

- Outdoor exercise by residents, across a number of activities, appears to have diminished slightly from 2021 to 2023.

FAMILY VIOLENCE

- In 2023, 2% of residents reported that family violence had had a negative impact on themselves or their family in the 12 months prior to survey, slightly down from 3% in 2021 and 2019³.

- + While rates of family violence related offences have varied over the past four years, the Shire has seen an increase between 2022-3 (1,549 per 100,000 pop.) and 2023-4 (1,713) compared with virtually no increase in the rate Victoria-wide for the same period

FINANCIAL WELLBEING AND RESILIENCE

- + Weekly incomes in the Shire appear to have increased slightly, with 41% of respondents reporting a net household weekly income of less than \$901 in 2021 compared to 37% in 2023³.

- Council's Liveability Survey reported that residents spending 30% or more on housing had increased 15 percentage points from 2021 to 2023. 22% reported spending more than 50% of their income on their rent or mortgage.

⁸ Crime Statistics Agency

⁹ Data Vic, 2024

¹⁰ T.A.C. , 2024

¹¹ Snapshot Climate, 2023

Applying an updated calculation¹² to Liveability Survey data suggests that 12% had experienced housing stress in 2023.

- Of the various indicators of financial resilience used, the most notable result in the 2023 Liveability Survey was that 14% of residents reported not being able to pay bills at some point within the last 2 years compared to 10% in 2021.

6% of 2023 Liveability Survey respondents reported that unemployment had negatively impacted them or their family in the previous 12 months and 9% responded that under-employment had.

Rates of unemployment from in March 2025 varied across the Shire, from 2.2 in Emerald-Cockatoo to 8.2 in Pakenham South West¹³.

HARM FROM TOBACCO, ALCOHOL, DRUGS AND GAMBLING

- From 2021 to 2023, the proportion of residents reporting negative impacts from alcohol addiction or binge drinking and from drug use decreased from 6% to 3%, while impacts from problem gambling remained at 2%.

The proportion of residents reported to have smoked in the first 20 weeks of pregnancy decreased from 7.3% in 2022 to 6.6% in 2023⁶.

14% of Cardinia Shire residents were found to be at an increased risk of harm from alcohol consumption compared to 13% Victoria-wide².

The 2021-22 rate of hospital admissions due to illegal drugs was similar to the average of the ten interface Councils¹⁴.

- Losses to electronic gaming machines in the Shire increased 7% between 2023-24 and 2024-25 financial years, from \$36,831,475 to \$39,473,888¹⁵.

¹² Those with income in the lowest 40% of the income distribution and pay more than 30% of their income on housing costs (Australian Housing & Urban Research Institute, 2025)

¹³ Dept. of Employment & Workplace Relations, 2025

¹⁴ Turning Point, 2025

¹⁵ Victorian Gambling & Casino Control Commission, 2025

Introduction

Health and wellbeing are driven by the interaction of many factors, ranging from social, economic, and environmental conditions to individual lifestyle factors and behaviours and are the basis for the concept of 'liveability'. Factors such as income, race, education, and employment opportunities significantly impact the overall health of individuals and communities. Understanding these drivers is crucial for effective policymaking and service delivery that aims to promote and enhance the health and wellbeing of communities.

The socio-ecological model of health provides a comprehensive framework for understanding what are known as the wider determinants of health which were used to inform the *Victorian Public Health and Wellbeing Plan 2023*. It outlines six main contributors to health and wellbeing:

- a fair and equal society
- a healthy start in life
- a strong education system
- positive employment
- healthy liveable communities
- effective health protection

This health and wellbeing profile is modelled on Council's *Liveability Plan* outcomes and includes its outcome measures where data is obtainable at the Local Government Area (LGA) or a more granular ABS defined level (Cardinia Shire Council, 2025). The *Liveability Plan* includes the following seven outcomes that are generally in line with outcomes in the *Victorian Public Health and Wellbeing Framework (2024)*:

- Improved mental health & wellbeing
- Improved social cohesion
- Improved safety
- Improved healthy eating & active living
- Reduced family violence
- Improved financial wellbeing & resilience
- Reduced harm from tobacco, alcohol, drugs and gambling

Appendix 1 outlines the alignment between the Liveability Plan and Victorian Public Health and Wellbeing Framework (2024) outcomes.

Appendix 2 portrays Council's Liveability Plan Socio-ecological health model

The profile is aimed at providing a snapshot into the recent state of health and wellbeing across Cardinia Shire and its liveability. Where possible, comparisons between outcomes from previous years are incorporated, as well as with state-wide findings or findings across Melbourne's ten interface councils¹ where feasible.

The report can be used as a tool to identify and assess strengths as well as key areas of concern or disparity impacting the local community to inform targeted interventions and initiatives aimed at improving liveability outcomes and fostering the wellbeing of our residents. It also fulfils Council's obligation under the Victorian Public Health and Wellbeing Act 2008 to produce a Municipal Public Health Plan.

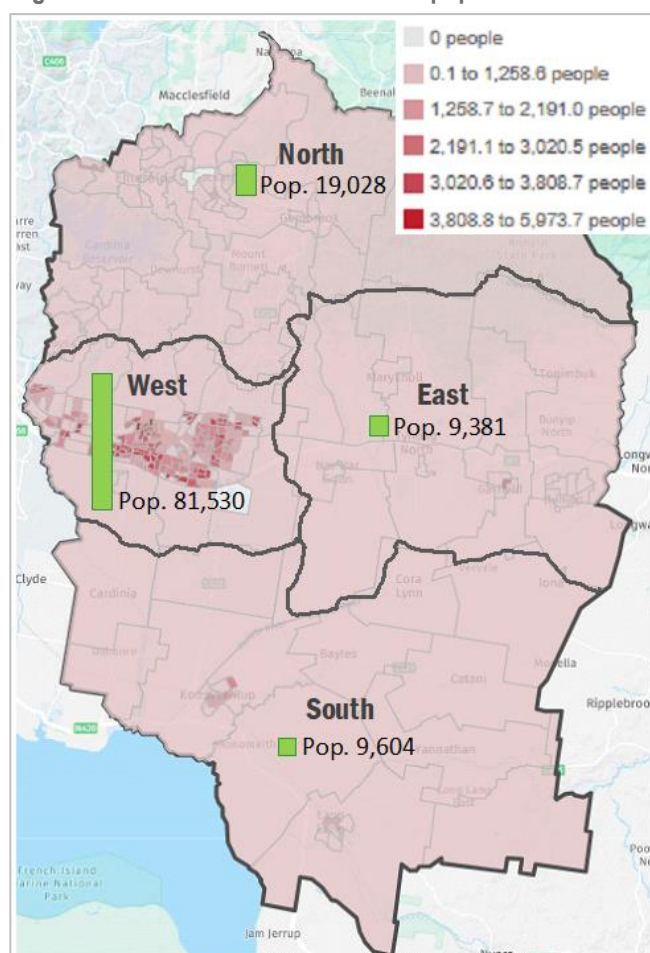
Individual Demographic Factors

Population, Age, Sex and Gender

According to the Australian Bureau of Statistics (ABS) in **2021 the Cardinia Shire estimated resident population was reported as 118,199 individuals, a 25% increase over the 5 years since the 2016 census count (ABS, 2021).** This means the Shire was the third smallest of Melbourne's 10 interface councils in terms of population. Interface councils are those that form an urban ring around Melbourne, that

interface with rural Victoria. The Shire is, however, the third largest in geographical size, being 1,281 square kilometres, and its population is unevenly distributed, as can be seen in Figure 1. Nearly 70% of the Shire's population reside in the small West region, mostly within the Pakenham and Cardinia Road precincts, followed by the Officer and Beaconsfield precincts.

Figure 1: Cardinia Shire 2021 resident population



Source: Informed Decisions (.id) online social atlas, accessed 27/3/2025 (from ABS CPH 2021)

The Shire's 2021 resident population was comprised of approximately 51% females and 49% males¹⁶ (ABS, 2021). **In 2023, approximately 53% of residents identified as female compared to 43% male, with 0.3% preferring to self-describe and 4% who did not respond (Cardinia Shire Council, 2023a).**

While the full report from the *Victorian Population Health Survey (VPHS) 2023* is not yet publicly available, early findings report **the proportion of LGBTIQIA+ residents in Cardinia as being 9.8%**, with 83.8% identifying as heterosexual. **Statewide, the proportion of those identifying as LGBTIQIA+ was reported as being 11% (VPHS, 2023).**

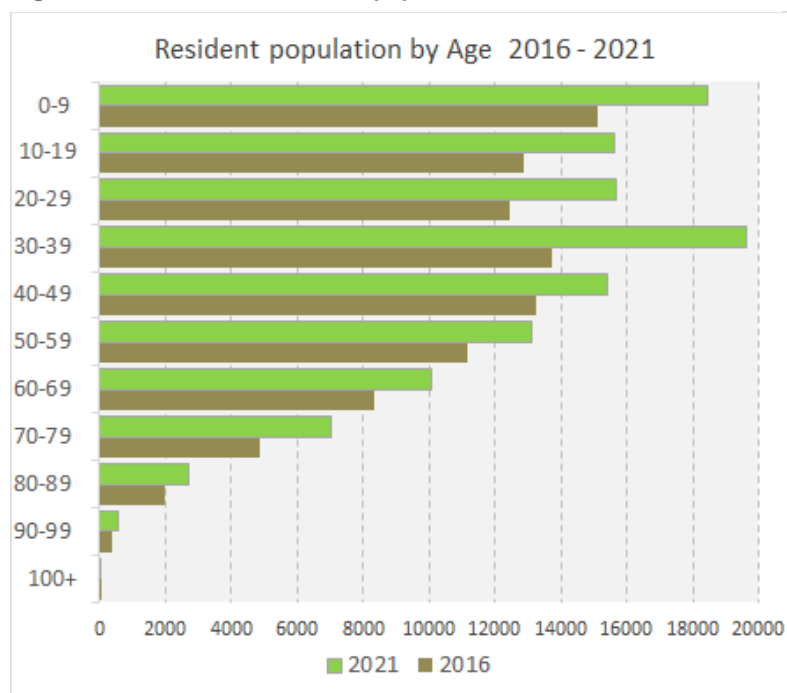
The age group showing the greatest increase in number, between 2016 and 2021, was that of 30-39 year olds, which increased by nearly 6,000 or 42.6% (ABS, 2016), (ABS, 2021). This age group also showed the greatest increase **as a proportion of all ages, from 15% in 2016 to 17% in 2021**, more than twice as much as any other 10-year age group. Figure 2 overpage graphically depicts the 2021 versus 2016 population by the 10-year age groups.

¹⁶ The ABS 2021 census data is recorded by biological sex, without gender identification

Analysis of the ABS 'common-service age groups' along with a comparative analysis of 5-year age groups, suggests that Cardinia Shire, up until the most recent census (2021), was **increasingly being populated by 25 - 39 year olds as 'parents and homebuilders' and 'a young workforce'**.

The population of Cardinia Shire is not evenly spread throughout its regions. As can be seen in Figure 1, the densest populations in 2021 were the Pakenham and Beaconsfield-Officer locations (West region). The **population of Cardinia Shire was forecast to rise from a predicted 129,248 in 2024 to 158,863 in 2034** as shown in Figure 3 (Informed Decisions, 2025). **This would be an increase of 29,615 or approximately 23% over 10 years.**

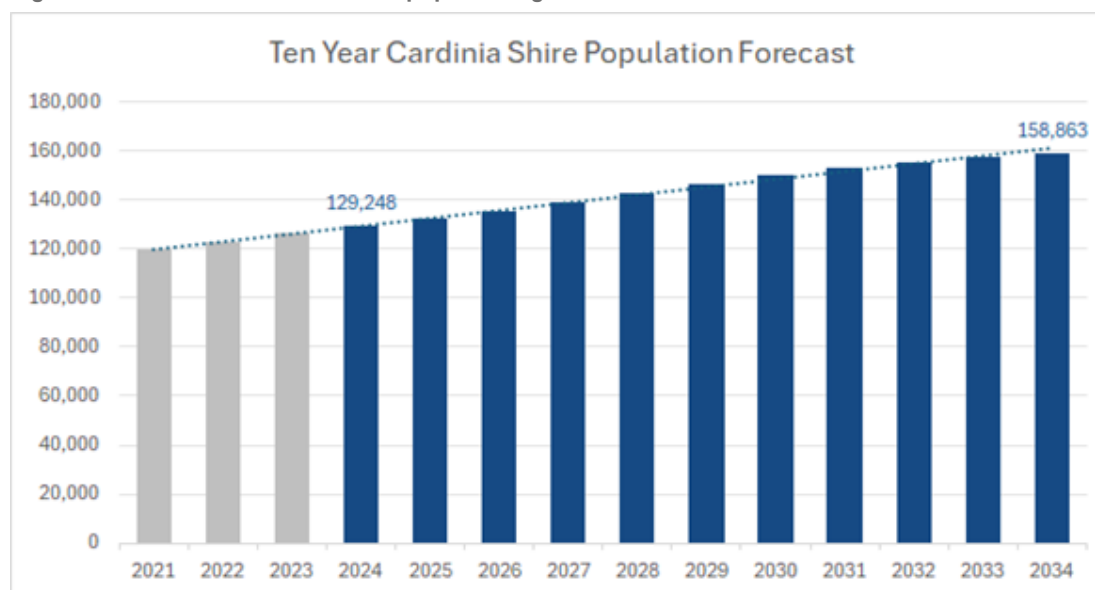
Figure 2: Cardinia Shire resident population 2016 - 2021



Source: ABS, Census of Population and Housing (CPH) 2016 & 2021

While Cardinia Shire's fertility rate¹⁷ has been slowly declining like most councils, its mean fertility rate from 2018 to 2023 was estimated at 1.97, slightly higher than the average of the ten interface council means (1.89) and higher than the Victorian mean rate of 1.57 (ABS, 2023).

Figure 3: Forecast of Cardinia Shire population growth 2024-2034



Source: Population and household forecasts, 2021 to 2034, prepared by .id (informed decisions) Sep. 2024.

¹⁷ Number of registered births per woman in the population (ABS, 2023)

Cultural and Linguistic Diversity

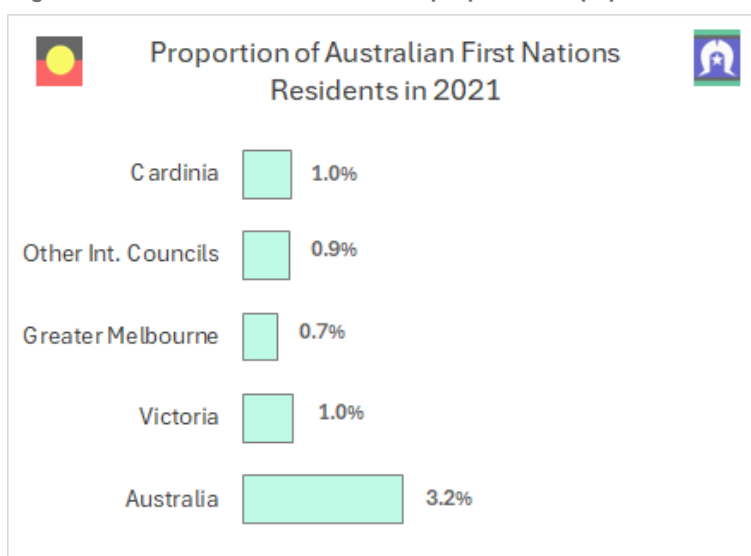
Ethnicity, Ancestry and Migration

Ethnicity generally refers to race, while ancestry refers to lineage¹⁸. Australia's First Nation peoples, in general, are reported in the census of population and housing (CPH) as having either Aboriginal ancestry, Torres Strait Island ancestry or both.

In the 2021 census, the proportion of Australian First Nation residents in Cardinia Shire was 1%, which was in line with the average of other interface councils' and Victoria, while slightly higher than Greater Melbourne (Figure 4).

While Cardinia Shire residents reported being born in more than 130 different countries in the 2021 census, the ten countries of birth responsible for the greatest numbers are presented in Table 2 below. Of the countries outside Australia - India, England and Sri Lanka were clearly the countries of birth most reported.

Figure 4: First Nation Australians as a proportion of population



Source: ABS CPH 2021

Table 1: Count of residents by the top 10 countries of birth (2021)

Country of birth	Count
Australia	84,554
India	5,139
England	4,204
Sri Lanka	2,279
New Zealand	1,941
Philippines	1,125
Pakistan	700
China (excludes SARs & Taiwan)	643
Scotland	616
South Africa	601

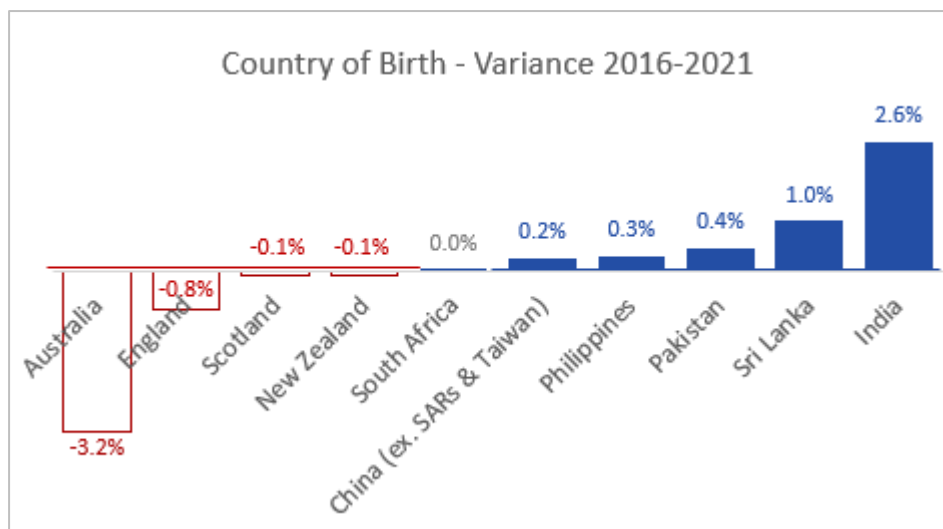
source: ABS CPH 2021

As shown in Figure 5 below, **between 2016 and 2021 Cardinia's proportion of Indian-born and Sri Lankan-born residents grew by 2.6% and 1% respectively**, while its proportion of Australian-born and English-born residents decreased by 3.2% and 0.8% respectively (ABS, 2016), (ABS, 2021). While the increase in Cardinia's population of residents born in India was in line with the average of the other interface councils, **the increased proportion of those born in Sri Lanka was noticeably more (1% compared to 0.1%)**.

According to the Victorian Government Department of Health, around 4,000 – 6,000 refugees and people seeking asylum currently settle in Victoria each year. This is more than any other state or territory at around one third of all refugees entering Australia. An estimated 11,000 – 20,000 people seeking asylum live in the Victorian community on bridging visas while awaiting determination of their refugee status.

¹⁸ Ancestry refers to lineage and can refer to common geographic origin, genealogical, or genetic characteristics (Lu, 2022)

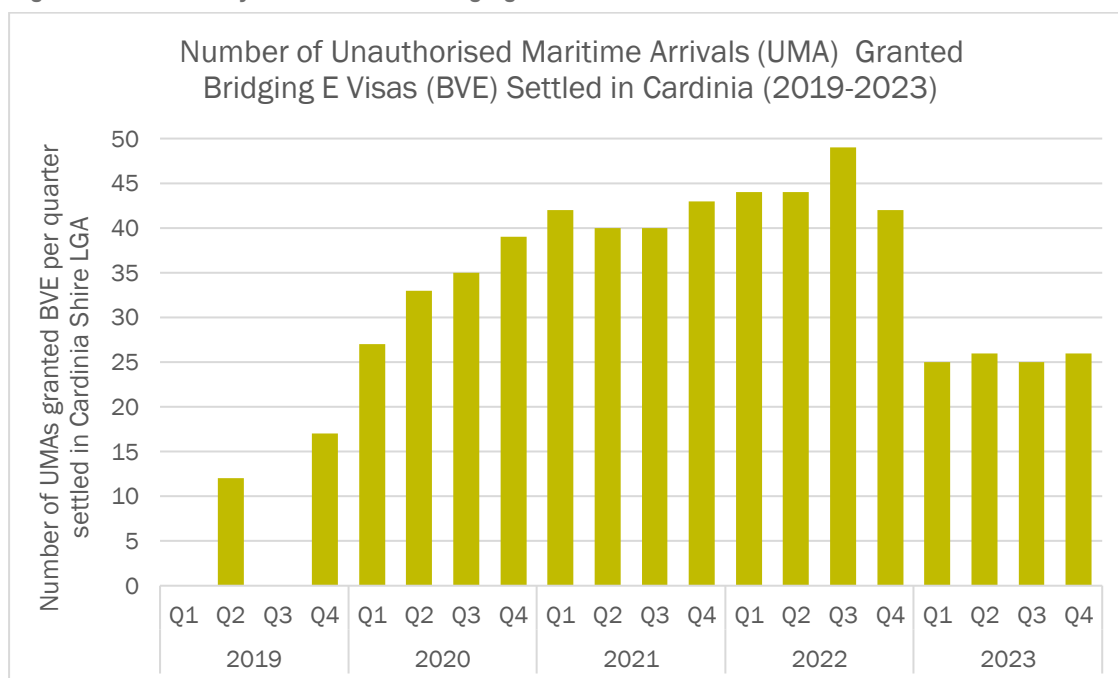
Figure 5: Cardinia Shire's top 10 countries of birth – percentage variance 2016-2021



Source: ABS, CPH 2016 & 2021

Figure 6 below reports the number of unauthorised maritime arrivals (UMA) on Bridging E Visas (BVE) who were settled in Cardinia per quarter between 2019 and 2023. **Numbers have almost halved in 2023 compared to 2022 which reported a high of 49 in quarter three of 2022.** The data provided by the Australian Government for these figures is released quarterly and reports the number of UMA BVEs settled by postcode with a minimum of 10. Asylum seekers were reportedly settled in Pakenham and/or Cardinia localities within this time; however, these figures may be underreporting somewhat as data may be missing where less than 10 UMA BVEs were settled within any postcode per reporting period.

Figure 6: Count of asylum seekers on bridging visas in Cardinia 2019-2023



Source: Federal Government Department of Home Affairs

Language

The 2021 census reported the proportion of **Cardinia residents using a language other than English (LOE) at home as 19%, half that of the other nine interface councils (average of 38%).**

This is similar to Council's 2023 Liveability Survey, where 15% of respondents reported speaking a LOE¹⁹. Of Cardinia residents who spoke a LOE at home, 88% reported speaking English well or very well compared to 86% on average in the other interface councils and 1.5% reported speaking English 'not well' compared to 4%.

The proportion of residents not speaking English was between 3.5% and 4% for Cardinia and across the other interface councils. From the 2016 to the 2021 census, an increase of seven percentage points in the proportion of Cardinia residents speaking a language other than English was reported (12% versus 19%), with a small increase in those not speaking English at all (0.7% in 2021 versus 0.4% in 2019).

Table 2: Top 10 Non-English languages used at home in Cardinia Shire 2021

Language	Count	Percent
English	91,108	81.3%
Punjabi	3,474	3.1%
Sinhalese	2,071	1.8%
Hindi	959	0.9%
Mandarin	951	0.8%
Arabic	771	0.7%
Urdu	771	0.7%
Spanish	692	0.6%
Tamil	651	0.6%
Gujarati	547	0.5%
Tagalog	491	0.4%
Other	9,645	8.6%

Source: ABS CPH 2021

Table 3 reveals the 10 most spoken languages, other than English, in Cardinia according to the 2021 census. While **Punjabi and Sinhalese being the most spoken languages** would be expected, Arabic being fifth in the list is possibly due to that language being spoken in many countries of birth that might not, individually, have been represented enough to make the list in Table 1. Punjabi, Hindi, Urdu and Gujarati reflect the cultural diversity of the notable percentage of residents born in India and Pakistan, while Sinhalese reflects the increasing population of Sri Lankan born residents. Tamil is a language of both India and Sri Lanka.

Disability

In the 2021 census, 4.8% of the total Cardinia Shire population reported needing assistance with core activities due to a severe or profound disability. This was slightly higher than in 2016 (4.2%) and slightly lower than in Greater Melbourne (5.5%). The more recent Cardinia Shire 2023 Liveability Survey asked participants whether household members had a disability requiring assistance with a core activity, to which 6% responded yes²⁰ and 1% preferring not to say. The 2023 VPHS used a broader definition of disability, asking participants whether they experienced any difficulty or restriction that affects their participation in work, education, social and community life, or performing daily activities due to a long-term health condition or impairment. In response to this criterion, 21.3% of Cardinia residents identified as having some form of disability, which was similar to the Victorian average of 19.9%.

In summary, in 2023 21% of Cardinia Shire residents reported restrictions to some activities due to disability or impairment, which was generally in line with that for all Victoria (20%), while 6% reported requiring assistance for core activities.

¹⁹ Some of the 4% variance could be attributed to the wording of the questions (language 'used' vs 'spoken' at home)

²⁰ There was, however, a slight over-representation of older respondents which might have inflated this proportion somewhat

Mental Health and Wellbeing

Physical health

Self-reported health condition²¹

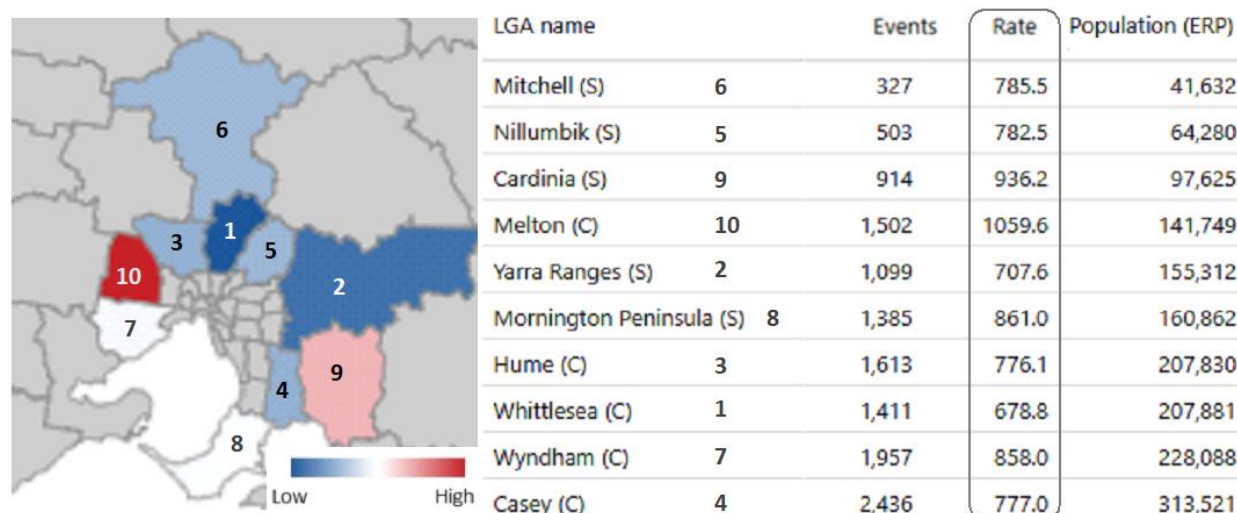
According to the 2023 VPHS, **75% of Cardinia's adult residents self-reported their physical health to be good, very good, or excellent compared to the State average of 78%, while, in 2021, 61% reported having no long-term physical health conditions compared to the average of the ten interface councils' 64% (ABS, 2021).**

The 2023 VPHS data showed that **dental health was reported to be worse in Cardinia in 2023 than the State average, with 29% of residents reporting to have fair or poor dental health compared to 23%, respectively.** 20.3% of Cardinia Shire residents reported having loose teeth and/or bleeding or painful gums, equal to the State average.

Infectious diseases

Victoria's Department of Health publishes daily surveillance data on infectious disease cases, as reported by medical practitioners and laboratories in accordance with legislative requirements. Rates of infectious disease are calculated at the number of events per 100,000 of the ABS estimated resident population (ERP). As can be seen in Figure 8 below, **in 2021 Cardinia shire had the second highest rate of infectious disease of the interface councils.** More recent figures are not included as they are based on 4 year old 2021 population estimates.

Figure 7: 2021 Infectious disease rates by Interface councils (lowest [1] to highest [10])



Source: www.health.vic.gov.au, LGA surveillance report, accessed 2/4/2024

While the number of infectious disease events in the Shire has risen from 914 in 2021 to 4660 in 2024, the resident population has likely increased noticeably which would attenuate the estimated rate. When the Shire's population is estimated from the 2026 census an updated rate can be calculated. A likely factor affecting rates in 2020-2021 were the Covid-19 lockdowns and restrictions, resulting in the lowest number of events since 2014.

²¹ Only adult health is reported here, due to a lack of contemporary child health data at the LGA level being accessible

Long-term Health Conditions and Death

61% of Cardinia residents reported having no long-term health conditions in the 2021 census, which was approximately three percentage points less than the average of the other Melbourne interface councils. Table 4 lists the percentage of Cardinia residents who reported one or more long-term health conditions. Asthma and mental health were the most reported conditions (~9% each), as well as being the only ones generally reported more in Cardinia than the other interface councils (average of 7% each).

Table 3: Proportion of Cardinia residents reporting one or more long-term health conditions in 2021

Arthritis	7.5%
Asthma	9.4%
Cancer (including remission)	2.4%
Dementia (including Alzheimer's)	0.5%
Diabetes (excluding gestational diabetes)	4.4%
Heart disease (including heart attack or angina)	3.2%
Kidney disease	0.8%
Lung condition (including COPD or emphysema)	1.5%
Mental health condition (including depression or anxiety)	9.3%
Stroke	0.8%
Any other long-term health condition(s)	7.5%

Source: ABS 2021 Census of Population & Housing

The leading three causes of death in the Shire between 2018 and 2022, reported by the Australian Institute of Health and Welfare (AIHW), were coronary heart disease (48.5 per 100,000 residents), dementia incl. alzheimer's (39 per 100k) and lung cancer (24 per 100k) - these rates were slightly less (.9) than the national rates²² (Australian Institute of Health & Welfare, 2022). Dementia was more prevalent among females²³ (45.5 per 100k residents) than males (30 per 100k) and coronary heart disease was far more prevalent among males than females (71.5 vs 29 per 100k respectively).

Immunisation

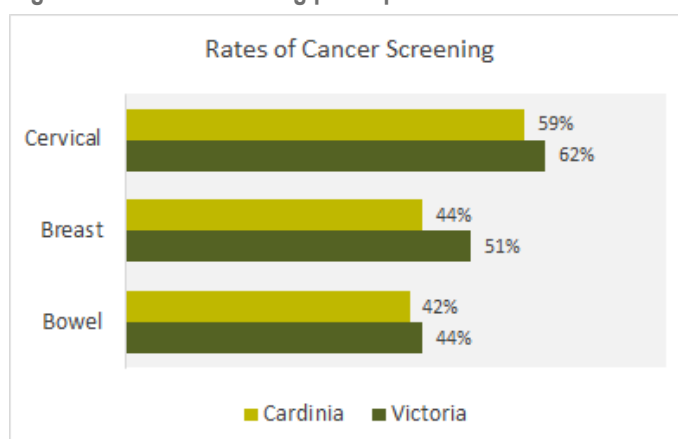
The Federal Department of Health and Aged Care report on childhood immunisation coverage via the Australian Immunisation Register (AIR), which combines the December, March, June and September quarters each year. **For the 2023-2024 period, the proportion of five-year-old children resident in Cardinia Shire who were fully vaccinated²⁴ was reported at approximately 95%, which was also the State average.**

Cancer Screening

In 2023 4% of residents were reported to have cancelled or postponed their routine cancer screening appointment compared to 3% state-wide (VAHI, 2023).

Rates of participation in cancer screening in 2022 appeared to be slightly less than that reported state-wide. Figure 8 shows the Cardinia Shire and Victorian rates of participation, either by invite or eligibility, for screening for three common cancers.

Figure 8: Cancer screening participation in 2022



²² Age-standardised per 100,000 persons (standardised to the estimated resident population by age)

²³ Alzheimer's disease appears age-related (80+ yrs) and women are known to live longer than men, so this might be a small factor contributing to the greater prevalence in women (Alzheimer's Society, 2025 [accessed])

²⁴ Comprised of eight childhood vaccines as stipulated in the Dept of Health & Aged Care's National Immunisation Program

Mental health

Self-reported mental health condition

In 2021 it was reported that **9% of Cardinia Shire’s resident population reported suffering a long-term mental health condition, 1.8 percentage points greater than the average for the other interface councils** (ABS 2021 CPH).

In 2023 approximately **15% of Cardinia Shire’s population reported having used a mental health service in the prior 12 months** (Cardinia Shire Council, 2023a) and **20% had sought some assistance with a mental health related problem from a variety of support services in the prior 12 months**, the same proportion as Victoria as a whole²⁵ (VPHS, 2023).

Similarly, **22% of Cardinia Shire residents reported ‘high’ or ‘very high’ levels of psychological stress on the K10 scale²⁶**, slightly more than the State-wide figure of 20% (VPHS, 2023).

Suicide

Table 4: Count & rate of suicides in Cardinia Shire 2016-2023

	Count of	-Rate per 100,00 population-		
Period	Suicides	Cardinia	Victoria	Australia
2016–2020	65	12.4	10.7	12.7
2017–2021	68	12.5	10.5	12.7
2018–2022	66	11.7	10.5	12.5
2019–2023	73	12.7	10.8	12.5
Mean	68	12.3	10.6	12.6

Source: AIHW, *Suicide & Self-harm - Monitoring National Mortality Database*

The AIHW Report on the number of deaths by suicide as registered on the National Mortality Database. As shown in Table 4, **the count of suicides in Cardinia Shire rose from 2016 to 2023 while the rate per 100,000 has remained relatively stable and in line with that of Australia in total** (mean of 12.3 vs 12.6). However, as Table 4 shows, the rate appears consistently higher than that for Victoria across the periods, where the mean or average rate is 12.3 vs 10.6 respectively.

Loneliness

According to the Victorian Population Health Survey report to MAV in 2023, *“Loneliness in Australia has been identified as the next public health epidemic of the 21st century”*. The VPHS estimated that in 2023 **24% of Cardinia Shire residents reported having experienced loneliness** which was similar across the 10 interface councils and the State average of 23% (CR). Across Victoria it was found that the **highest prevalence of reported loneliness was amongst 18-24 year olds** (32% vs 21% mean of other Vic adult age groups).

Life satisfaction

In response to the question “in general, how satisfied are you with your life overall”, on a 5-point scale, **75% of Cardinia Shire residents reported their life satisfaction as being high or very high compared to 77% for Victorians overall** (VPHS, 2023).

²⁵ Services including: GPs, community health, psychiatric, hospitals, employee assistance programs, school counselling services, nurse-on-call etc.

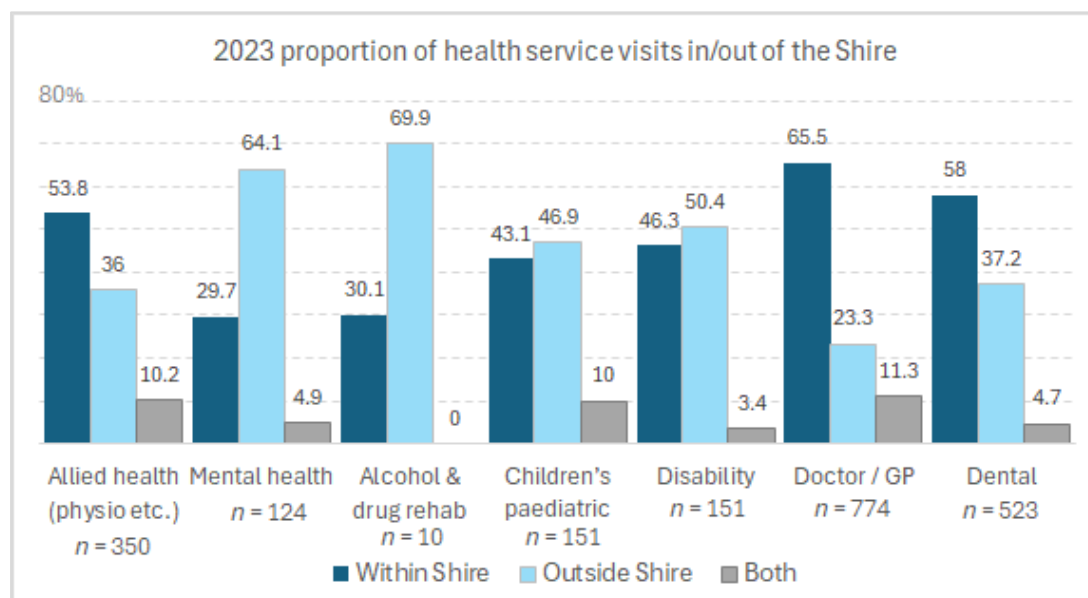
²⁶ Kessler Psychological Distress Scale – score of 22+

Community infrastructure and services

Health Services

The 2023 Cardinia Shire Liveability Survey participants were asked whether they had used any of a range of health services within the past 12 months and whether their visitation was within or outside of the Shire. Figure 8 shows the percentage of service use within *versus* outside of the Shire, as well as both within and outside the Shire (totals less than 100% indicate 'don't know' responses).

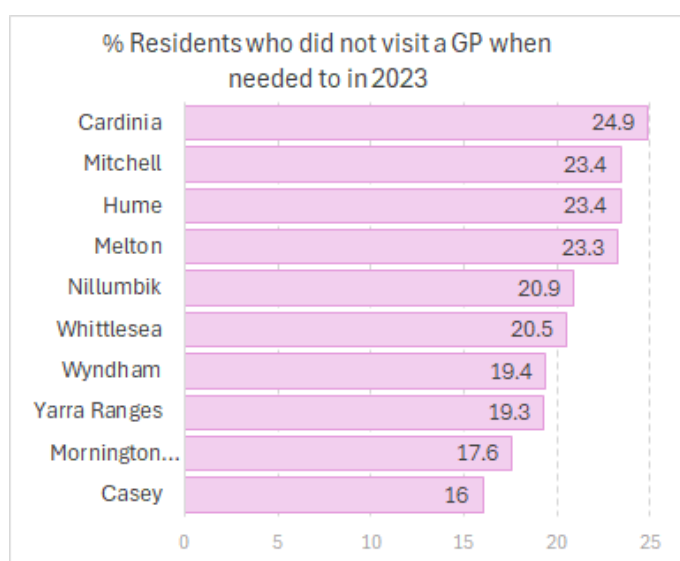
Figure 9: Percentage of health service use within versus outside the Shire in 2023



Source: Cardinia Shire Liveability Survey 2023

The largest variance between greater service use outside rather than within the Shire was that for **Alcohol & drug rehabilitation services (70% outside – 30% within)**, though the sample size was only 10, followed by **mental health services (64% outside – 30% within)**. The health services visited more often within the Shire were that of doctors/GPs, followed by dental services and allied health services.

Figure 10: Proportion of Interface Council residents unable to visit a GP when needed in 2023



Source: VPHS 2023 (early data release to MAV)

In the financial year 2023-24, 85% of residents 0-24 years old attended a general practitioner service (GP), while 85% of 25-44 year olds attended, 93% of 45-64 year olds and 100% of those over 64 years of age attended (AIHW, 2023). The Public Health Information Development Unit (PHIDU) Social Atlas reported that in 2023/24 the rate of general practitioners in Cardinia Shire was 67.7 per 1,000 residents, equal third lowest of the ten interface councils and the rate of dentists was equal lowest at 32 (PHIDU, 2025).

Figure 10 reveals that **Cardinia Shire had the highest proportion of residents reporting they could not visit a GP when they needed to in 2023 compared to other**

interface councils and this was 5.4 percentage points higher than the State average (VPHS, 2023).

The majority of reasons reported, for not visiting the GP, was 'other' rather than one of the response options offered. In fact, 47% of respondents answered 'other' compared to an average of 31% across the other councils. Of the response options offered, the main reason selected was unavailability of an appointment, though the percentage responding was the smallest of the councils. Cost was not a major reason (15% of respondents vs 20% across other councils) and transport or travel distance was reported as a reason by 4% of respondents compared to 3% across the other councils.

In contrast, **the cost of dental treatment appeared to affect Cardinia shire residents more than the average Victorian, with 42.8% delaying or avoiding visiting a dentist due to cost in the past 12 months compared to the Victorian average of 32.3% of the population (VPHS, 2023).**

According to the 2023 VPHS, **44.2% of the Cardinia Shire population had private health insurance cover, noticeably lower than the state average of 52.3%.**

Housing

According to the 2021 census of population and housing, **Cardinia Shire's rate of homelessness was 574 per 100,000 persons - slightly less than the median of the ten interface councils (649, table 5) but higher than in 2016 (461)²⁷** and one in 16-17,000 was sleeping rough, slightly less than that reported in 2016.

Findings from Cardinia Shire's Liveability Survey reveal that **the proportion of residents reporting having seen homeless persons in their local area has steadily increased over time (22% in 2019, 30% in 2021, 44% in 2023) and approximately 16% of residents report they or a family member or friend had required housing support, similar to 2019 (17%) (Cardinia Shire Council, 2023a).**

In 2023, the percentage of Cardinia Shire residents reporting spending more than 50% of their household income on rent or a mortgage was nearly triple that reported in 2021 and double that reported in 2019. Using the typical definition of affordable housing²⁸, 56% of residents are potentially living in unaffordable housing, compared to 41% in 2021 and 37% in 2019 as depicted in figure 11 (Cardinia Shire Council, 2023a).

Table 5: 2021 rate of homelessness (per 1,000 persons)

LGA	RATE
Hume	1096
Casey	1096
Wyndham	892
Melton	783
Whittlesea	723
Cardinia	574
median	574
Yarra Ranges	491
Mitchell	460
Mornington Peninsula	379
Nillumbik	216

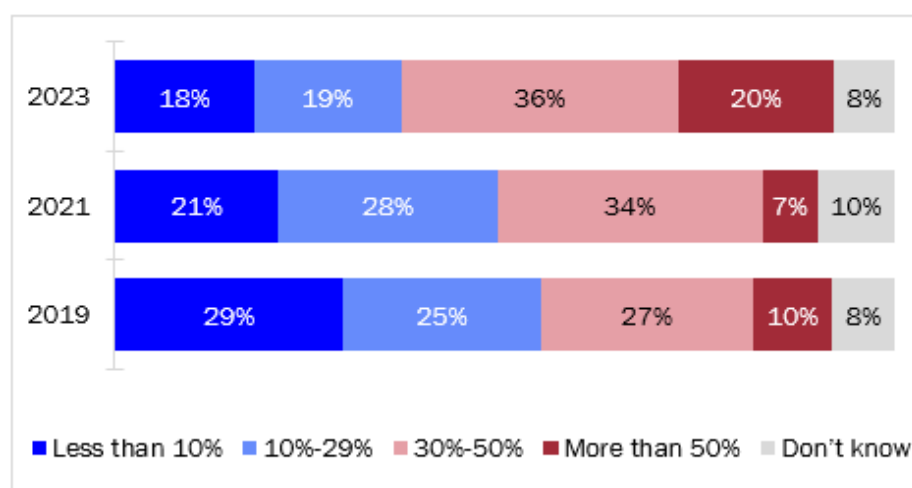
Source: ABS 2021 CPH

When considering household income and therefore, ability to pay for housing, it's estimated that around 16% of households in Cardinia Shire versus 13% of households Victoria-wide, experienced housing stress in 2021. This is defined as when households earning in the bottom 40% of incomes, pay more than 30% of their income on housing costs. This consists of 17% of mortgaged households, and 42% of rented households. (2021 Census)

²⁷ The 2016 rate is based on ABS SA3 area 'Cardinia', whereas the 2021 rates are based on Local Govt Areas (LGAs), as LGA data was not available for 2016 - the difference is negligible, however.

²⁸ Less than 30% of income spent on housing ([Understand affordable rental housing | NSW Government](#), accessed 24/6/2025)

Figure 11: Proportion of household income spent on housing (rent, mortgage) in Cardinia Shire



Source: Cardinia 2023 Liveability Survey Report

The 2021 census reported that residents who rented in Cardinia Shire were almost twice as likely as mortgage holders to be paying more than 30% of their income on their housing, and 0.8% of dwellings were owned by a government or community housing provider. In 2023 Cardinia Shire residents were reportedly less satisfied with their rental accommodation compared to the State on average, with 14% responding that they were dissatisfied or very dissatisfied compared to 8% and 76% responding that they were satisfied or very satisfied compared to 81% (VPHS, 2023).

Education

Formal Education

In 2021, 52% of residents reported having completed year 12 or equivalent, 57% had completed a diploma or vocational qualification and 31% had completed a university qualification. Overall, as displayed in table 6, **74% of residents had attained year 12 or certificate II or higher, which was the median or average proportion of the ten interface councils. 8% of the Shire's 15-24 year olds were reported as being disengaged from education, training or employment, compared to 7.5% State average (ABS, 2021).**

Early Development

The Australian Early Development Census (AEDC) is a Federal Government nationwide data collection of early childhood development at the time children commence their first year of full-time school. It is held every three years and involves teachers completing a research tool, the Australian version of the Early Development Instrument. The Instrument collects data relating to five key domains of early childhood development:

- Physical health and wellbeing
- Social competence
- Emotional maturity
- Language and cognitive skills (school-based)
- Communication skills and general knowledge

The AEDC domains have been shown to predict later mental health, wellbeing and academic success (AEDC, 2025).

Table 6: Proportion of residents having attained Yr 12 or Cert II or Higher in 2021

LGA	%
Nillumbik	81%
Wyndham	79%
Yarra Ranges	74%
Casey	74%
Mornington Pen.	74%
Cardinia	74%
Whittlesea	73%
Melton	73%
Hume	71%
Mitchell	69%
Median	74%

Source: ABS 2021 CPH

In 2024, 24% of Cardinia shire's 1st year primary school children were deemed vulnerable on one or more of the AECD domains compared to 19% in 2021. The 2024 finding was the same as that for Australia (24%) and slightly higher than for Victoria (22%). In 2024, children deemed vulnerable on two or more domains comprised 13% of Cardinia Shire's 1st year primary students compared to 9% in 2021. The 2024 finding was similar to that for Australia (13%) and Victoria (12%).

The increased proportion of Cardinia Shire's children on the domains of vulnerability, between 2021 and 2024 were found to be statistically significant and were greater than the increases reported for Victoria or Australia for the same period.

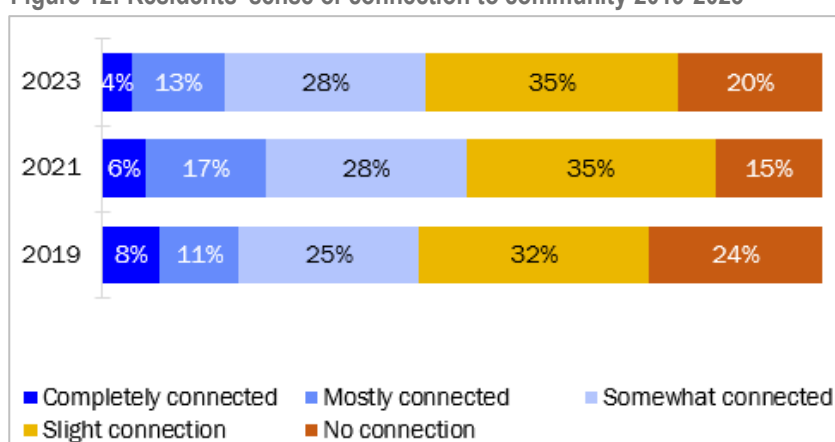
Social cohesion

Sense of connectedness

2023 Liveability Survey participants were asked about the level of connection they felt to their local community, the land they live on, various cultural connections and whether the level of connection was 'enough for them'.

There was a decrease in the proportion feeling completely or mostly connected to their community, from 23% in 2021 to 17% in 2023.

Figure 12: Residents' sense of connection to community 2019-2023



Source: Cardinia Shire Liveability Report, 2023

There was a similar increase in those who reported having no connection, while 22% reported that their level of connection to community was 'not enough', second only to their connection with Australian indigenous culture not being enough (26%) (Cardinia Shire Council, 2023a).

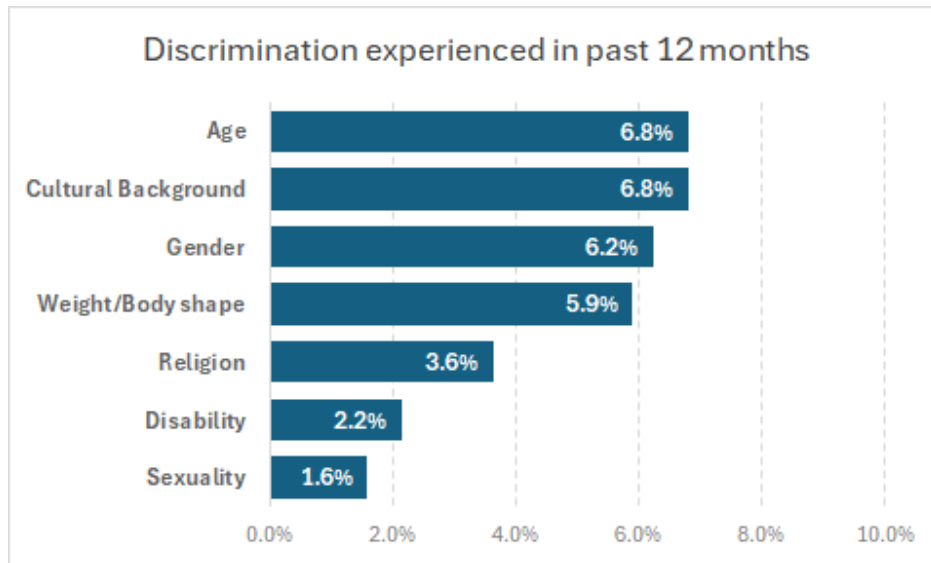
42% of residents reported that they definitely felt valued by society compared to 48% of all Victorians (VPHS, 2023)

Discrimination

A likely source for feelings of disconnectedness with the local community is the experience of discrimination. Discrimination refers to the prejudicial or unjust treatment of groups of people, based on different factors of their identity including, but not limited to: race, age, gender, sexuality, and disability. Whether intentional or unconscious, discrimination negatively impacts the health and wellbeing of those experiencing discrimination.

In 2023, 23% of liveability survey respondents reported having experienced one or more types of discrimination in the previous 12 months (Cardinia Shire Council, 2023a). Figure 13 reveals the main types of discrimination reported by respondents in 2023 (Cardinia Shire Council, 2023b). However, discrimination was reportedly experienced by 31% of those who speak a language other than English at home due to their cultural background (versus 2% English only), 15% of those aged between 60-69 and 11% of those aged 70+ due to age (versus 7% of all ages), and 9% of females due to gender (versus 3% males).

Figure 13: Proportion of respondents who experienced discrimination in prior year by type



Source: Cardinia Shire Liveability Survey, 2023

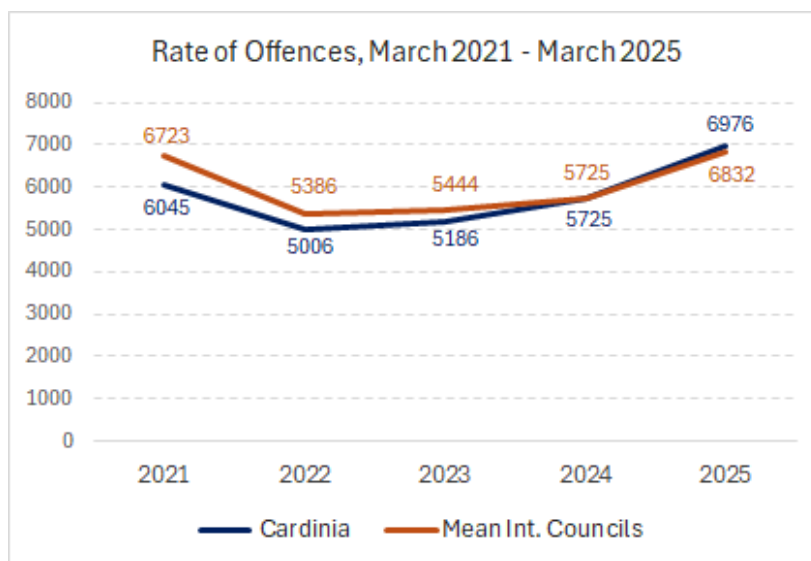
56% of residents agreed that multiculturalism ‘definitely makes life in their area better’ compared to 67% of all Victorians (VPHS, 2023).

Safety

Crime

In 2023, 18% of residents reported they or their family had experienced negative effects from crime or safety issues, 14% from anti-social behaviour and 6% from vandalism (Cardinia Shire Council, 2023b). These findings are similar to those from 2021, though there was a slight drop in reported vandalism (8% in 2021). Appendix 3 graphically depicts the count of offences and rate of criminal incidents across the Shire in 2023-2025.

Figure 14: Criminal offence rates – Cardinia Shire vs Interface Councils



Source: Crime Statistics Agency, Latest crime data by area, 2025

Criminal offences in Victoria are reported by years ending in March. Figure 14 shows that the rate of criminal offences (per 100k residents) in the Shire has been slowly increasing since March 2022 and, as of March 2025, has slightly surpassed the average of the ten interface councils (Crime Statistics Agency, 2025).

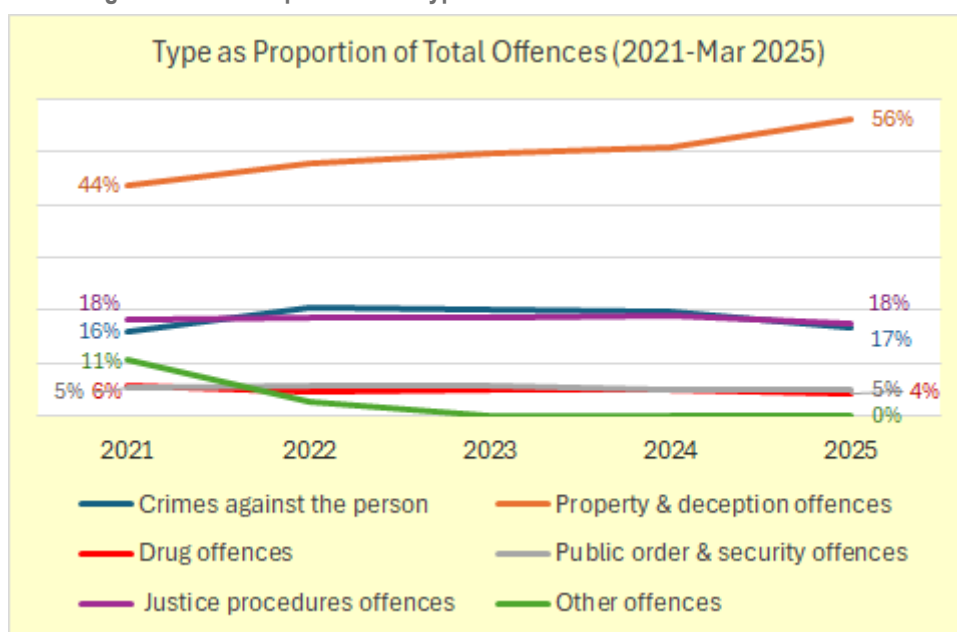
Figure 15 below reveals that property and deception offences are consistently the majority of offences committed and are the only offence types

to have increased proportionally since March 2021. The drop in offences categorised as ‘other’ was due to a large spike in 2020, and subsequent drop, in public health and safety offences; it is almost certain the increase and decrease was due to Covid-related Chief Health Officer breaches²⁹.

Property and deception offence types include: arson, property damage, burglary/break & enter, theft, deception and bribery. From March 2022 to March 2025, there was little variance in the proportions of the various property and deception offences, meaning that they all contributed fairly evenly to the increased rate from 2022, with the exception of bribery offences of which none have been recorded.

Within the property offence type sub-group, **the offence that has increased recently is that of stealing from a motor vehicle, which has increased as a proportion of property offences from 18% in 2021-2024 to 25% in the year ending March 2025.**

Figure 15: Break up of offence types recorded in Cardinia Shire since 2021



Source: Crime Statistics Agency, Latest crime data by area, 2025

Travel

Carriageways

According to Victorian road crash data, **from January 2023 through September 2024 there were 561 road accidents in Cardinia Shire, with 727 injuries and 9 fatalities** as a result (Data Vic, 2024). Appendix 4 provides a map of fatal and injurious accidents in the Shire for this period and shows that **5 of the 9 fatalities were in the North-West ‘Hills’ area of the Shire.** Traffic Accident Commission (TAC) data shows that for the year ending September 2024 Cardinia Shire:

- Had no passenger, pedestrian or cyclist fatalities on its roads compared to an average of 2 across all interface councils
- Had 1 driver fatality compared to an average of 3 across interface councils
- Had many more motorcyclist fatalities - 6 compared to an average of 1.6 across interface councils

(T.A.C., 2024)

²⁹ See: [Police-recorded crime trends in Victoria during the COVID-19 pandemic: update to end of December | Crime Statistics Agency Victoria](#)

More recent data covering the **full 2024 calendar year** shows that there were **11 fatalities**: 5 driver, 4 motorcycle, 1 passenger and 1 pedestrian (Transport Victoria, 2025).

The Princes Highway is the carriageway that experiences the most vehicular accidents in the Shire, more than 1.5 times any other, as detailed in Table 7.

A list of carriageways where 5 or more accidents occurred between January 2023 and September 2024 and their general locations is provided at Appendix 5.

Table 7: Carriageways where 15+ accidents occurred between Jan. 2023 & Sept. 2024

Carriageway	Accidents
Princes highway	81
Princes freeway	51
Gembrook-launching place road	21
Cardinia road	20
South gippsland highway	17
Belgrave-gembrook road	16
Beaconsfield-emerald road	15

Source: Data Vic, Victorian road crash data

Footpaths

Resident ratings of the safety of the footpaths they use in the Shire has been slowly but steadily increasing - from 49% rating their safety as good or very good in 2019 to 59% in 2023, and from 16% and 18% rating them poor or very poor in 2019/21, to 15% in 2023 (Cardinia Shire Council, 2023a).

Cycle paths

Of respondents to our 2023 survey who owned a bicycle, 39% reported that a lack of safe bike lanes in their area was a barrier preventing them from cycling more, down from 45% in 2021, and **19% reported that driver behaviour was also factor**, similar to residents in 2021 (Cardinia Shire Council, 2023a).

Accidents

Falls

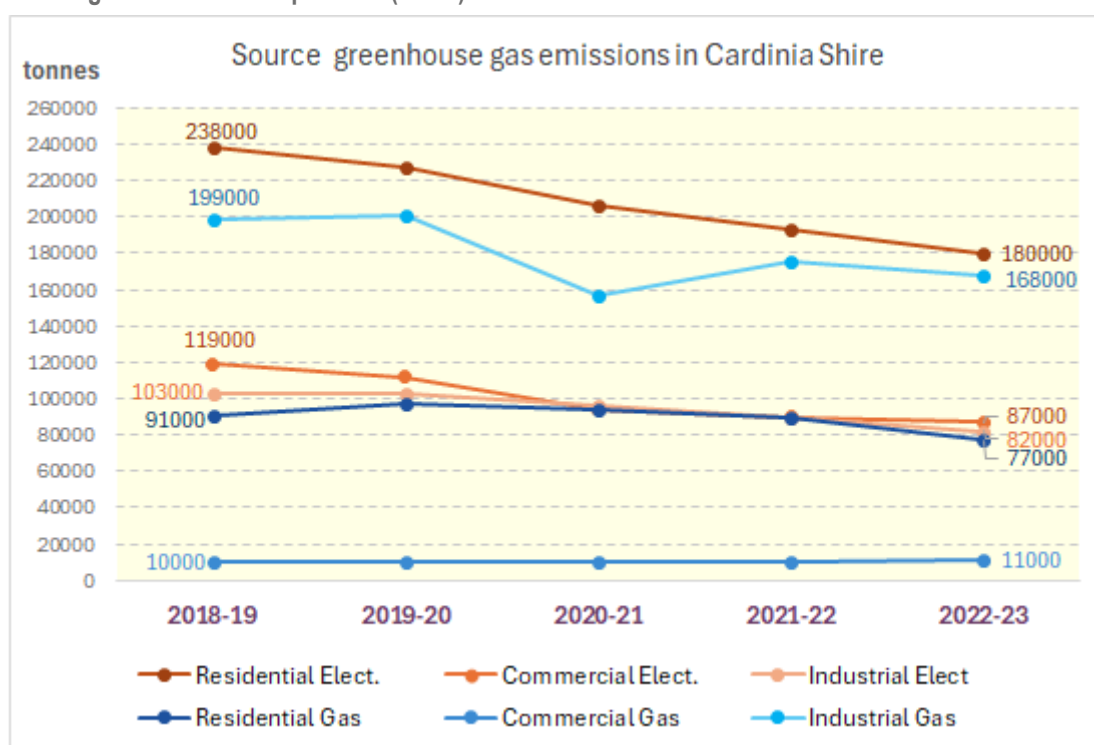
From 2018 to 2022, **‘accidental falls’ was sixth out of the 20 leading causes of death in the Shire, at a rate of 17 per 100,000 residents** (age standardised) - **this was more than one and a half times the national rate**. The crude rate in Cardinia was 14 for males and 16 for females (Australian Institute of Health & Welfare, 2022).

The Environment

Greenhouse Gas Emissions

As can be seen in figure 16 below, **greenhouse gas emissions from Cardinia Shire are slowly decreasing**, with the exception of that from natural gas in the commercial sector (Snapshot Climate, 2023)³⁰. The most noticeable decrease is that from residential electricity consumption, which is likely due to uptake of solar panels.

Figure 16: Carbon equivalent (CO₂e) source emissions in Cardinia Shire 2018/19 – 2022/23



Source: Snapshot Climate, 2025

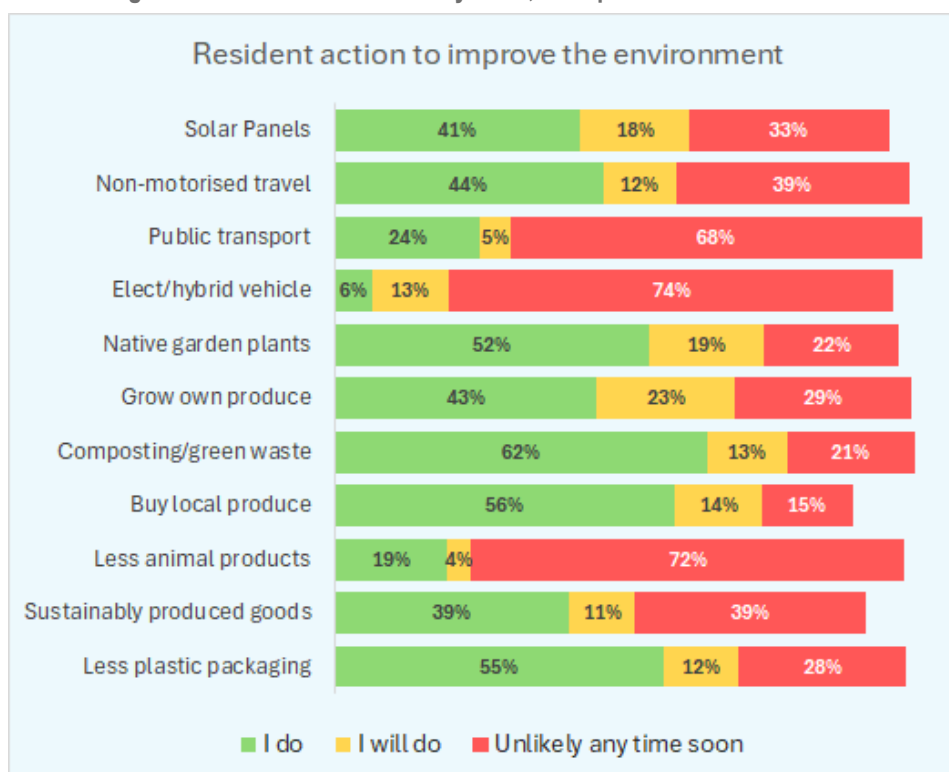
Actions to improve the environment

Residents were asked which of a range of actions they had taken or were likely to take to help improve the health of the environment (Cardinia Shire Council, 2023b). Of those who definitively responded¹⁶, **the least likely action to be taken in the foreseeable future was purchasing an electric or hybrid vehicle (74%)** followed by **eating less animal products (72%)** and **using public transport (68%)**, as shown in figure 17 below.

The **most common actions already taken** were **composting or use of green waste bins (62%)** followed by **buying local produce (56%)** and **buying goods with less plastic packaging (55%)**.

³⁰ "Emissions data is partially modelled and therefore approximate and not suitable for detailed monitoring" (Snapshot Climate)

Figure 17: Actions taken or likely to be, to improve our environment³¹



Source: Cardinia Shire Liveability Survey, 2023

Healthy Eating and Active Living

Healthy Eating

In 2023, **61.5% of adult residents reported not meeting the recommended guidelines for daily intake of fruit and vegetables**³². This proportion is similar to that reported across Victoria (age adjusted), and **the proportion of males not meeting guidelines was 10 percentage points greater than that of females** (VAHI, 2023).

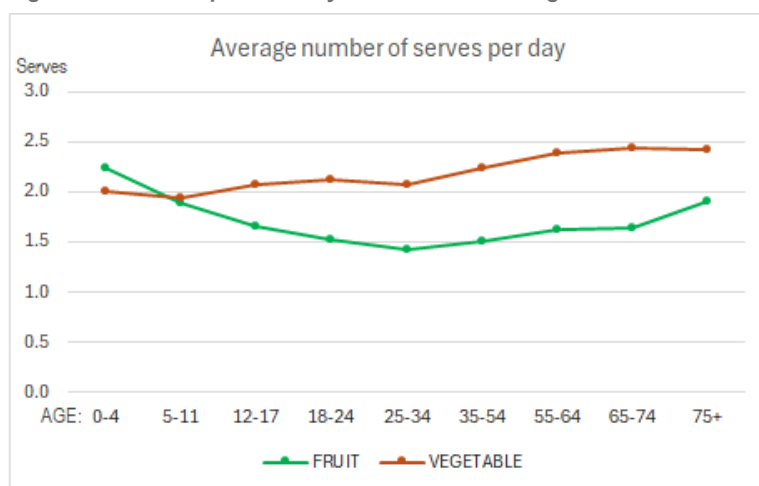
The Shire's Liveability Survey also collects information on residents' daily intake of fruit and vegetables, however, it is not comparable with the VPHS data due to using different guidelines and serving sizes. The Liveability Survey's findings include that **there appears no variance between the overall reported fruit and vegetable intake in 2023 compared to 2021** (Cardinia Shire Council, 2023b). There appear no sizeable trends in the Liveability Survey data, though **female residents over the age of 54 appear to be eating half a serve of vegetables less per day in 2023 compared to 2021**.

Figure 18 below, depicts the average intake of fruit and vegetables by age in the Shire in 2023, and reveals that, unlike vegetable intake which slowly increased with age, the **average fruit intake decreased from age 5 to age 34** before slowly rising in middle to older age.

³¹ Percentages do not total 100% due to 'don't know' and missing responses being excluded

³² 5-6 x 75 gram serves of vegetables & 2 x 150 gram serves of fruit per day (VAHI - <https://vahi.vic.gov.au/reports/victorian-population-health-survey-2023> accessed 8-8-2025)

Figure 18: Mean reported daily intake of fruit & vegetables in 2023



Source: 2023 Cardinia Shire Liveability Survey

The consumption of fast food appears to have decreased in the Shire from 2021 to 2023.

While the proportion of residents eating fast food daily or most days has remained similar over time (2.7% in 2021 vs 2.2% in 2023), the proportion of residents eating fast food more than once a week decreased by 12 percentage points from 46% in 2021 to 34% in 2023 (Cardinia Shire Council, 2021), (Cardinia Shire Council, 2023b).

Similar to the consumption of fast food, the consumption of sugar sweetened drinks appears to have decreased between 2021 and 2023. The proportion of residents reporting consumption of sugar sweetened drinks daily or most days decreased slightly from 15.5% in 2021 to 13.5% in 2023, however, the proportion consuming them 1 or more times per week decreased from 42% to 32%. However, the 2023 VPHS survey found that **41% of Cardinia Shire residents reported consuming sugar sweetened drinks several or more times per week, compared to 34% across the State.**

Another indicator of healthy eating and active living is whether residents grow their own produce. In 2023, **43% of Cardinia Shire residents reported growing their own fruit or vegetables**, with a further 23% suggesting they intended to grow their own produce in the near future and 29% revealing they did not intend to (Cardinia Shire Council, 2023b).

Active Living

The VPHS reports on Victorians' self-reported physical activity levels using the measure of 2.5 hours of "moderate intensity physical activity" per week for adults 18 to 64 years. This is in line with the national physical activity guidelines (Commonwealth Department of Health, Disability & Ageing, 2025).

While 34% of residents reported 2.5 hours or more of moderate to vigorous physical activity per week compared to 35% state-wide, **66% reported less than the recommended 2.5 hours compared to 64% state-wide.** 16% reported completing little physical activity compared to 17% state-wide (VAHI, 2023).

The time spent sitting has been associated with increased risk of heart disease, diabetes, some cancers and poor mental health³³. The 2023 VPHS shows that the proportion of **Cardinia Shire residents who reported sitting for seven or more hours per day was less than that of Victorians generally** (25% vs 33% age adjusted). The difference in the proportion of Cardinia Shire residents sitting for less than seven hours per day was statistically significant (VAHI, 2023).

The 2021 census asked what mode of travel respondents used to travel to work. Cardinia Shire residents who worked away from home reported similarly to that of the ten interface councils generally, with **4% reporting they used public transport, 2% walking or riding and 94% using powered vehicles to get to work.**

³³ For example, see <https://www.betterhealth.vic.gov.au/health/healthyliving/the-dangers-of-sitting>

Of the residents not prevented by a physical disability, **31% reported that they walked, rode or scooted to a range of common activities, while 68% preferred to use their car³⁴. Only 1% reported using public transport** (Cardinia Shire Council, 2023b). 65% of residents reported using active transport to participate in non-competitive exercise, 53% to children's playgrounds, 46%% to visit parks and 37% to off-lead dog parks. However, **less than 25% used active transport to the other activities which included shopping and visiting native bushland**. Of the activities where residents reported **driving outside of the Shire, the highest proportion was for non-grocery shopping (57%) followed by travel to cultural events (42%)**. There were various reasons given for not using active transport (walking, riding or scooting) as can be seen in Table 8.

Table 8: Reasons given for not using Active Transport
(proportion of respondents)

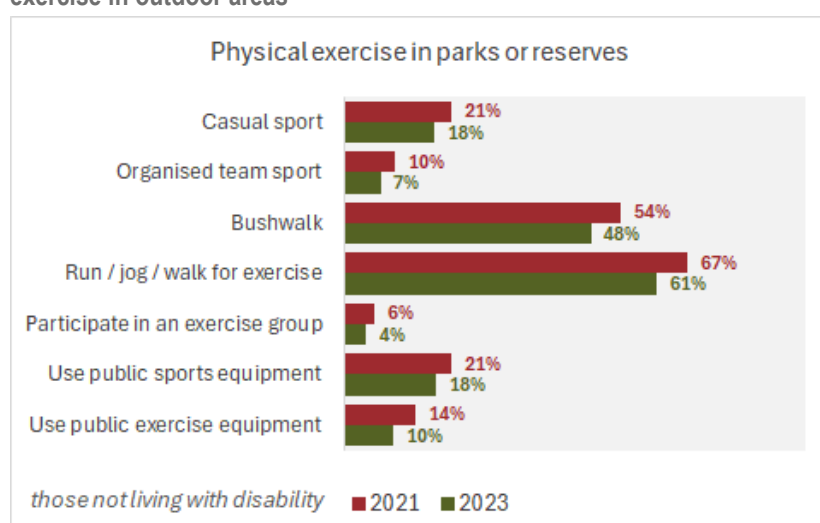
Reason	%
Weather	30
Too much to carry	28
I prefer to use my car	27
Takes too long	25
Nothing within walking / riding distance	23
Poor connectivity (paths not continuous)	20
Don't have a scooter	18
Poor quality footpaths (uneven surface, cracks, slippery etc)	18
Poor lighting	18
No bike paths	18
No footpaths around me	16
Don't have a bike	16
Driver behaviour makes it unsafe	11
People who are troublemakers on route	11
No appropriate pedestrian crossings	10
Unsafe bike paths	8

Source: 2023 Cardinia Shire Liveability

Of the reported constraints to walking, riding or scooting, that were related to infrastructure, the main barriers to using active transport appear to be the **poor connectivity of paths (20% of respondents), poor quality of footpaths (18%), poor lighting (18%) and that there are no bike paths (18%) or footpaths (16%) near them**.

Outdoor exercise by residents appears to have diminished slightly from 2021 to 2023 (Cardinia Shire Council, 2021), (Cardinia Shire Council, 2023b). Figure 19 highlights small decreases of between 2% and 6% in various exercise activities in outdoor spaces reported by residents not living with a disability in 2023.

Figure 19: Proportion of respondents not living with disability by physical exercise in outdoor areas



Source: 2021 & 2023 Cardinia Shire Liveability Survey

³⁴ Only responses of 'drive locally within Cardinia Shire' are included - responses of 'drive outside of Cardinia Shire' are excluded

Family violence

In 2023, **44% of residents reported believing that family violence was a serious problem**, which was similar though three percentage points up from the 41% in 2021 (Cardinia Shire Council, 2023a).

Generally, the perception in our community about the prevalence of family violence in 2023 was virtually the same as in 2021, with **36% of Liveability Survey respondents believing that family violence is very or extremely common, including 29% of males and 45% of females**. However, for the first time in the last three iterations of the Liveability Survey, **11 respondents believed that family violence was non-existent in their community** (Cardinia Shire Council, 2023a). Table 9 reveals that the majority of these respondents were male (7) and were under 35 years of age (4 male, 3 female).

Table 9: 2023 Liveability Survey respondents reporting their belief that family violence did not exist in their community

	Male	Female	Total
Under 35	4	3	7
35-49	2	1	3
70+	1	0	1
	7	4	11

In 2023, **2% of respondents said that family violence had had a negative impact on themselves or their family in the 12 months prior to survey**, slightly down from 3% in 2021 and 2019. Furthermore, in 2023, 1% said they had used family violence support services in the 12 months prior to interview, a similar proportion to that recorded in 2021 (not asked in 2019). **Seven of the 12 responding that they had used a family violence support service reported it as being outside of Cardinia Shire**, with 2 being within the Shire and 3 not knowing.

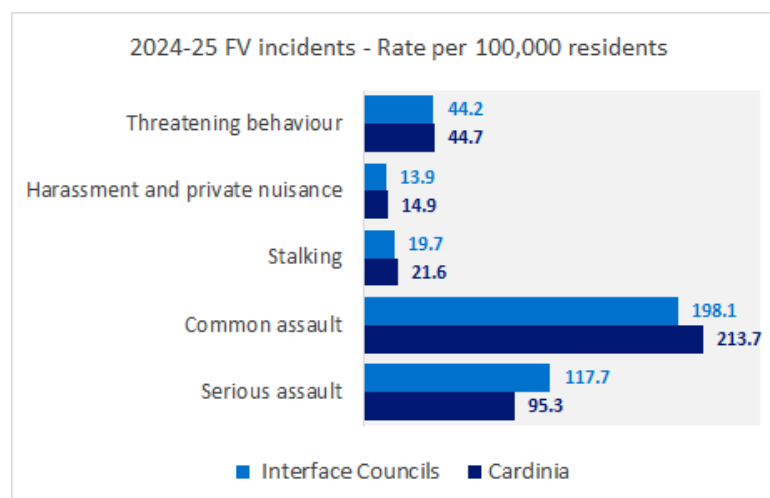
For the year ending March 2025, the rate of reported family violence incidents³⁵ per 100,000 residents in Cardinia Shire was similar, though slightly less, than the average of the ten interface councils (390 vs 394). However, the number of family incidents reported in 2025 was 19% higher than in 2024.

As can be seen in Figure 20 below, **the rate of family violence serious assaults in Cardinia was somewhat less than interface councils collectively but the rate of common assaults was greater** (Crime Statistics Agency, 2025). The majority of the reported family violence common assaults in 2024-25 occurred in Pakenham (162), nearly four times that of the suburb with the next highest count, being Officer with 45.

In terms of total family violence related offences, which outnumber FV-coded incidents: **Cardinia shire has seen an increase in the rate per 100,000 persons between 2022-23 (1,549) and 2023-24 (1,713) with virtually no increase in the rate Victoria-wide for the same period**. Also revealed, is that **there were 1,057 breaches of family violence orders in Cardinia in 2023-24** and that while the country of birth of 49% of victims was unknown, **42% of victims were known to be born in Australia with the remaining 9% being born overseas** (Crime Statistics Agency, 2025).

³⁵ Recorded incidents where offences are coded specifically as family violence (FV). Breaches of family violence orders are not included. Incidents can involve multiple offences, including of the same type.

Figure 20: Rate of reported family violence incidents in the year ending March 2025 by principal FV offence type



Source: Crime Statistics Agency, 2025

Financial wellbeing and resilience

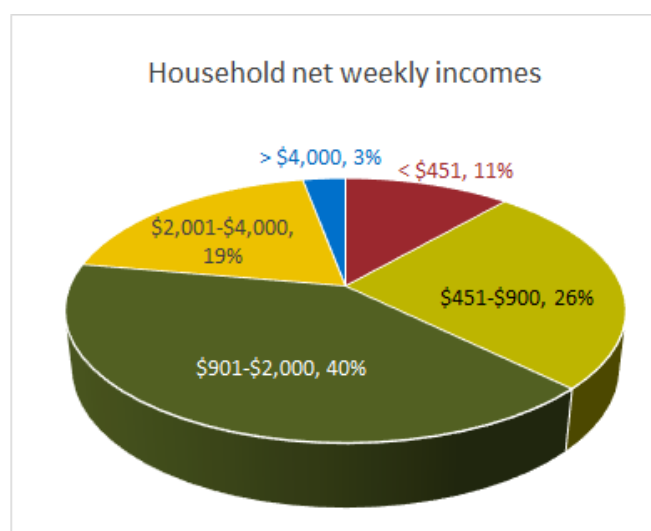
Income

In 2023, of residents willing to state their income **the largest proportion reported a weekly household income of between \$901 and \$2,000 per week (40%)**. As illustrated in Figure 21, 11% reported the lowest income band (less than \$451 per week) and 3% the highest, more than \$4,000 per week (Cardinia Shire Council, 2023b).

Weekly incomes appear to have increased slightly from the 2021 to the 2023 Liveability Survey, with 41% of respondents reporting a net household weekly income of less than \$901 in 2021 compared to 37% in 2023.

In June 2023, 4.1% of residents aged between 22-64 years were receiving JobSeeker Payments, while 2.6% of young people aged 16-21 years were receiving a youth allowance. 4.2% of families with children were classified as low income, welfare dependant; these families and their children are more likely to have poorer educational outcomes, experience housing stress and have poorer wellbeing (physical and mental).³⁶ This equated to 9% of children aged under 16 years old belonging to families who were welfare dependant, the same as the Victorian average of 9% (PHIDU, 2025).

Figure 21: Approximate weekly income of residents in 2023



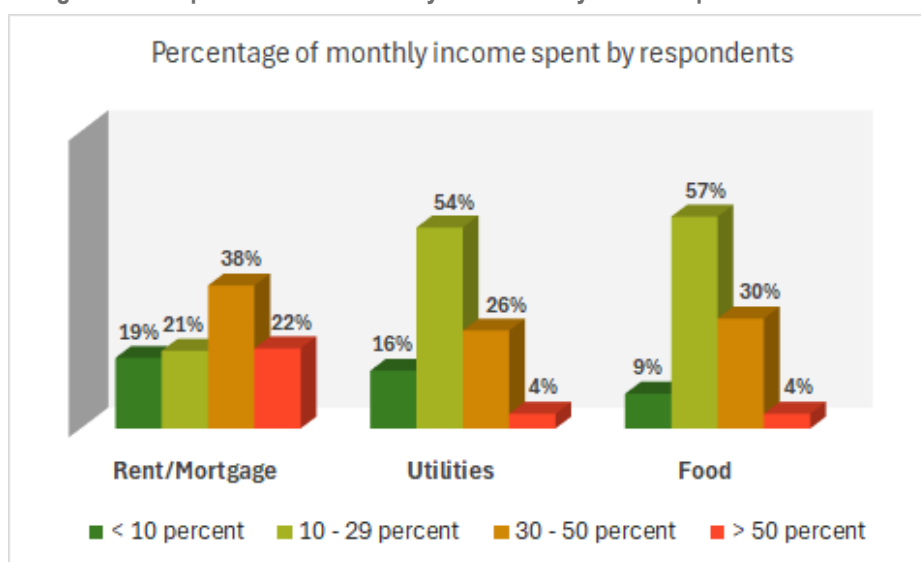
Source: 2021 & 2023 Cardinia Shire Liveability Survey

³⁶ Barnett M. Economic disadvantage in complex family systems: expansion of family stress models. Clin Child Fam Psych Rev. 2008;11(3):145-61

Cost of Living

Participants in the 2023 Liveability Survey were asked about their main costs as a percentage of their monthly income. Figure 22 illustrates that the main burden is the cost of housing, where **22% of those who could respond³⁷ reported spending more than 50% of their income on their rent or mortgage** and 38% of respondents reported spending 30% to 50% on their housing.

Figure 22: Proportion of residents by % of monthly income spent on necessities



Source: 2021 & 2023 Cardinia Shire Liveability Survey

Applying a contemporary formula that defines housing stress³⁸ to the Liveability Survey data, results in an estimate that **12% of those who reported their spending had experienced housing stress**. The 2023 Liveability Survey report found that the proportion of **respondents spending 30% or more on housing had increased 15 percentage points from 2021 to 2023**. While this increase is worth noting, 24% of these respondents reported household incomes in excess of \$2,000 per week and 4% reported incomes greater than \$4,000 per week, allowing the possibility that they might desire and/or have the capacity to pay for less affordable housing; respondents reporting they did not know the percentage of their income spent on housing were also included in the calculation.

Table 10: Proportion of respondents who experienced negative financial impacts in the previous twelve months

Personally Experienced:	%
Ran out of food due to no money	6%
Couldn't afford to pay bills	14%
Couldn't afford rent/mortgage	8%
Needed housing support	3%
Few rental properties within budget	8%
Few houses for sale within budget	16%

Source: 2023 Cardinia Shire Liveability Survey

Results of other indicators of the cost of living are presented in Table 10. While all these results are marginally higher than in 2021, the most notable is that **14% of respondents reported not being able to pay bills at some point within the last 2 years compared to 10% in 2021** (Cardinia Shire Council, 2023b).

Of the 52 who responded 'yes' to the question 'ran out of food and couldn't afford to buy more', 44 (85%) also responded 'yes' to the question 'there just isn't enough money for food'.

³⁷ Some participants reported not knowing the % of income spent and/or did not answer

³⁸ The 30:40 indicator, where the definition applies to those with income in the lowest 40% of the income distribution and pay more than 30% of their income on housing costs (Australian Housing & Urban Research Institute, 2025)

5% of those who responded 'no' to having run out of food also responded that there isn't enough money to buy food, suggesting that while not necessarily running out of food they could not afford as much as needed or desired. The 2023 Liveability Survey Report found that all these indicators showed an increase from the previous year, in the proportion of respondents reporting negative impacts - **from an increase of 1 percentage point in needing housing support to 6 percentage points in being unable to afford to pay bills**. The report also found that the proportion of respondents reporting they had accessed financial or food support services in the past year was approximately the same as in 2021, however **those accessing housing support services increased slightly from 0% in 2021 to 2% in 2023**.

Employment

6% of 2023 Liveability Survey respondents reported that unemployment had negatively impacted them or their family in the previous 12 months and 9% responded that under-employment had.

Table 11: Quarterly unemployment rates by SA2

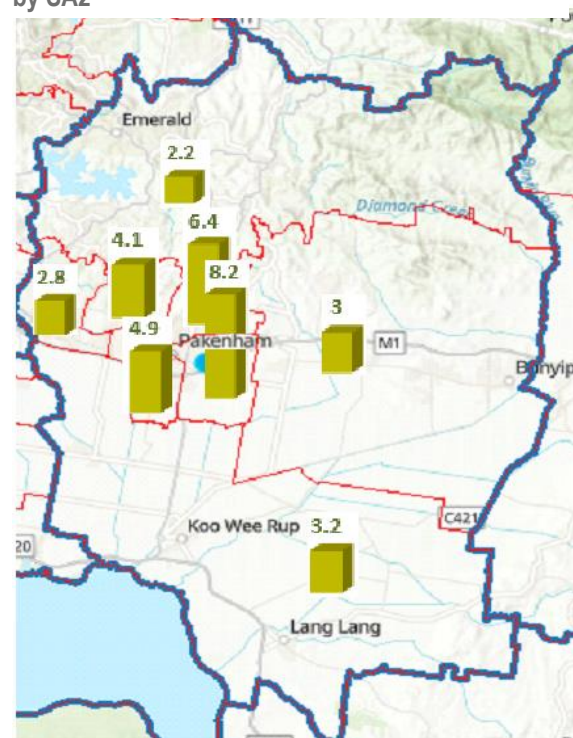
SA2 area	Jun-24	Sep-24	Dec-24	Mar-25
Emerald - Cockatoo	2	2	2	2.2
Beaconsfield - Officer	2.3	2.4	2.4	2.8
Bunyip - Garfield	2.8	2.9	2.8	3
Koo Wee Rup	3	3	2.9	3.2
Pakenham - North East	5.5	5.7	5.8	6.4
Pakenham - North West	3.6	3.6	3.7	4.1
Pakenham - South East	7.5	7.9	7.8	8.2
Pakenham - South West	4.3	4.4	4.4	4.9

Department of Employment & Workplace Relations, 2025

Table 11 lists the unemployment rate by statistical area 2 (SA2) within Cardinia Shire for the June 2024 - March 2025 quarters (Department of Employment & Workplace Relations, 2025).

It shows that rates are slowly increasing and that **the highest rate of unemployment is concentrated in the general Pakenham area, though it is clearly highest in Pakenham South-East (8.2)**. For the March 2025 quarter, the **average unemployment rate across Cardinia Shire SA2s was 4.4%** similar to the **Victorian-wide rate of 4.6%** (Department of Treasury & Finance, 2025).

Figure 23: 2025 March quarter unemployment rates by SA2

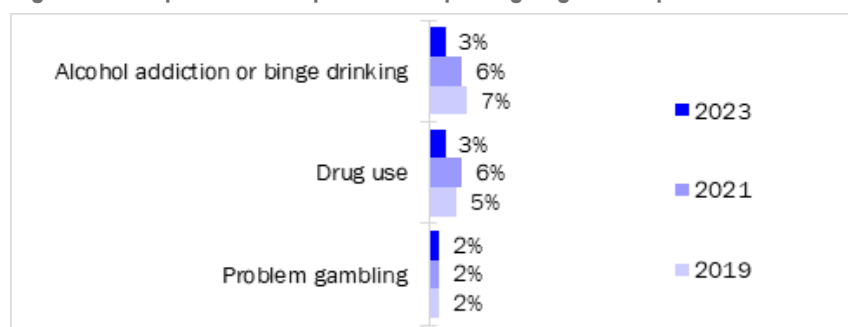


Harm from tobacco, alcohol, drugs and gambling

The 2019, 2021 and 2023 Liveability Survey of Cardinia Shire residents included self-reporting on the negative impact of excessive alcohol consumption, drug use and problem gambling.

Negative impacts from excessive alcohol consumption were reported as declining, from 7% of responses in 2019 to 3% in 2023, responses of **negative impact from drug use had declined by 3%** in 2023 and negative impact from problem gambling was reported by 2% of respondents across the three years (Figure 24 below).

Figure 24: Proportion of respondents reporting negative impacts from alcohol, drugs and gambling



Source: Cardinia Shire Liveability Survey report, 2023

Tobacco

In 2023, the proportion of Cardinia Shire residents who reportedly smoked or consumed e-cigarettes was 21% compared to the Victorian state-wide figure of 19% and 12% of residents reported smoking on a daily basis with 5% reporting they consumed e-cigarettes on a daily basis, compared to 10% and 5% State-averages , respectively (VAHI, 2023).

Smoking while pregnant is an important indicator of health as there are multiple negative effects on babies invitro and it is estimated that up to 25% of stillbirths could be caused by smoking (Red Nose Australia, 2021). The proportion of Cardinia Shire residents who smoked in the first 20 weeks of pregnancy has been slowly but steadily decreasing over past years. **In 2023 6.6% of women smoked in the first 20 weeks of their pregnancy compared to 7.3% in 2022** (Australian Institute of Health & Welfare, 2023).

The Red Nose organisation, a leader in safe pregnancy advice, reports that approximately 10% of women Australia-wide smoke during pregnancy.

Alcohol

In 2023 it was estimated that **14% of Cardinia Shire residents were at an increased risk of harm from alcohol consumption** compared to 13% Victoria-wide (VAHI, 2023). Increased risk of harm from alcohol related disease or injury is associated with drinking more than 10 standard drinks in a week, or more than 4 standard drinks in any one day³⁹.

While males reportedly consumed alcohol on a daily basis noticeably more than females, the 2023 Liveability Survey findings suggests that **daily alcohol consumption could be positively associated with age, with less than 7% of 18-24 year olds reportedly consuming alcohol on a daily basis – but steadily rising to 18% of those 75 years or older** as shown in Figure 25 (Cardinia Shire Council, 2023a).

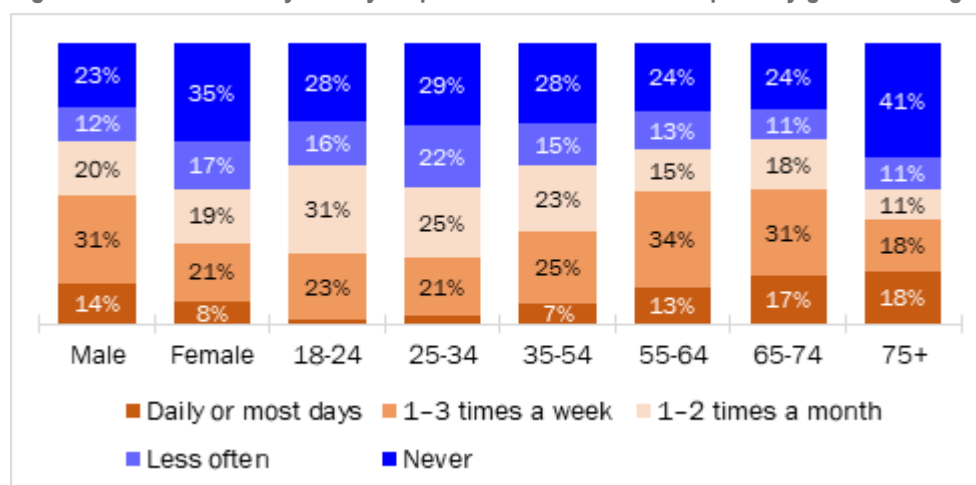
The rate of hospital admissions of Cardinia Shire residents due to alcohol, per 100,000 persons, decreased from 452 and 427 in financial years 2019 and 2020 respectively, to 366 in 2021-22 (Turning Point, 2025). The 2021-22 rate was noticeably lower than the average of the ten interface Councils (445).

In 2022/23, there were 203 alcohol-related episodes of care, per 100,000 persons, lower than the Victorian rate of 260, but second highest for the south-east Melbourne Primary Health Network catchment.⁴⁰

³⁹ See: NHMRC Health risks from drinking alcohol <https://www.nhmrc.gov.au/health-advice/alcohol>

⁴⁰ Turning Point, 2024 (AODStats), accessed via <https://aodstats.org.au/explore-data/treatment-services-vadc/>.

Figure 25: 2023 Liveability Survey respondents' alcohol consumption by gender and age



Source: Cardinia Shire Liveability Survey report, 2023

Alcohol is a leading contributor to road injuries and deaths in Victoria, with 17% of fatalities on Victorian roads involving a driver with a blood alcohol concentration of over 0.05g/100mL. This impact is more highly concentrated during the hours where people are more likely to be driving under the influence of alcohol:- Sunday 6pm – Monday 6am, Monday 8pm – Tuesday 6am, Tuesday 6pm – Wednesday 4am, Wednesday 6pm – Thursday 6am, Thursday 6pm – Friday 6am, Friday or Saturday 8pm to 6pm; this is termed 'high-alcohol hours'.

There were approximately 29 serious road injuries during 'high alcohol hours' per 100,000 residents in 2021-22; significantly higher than the Victorian rate of 13.7 (Turning Point, 2025)

Drugs

The reporting of negative impacts due to drug use decreased from 5% of residents in 2019 and 6% in 2021 to 3% in 2023 (Cardinia Shire Council, 2023a).

The rate of hospital admissions of Cardinia Shire residents due to illicit drugs, per 100,000 persons, increased from 185 in 2020-21 to 211 in 2021-22, though it was slightly less than in 2019-20 (Turning Point, 2025). The 2021-22 rate was similar to the average of the ten interface Councils (222).

In 2022/23, there were 238 Illicit drug-related episodes of care, per 100,000 persons, lower than the Victorian rate of 331, but fourth highest for the south-east Melbourne Primary Health Network catchment (Turning Point, 2025).

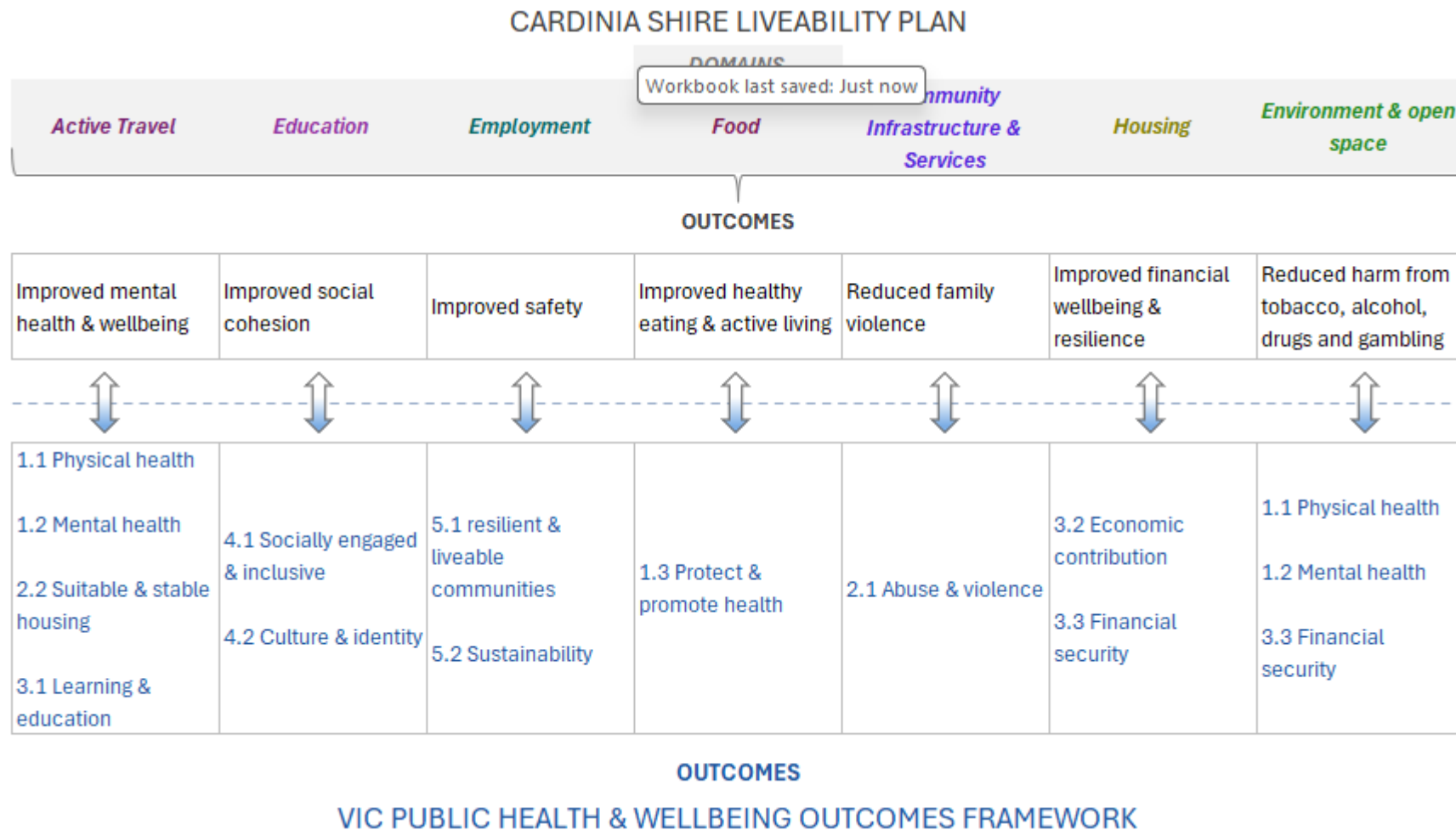
Gambling

Negative impacts due to gambling were reported by 2% of residents in 2023, the same as for 2021 and 2019 (Cardinia Shire Council, 2023a).

Losses to electronic gaming machines in the Shire increased 7% between 2023-24 and 2024-25 financial years, from \$36,831,475 to \$39,473,888 (Victorian Gambling & Casino Control Commission, 2025).

APPENDIX 1:

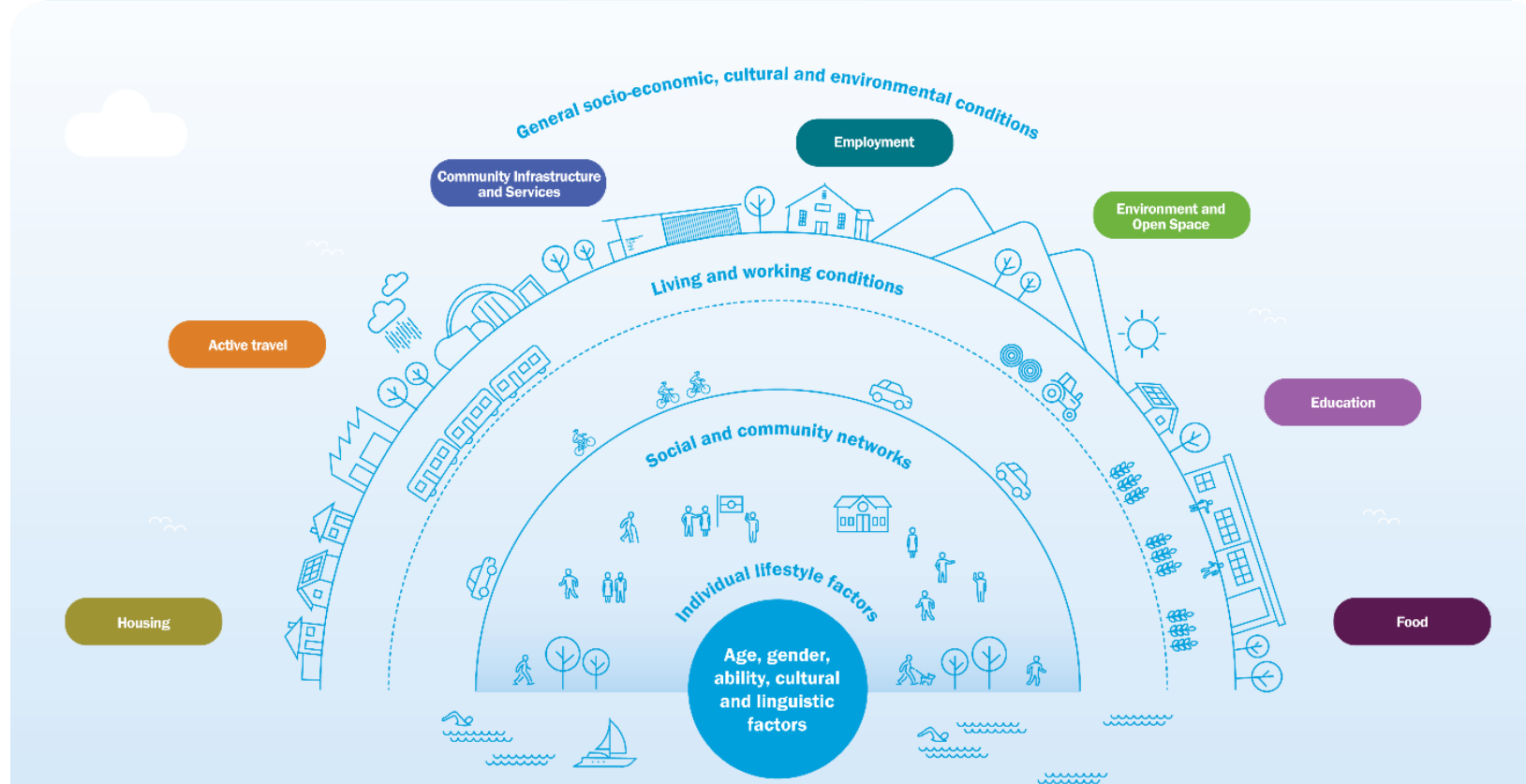
Alignment between Cardinia Shire Liveability Plan and the Victorian Public Health & Wellbeing Outcomes Framework



APPENDIX 2:

Cardinia Shire's Liveability Plan Socio-ecological health model

Socio-ecological model of health



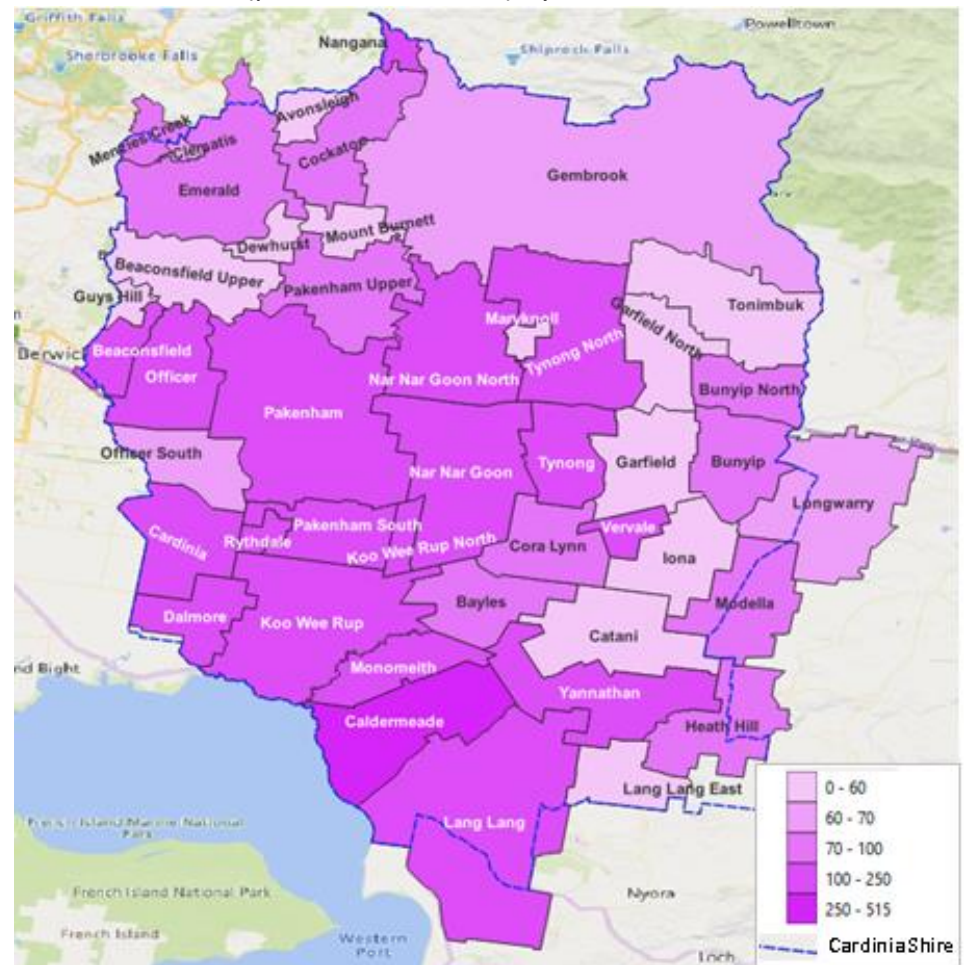
APPENDIX 3:

Reported crime in Cardinia Shire – April 2023 – March 2025

Count of Offences by Suburb



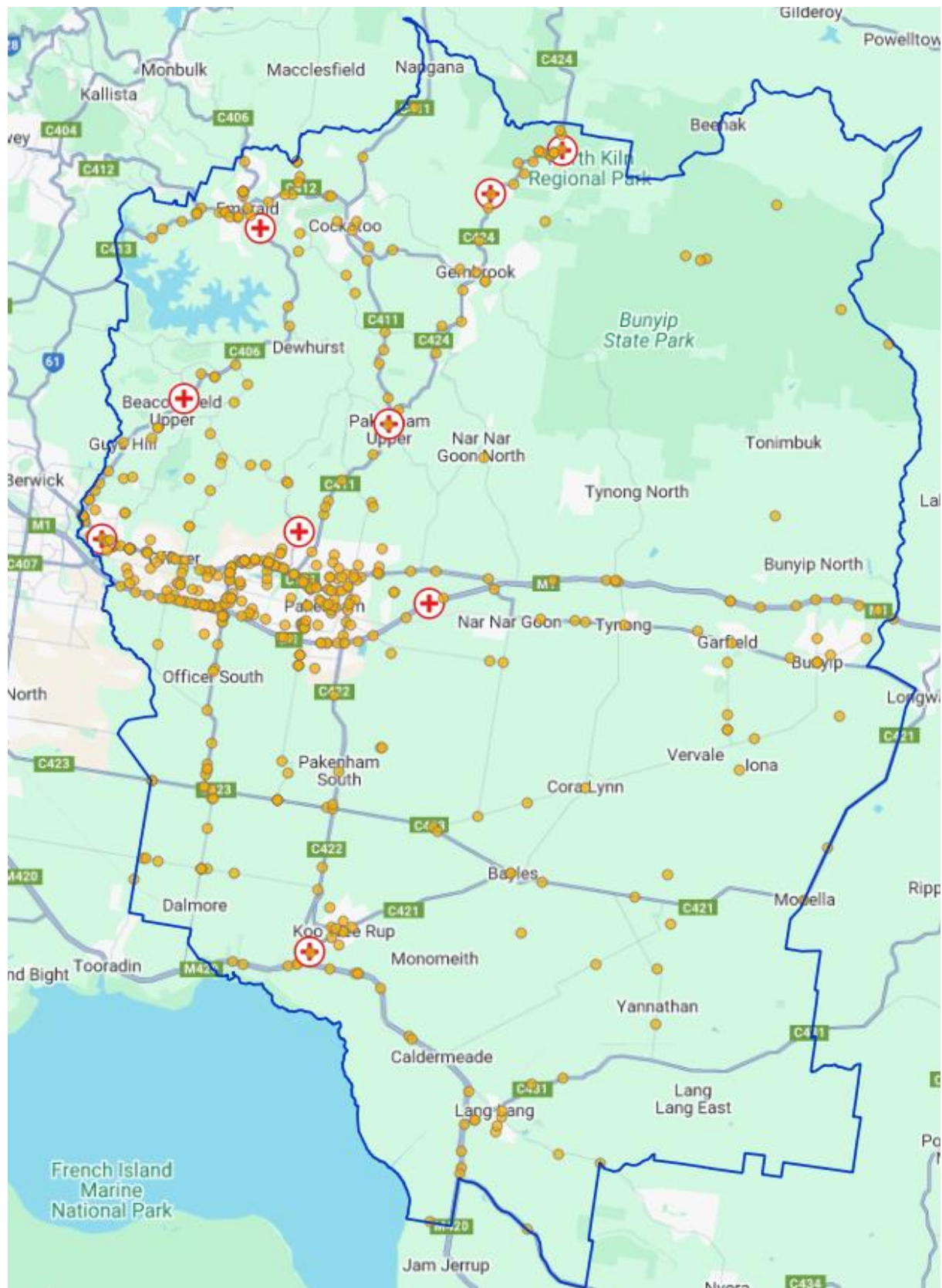
Rate of Incidents (per 1,000 residents) by Suburb⁴¹



⁴¹ Approximate estimate, using most recent population count per suburb (2021 census)

APPENDIX 4:

Map of road fatalities (⊕) and injuries (●) in Cardinia Shire, Jan 2023 - Sept 2024



APPENDIX 5:

Cardinia Shire carriageways where 5 or more accidents have occurred between January 2023 and September 2024

Beaconsfield Area		total
beaconsfield-emerald road	6	
old princes highway	14	
princes highway	11	31
Emerald Area		
belgrave-gembrook road	13	
emerald-monbulk road	7	
macclesfield road	6	
wellington road	6	32
Lang Lang Area		
south gippsland highway	9	9
Pakenham Area		
beaconsfield-nar nar goon road	12	
cardinia road	8	
henry road	8	
mcgregor road	11	
pakenham road	9	
princes freeway	14	
princes highway	51	113
Gembrook		
gembrook-launching place road	21	21
Officer/Officer Sth		
bridge road	6	
cardinia road	5	
princes freeway	23	
princes highway	17	51
Cardinia		
cardinia road	7	7
Beaconsfield Upp Area		
beaconsfield-emerald road	6	6
Koo Wee Rup - Catani Area		
ballarto road	7	
manks road	5	
rossiter road	6	
south gippsland highway	8	26

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