

# State of Knox Report

## 2nd edition 2016

Knox City Council  
October 2016

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*Knox City Council acknowledges the traditional custodians of the  
City of Knox, the Wurundjeri and Bunurong people of the Kulin Nation.*

# Executive Summary

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## About the report

Produced through extensive analysis of high-quality data, this State of Knox Report (2nd edition) 2016 provides clear evidence that the City of Knox is a great place in which to live, work and play.

It examines how the City of Knox has changed in the past decade and, specifically since the last State of Knox Report, identifies trends that will have an impact on the city's future. The report will inform the vision, objectives and strategies of Council and the community, providing a strong evidence base to guide decision making and shape their ideal city.

The report comprises three key sections:

1. Purpose of the State of Knox Report
2. Demographic overview of the City of Knox
3. Aspirations for the City of Knox into the future.

## A demographic overview

The report contains a demographic overview of the City of Knox, looking particularly at shifts between two census periods (2006 and 2011) and the decade of 2001 to 2011, as well as examining growth markets into the future.

### Some key demographic factors identified

- *Growth* in the share of over 55s. Knox is now older than the metropolitan average. The number of people at post-retirement age is forecast to double between 2011 and 2031.
- *Declining* percentage of younger residents as a share of the population, although the absolute number of younger people is set to increase. There will be a *reduction* in the 0-14 age group.
- *Increasing* share of the overseas-born population; *increasing* proportion of the population born in countries where English is not the first language.
- *Increase* in the number of residents identifying themselves as Indigenous.
- *Steady decline* in 'couple with children' households (although this remains dominant); *increase* in the proportion of 'lone person' and 'couple only' households.
- *Ongoing* trend for a smaller proportion of young people (aged 19 years) with Year 12 attainment compared with the regional average.
- *Ongoing* lower than average share of young people (15-24 years) participating in tertiary education, whether vocational or university.
- *Ongoing* lower than regional and state average kindergarten participation rate.

### Some possible effects of these demographic factors

- Less housing choices to cater for growth in the number of older residents in 'lone person' and 'couple only' households.
- More social isolation (it is forecast that one in four of all Knox households will be a 'lone person' by 2031).
- More residents with a major disability (the prevalence of disability escalates rapidly after age 65).
- Greater demand for planning services and infrastructure
- Declining literacy and education levels leading to negative social and economic outcomes

## Aspirations for the City of Knox into the future

Aspirations for the City of Knox are presented in accordance with the Knox City Plan's five themes:

- Healthy connected communities
- Prosperous, advancing economy
- Vibrant and sustainable built and natural environments
- Culturally rich and active communities
- Democratic and engaging communities.

The data analysis within these themes highlights a range of factors that emphasise Knox's strengths, as well as the challenges that still remain and may be emerging.

### Knox's strengths

- Adults, children, and young people in Knox generally experience positive **health and wellbeing**:
  - 42.7% of adults identified as being in 'excellent' or 'very good' health in 2011-12.
  - Age-standardised death rates per 1,000 people reduced slightly from 5.6 in 2012 to 5.5 in 2014.
  - Only 6.5% of children (0-6 years) were developmentally vulnerable in 2015 in two or more domains (e.g. physical health and wellbeing, social competence, emotional maturity, language and cognitive skills, communication and general knowledge).
  - 76.1% of 15-19 year olds (not at secondary school) were fully engaged in work or study at a non-school institution in 2011, better than the metropolitan average of 75.3% for the same period.
  - Rates of youth substance misuse have improved in Knox since 2009-10, with alcohol-related hospital admissions for 15-24 year olds and alcohol-related assaults by 18-24 year olds reducing during the review period.
  - The average rate of short-term risk from harmful alcohol consumption across the population is lower than metropolitan-wide rates. Long-term risk is also slightly lower than average in Knox.
  - Data indicates a halt in the upward trend in the prevalence of pre-obesity and obesity in Knox and the rate of physical inactivity continues to be lower (better) than average.
- Residents have positive perceptions of **access to facilities and services** in Knox.
- Knox provides extensive access to **open spaces**, with 1,553.2ha of open space (within the urban growth boundary). This equates to 7.4ha per 1,000 people, which places Knox within the top six metropolitan councils per capita.
- Perceptions of **safety on the streets** during the day and at home in Knox are higher than the metropolitan average.
- **Lifelong learning** showed some positives with literacy and numeracy improvements between 2011 and 2014, with Knox remaining higher than the Victorian average.
- **Community connectedness** remains an ongoing strength. The percentage of adults reporting their satisfaction with feeling part of the community in 2011 was high and similar to the metropolitan average (at 70.8% and 70.9% respectively).
- **Volunteering** has been strong in Knox for many years and the data shows that it is still well above the metropolitan average.
- The Annual Community Satisfaction Survey shows that Knox's rating (on an index score 0-100) for 'community satisfaction with consultation and **engagement**' was 59 in 2013 and 60 in 2016, with the Melbourne metropolitan average at 58. 'Lobbying on behalf of the community' was 58 across both years with a metropolitan-wide average of 56.
- Knox has a **thriving local economy** providing a gross regional product (GRP) in 2016 estimated at about \$8.08 billion, up almost 8% from June 2013. It continues to remain just over 3% of the comparable figure for the Greater Melbourne GRP.
- The transferrable **skills, knowledge and abilities** of Knox residents and the regional workforce are a key strength for companies based in Knox.
- In terms of **personal economic capacity**, no Knox suburb was technically disadvantaged according to the Index of Relative Socio Economic Disadvantage.

### Current and emerging challenges

- Knox faces some **physical and mental health** challenges:
  - Significant increases in Knox adults diagnosed with Type 2 diabetes and asthma.

- Registered mental health clients per 1,000 population increased from 8.6 in 2010-11 to 8.9 in 2011-12 (although this is still below the metropolitan average of 9.6).
- An increasing use of mental health services (from 9.2% in 2008 to 13.5% in 2011-12), and a rate of hospital admissions for mental health-related conditions that is significantly higher than the national average (2011-12).
- Rates of eating disorders, psychiatric hospitalisations and reported bullying among young people are worse than the metropolitan averages for the same period.
- The number of 15-24 year olds being admitted to hospital for drug-related matters also increased from 13.8 (per 10,000) in 2009-10 to 24.8 (per 10,000) in 2012-13 and was well above the metropolitan average of 20.7.
- Concerns among Knox's **ageing** population include the fact that 66.7% of households comprising people 65 years and above lived on 'low' or 'very low' incomes in 2011, which was well above the metropolitan average of 63.3%.
- Issues of **safety**:
  - Only 62.4% of adults in 2011 stated that they felt safe to walk alone in their local area at night, significantly lower than the metropolitan average of 68.4%.
  - Crime remains lower than average in Knox but has grown faster than the Victorian average over the past few years.
  - Knox has had the highest rate of reported family violence in Melbourne's outer east for more than 20 years.
- In terms of **education**, completion rates for a higher education qualification (a bachelor's degree or higher) were considerably lower than the metropolitan average for every age group across the life cycle.
- In terms of **housing**:
  - There is a clear mismatch between the size of dwellings, declining household size, and the limited number of one and two-bedroom dwellings.
  - Lowest vacancy rates in the state, around 1-2% over the past year. The critical shortage of rental premises is placing upward pressure on rents. The Knox median rent increased by 22% between 2001 and 2006 and by 50% between 2006 and 2011.
  - In 2011, the amount of social housing within Knox was below the metropolitan figures, both in terms of the average as a percentage of housing stock (2.1% compared with 2.9%) and as a ratio of number of dwellings per head of population (7.4 per 1,000 residents, compared with 10.6).
- Opportunities to improve attitudes to **diversity**:
  - 47.2% of Knox adults disagree 'that Australia is weakened by groups sticking to their old ways'. This is 3.8 percentage points lower than the state measure and implies that Knox adults are less accepting of cultural diversity than the state average.
  - 50.3% of Knox adults feel that multiculturalism makes life in the area better; this is 3.7 percentage points lower than the Melbourne metropolitan average.
- Data reveals that there has been a negative shift from a consistent, long standing and higher than average rate of **participation in community events** in Knox over the past several years to a rate that is now comparable to metropolitan-wide figures or below average.
- In terms of community **engagement**:
  - In 2011, 46.2% of adults reported having been involved in some sort of citizen engagement activity in Knox, which was below the metropolitan average of 47.5%.
  - 57.1% of adults viewed their local area as being an active community in which people do things and get involved in local activities and issues. While this was higher than the metropolitan average of 55.4%, it was slightly below the 2008 figure of 59.8% and suggests that people in Knox are becoming less inclined to involve themselves in these sorts of activities.

# Purpose of the State of Knox Report

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This is the second edition of the State of Knox Report. The first edition was endorsed by Council in July 2015.

The State of Knox Report presents high-quality, reliable and comparable data as well as analysis and discussion about Knox, which are designed to help people understand Knox's current 'state of play'. It seeks to contribute to informing the vision, objectives and strategies of Council and the community to achieve their ideal city. The report also presents key changes in conditions in Knox over time.

The report acts as a monitoring tool to assist Council and the community to understand their progress towards the long-term Knox City Vision. The Knox Vision and the Knox City Plan<sup>1</sup> 2013–17 set out the themes and aspirations for the future of the City of Knox, including 16 key points arising from those aspirations. These themes and aspirations underpin this report.

The State of Knox Report is reviewed every four years to inform the development of the Knox City and Council Plan, ensuring that Council's decision making has a strong evidence base. The report's primary audience is Council and targeted stakeholders, but it is also available publicly.

The key aspects of the State of Knox Report are:

- A demographic overview of the City of Knox.<sup>2</sup>
- A suite of data taken from the State of Knox Master Database 2016<sup>3</sup> and where possible reference to a wider analysis of longitudinal data and emerging trends, and a discussion of the state of Knox as it responds to the aspirations for the future City of Knox identified in the Knox Vision 2013–17. This is presented in accordance with the Knox City Plan's five themes:
  1. Healthy connected communities
  2. Prosperous, advancing economy
  3. Vibrant and sustainable built and natural environments
  4. Culturally rich and active communities
  5. Democratic and engaging communities.
- The key changes in conditions in Knox since the first State of Knox Report was published.<sup>4</sup>
- A general discussion of the drivers and causes that have had an impact on changing conditions.

## How to read this report

As you read this document, the statements in **bold** are the key components or attributes of Knox's Vision; these statements are therefore aspirational in nature. The analysis, statistics and discussion following these statements seek to provide a comparison between the first and second State of Knox reports, and are referred to throughout the report as the 'review period' (2014 to 2016). The report provides discussion about where we are now, what we know about our community now, and what is influencing or driving our current state.

## The data used in this report

As indicated, this report has been developed from a solid evidence base using an extensive array of available data sources. For your information, these sources are listed in the reference section at the end of the report.

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<sup>1</sup> The Knox City Plan 2013–17 also incorporates the Council Plan.

<sup>2</sup> The demographic overview is based on census data available at the time of writing (2006 and 2011).

<sup>3</sup> The State of Knox Master Database (2nd edition) 2017–21.

<sup>4</sup> A significant proportion of the data is sourced from the 2011 census, which is the highest quality and most reliable data available. The next census was held in August 2016. Unfortunately, this data will not be publicly available until late 2017, which means that some data updates will not be available for this edition of the State of Knox Report.

## Demographic overview of the City of Knox

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The City of Knox is situated in the eastern suburbs of Melbourne, approximately 20 to 25 kilometres from the Melbourne CBD. The city comprises 11 suburbs: Bayswater, Boronia, Ferntree Gully, Knoxfield, Rowville, Scoresby, The Basin, Wantirna and Wantirna South, Lysterfield, and Upper Ferntree Gully.

The area boasts a green, leafy image extending to the foothills of the Dandenong Ranges. Land use is primarily residential; of the residential areas 86.5% are separate houses, 12.5% medium density and 0.6% high density (apartments).<sup>5</sup>

The original population of Knox comprised the Wurundjeri and Bunurong people. Today, the estimated resident population is 155,681<sup>6</sup> and Knox is home to a growing, diverse socio-economic and cultural community. The strengths and challenges associated with a growing community are addressed in this report.

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### Knox snapshot at 2011 census

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Total population	149,301	
Total born overseas	41,506	27.8%
Recent arrivals (2006 to 2011)	5,746	3.8%
Indigenous population	544	0.4%
Labour force participation		66.8%
Employed		95.4%
Unemployed		4.6%
Median household income (per week)		\$1,401
Low income households	14,093	9.4
SEIFA Index		1,049

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Source: ABS, Census of Population and Housing, 2011, and Profile id.

The following demographic overview of the City of Knox presents:

- The main demographic changes between the two census periods of 2006 and 2011.
- Five key demographic shifts that have emerged over the decade 2001-11:
  1. Ageing of the population
  2. Changing household structure
  3. Housing choice – the supply and demand mismatch
  4. Compromised education and skills base
  5. Changing cultural mix.
- A discussion of the three key demographic growth markets in Knox to 2031, which are:
  1. The retirement-aged population
  2. The number of people moving through their peak earning years
  3. The number of schoolchildren.

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<sup>5</sup> Profile id. 2016.

<sup>6</sup> ABS, Estimated Resident Population, 2015.

## Main demographic changes between 2006 and 2011 (the two census periods)

The key demographic changes arising in Knox since 2006 are:

- *Reduction* in the 0-14 year age group from 20.3% of the population in 2006 to 18.5% in 2011.
- *Growth* in the share of over 55s from 21.7% in 2006 to 25.3% in 2011.
- Increased numbers of residents identifying themselves as Indigenous from 481 to 539 people.
- 'Couple with children' households remain dominant, although a steady decline has continued and now they now comprise 40.1% of all Knox households compared with 41.5% in 2006.
- Separate houses remain the dominant housing type (87%) with higher density housing choices stabilising at just over 12% of dwellings following a considerable increase at the start of the millennium.
- *Increase* in the proportion of 'lone person' (18.9%) and 'couple only' (24%) households compared with 18.3% and 22.9%, respectively, in 2006.
- The largest culturally and linguistically diverse (CALD) group remains those born in India, although the greatest growth in numbers has occurred in the Chinese-born population, which has moved from fourth to the second most populous CALD group. Malaysian and Sri Lankan-born residents retain their place in the top four numerically.
- Cantonese and Mandarin are now the top two languages spoken at home other than English.

## Key demographic shifts between 2001 and 2011 and future forecasts

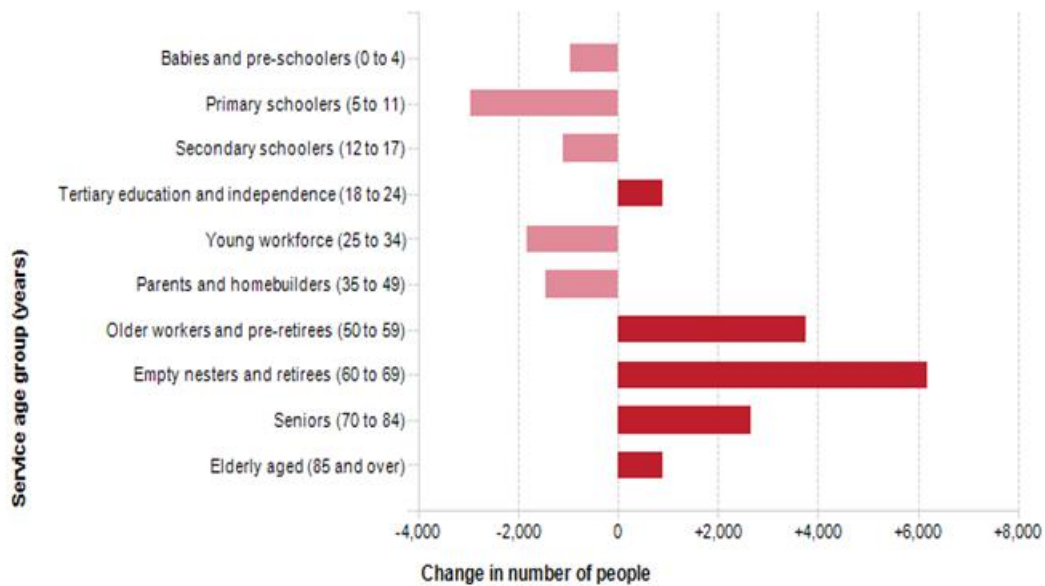
Five key demographic issues arose in Knox between 2001 and 2011. These are outlined below with an exploration of what these issues might mean for future planning and service provision.

### 1. Ageing of the population/population change

Figure 1 illustrates the increase in the number of people in all age groups post 50 years (in red) and population losses among age groups younger than 50 years (in pink), consistent with population ageing over the past decade.



Figure 1: Change in age structure in the City of Knox, 2001-2011.



Source: ABS Census, 2001 and 2011. Compiled by Profile id. 2016.

The data indicates that:

- Knox is now older than the metropolitan average (the median age in Knox is 38 years, compared with 36 years for Melbourne).
- There has been significant growth in the share of over 55s, which has increased from one in six residents in 2001 to one in four in 2011. By 2031 it is forecast that one-third of Knox's population will be aged over 55 years, including 20% at post-retirement age (65+ years).
- The number of people at post-retirement age is forecast to double between 2011 and 2031, from 19,000 to 36,000.

However, it is important to balance this information with the fact that the number of children and young people (and their parents) has stabilised and is forecast to grow over the next 20 years. Knox, with its housing stock heavily skewed towards larger, family-sized homes, will continue to attract new families with children.

The percentage of younger residents as a share of the population will decline because our population base is increasing and the number of older residents is growing more quickly. However, the number of younger people is also set to increase as Knox moves through the household life cycle and ongoing process of suburban regeneration.

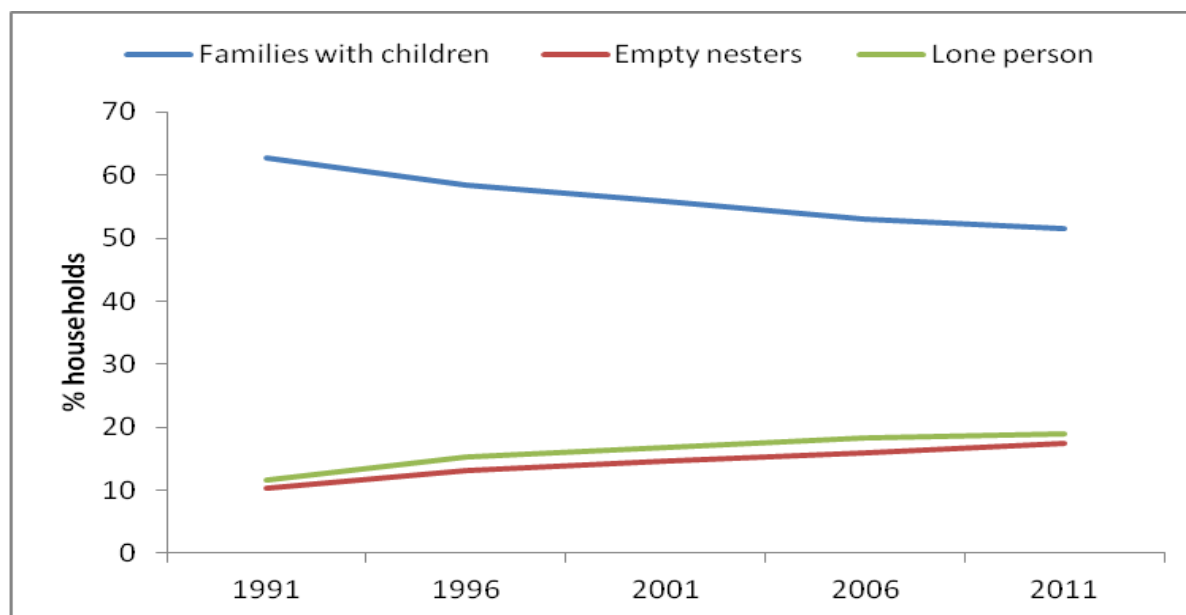
### Possible effects on Knox

- Potential demand for (smaller) housing choices to cater for growth in the number of older residents in 'lone person' and 'couple only' households.
- Escalating potential for social isolation (it is forecast that one in four of all Knox households will be a 'lone person' by 2031).
- Substantial increase in the number of residents with a major disability (the prevalence of disability escalates rapidly after age 65).
- Impact on planning of aged services and infrastructure.
- A growing number of both older and younger residents will require services that cater for growth in both age groups.
- As Knox becomes more diverse in age, a range of age-specific social infrastructure will be needed.

## 2. Changing household structure

Figure 2 illustrates the steady decline in households containing families with children over the past 20 years. In contrast, the proportion of smaller household types ('lone person' and 'couple only') has increased.

Figure 2: Changing household structure in the City of Knox, 1991-2011.



The data indicates that:

- While 'family with children' (i.e. couple or lone parent with children) households remain the dominant household type, there has been a shift to smaller household types and greater diversity in household structures, consistent with ageing of the population.
- Of every 100 households in Knox, the split between smaller 'single/couple only' households and 'family with children' households has shifted from a ratio of 39%:56% in 2001 to 43%:52% in 2011. It is forecast that by 2031, one in two households in Knox will be a smaller unit, such as a couple or single household.
- The number of smaller, 'lone person' and 'couple only' households is forecast to increase by 50% from 23,000 households in 2011 to 36,000 by 2031.

A declining percentage of households containing families with children does not mean there will be fewer of them in Knox. The number of families with children is forecast to increase as the population grows and Knox's supply of detached housing attracts an incoming population of this household type (from 27,000 in 2011 to 29,000 in 2031). During this time, however, the growth in the number of smaller household groups, such as singles and couples, will be faster; within 20 years just over half of all households in Knox will be a 'couple only' or 'lone person' residents.

### Possible impact on Knox

- Demand for different forms of housing will continue to grow to meet changing household structures.
- Increased choice of housing stock as Knox becomes more diverse in age and types of households.

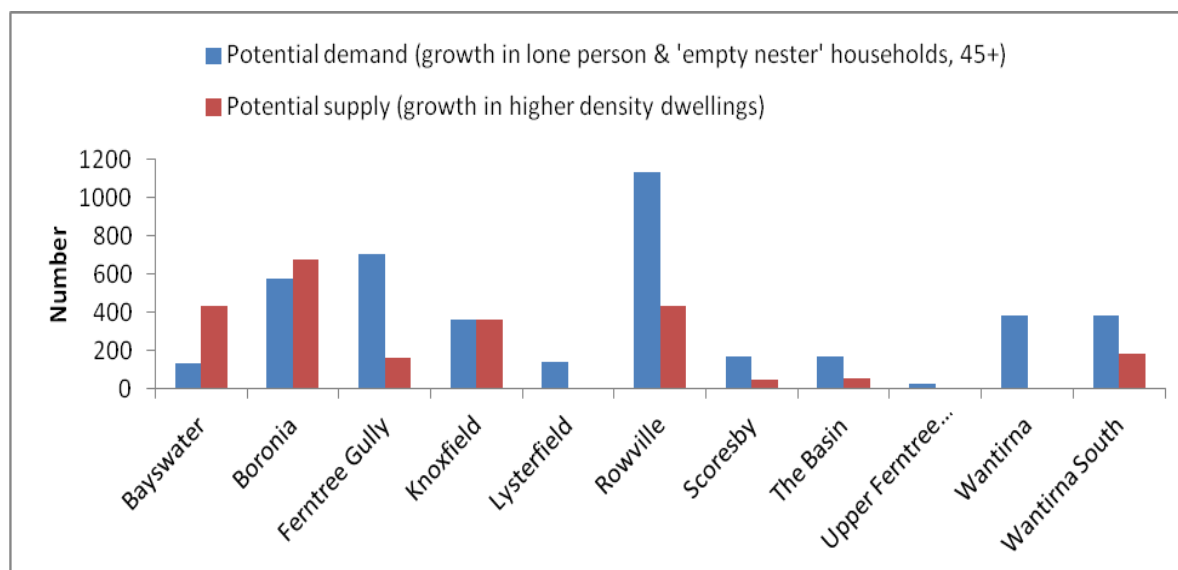
## 3. Housing choice – the supply and demand mismatch

Figure 3 compares the growth in potential demand or 'need' for smaller housing options over the past 10 years (based on an increase in the number of 'lone person' or 'empty nester' couple households<sup>7</sup>)

<sup>7</sup> These are 'couple only' households with a household head aged 45+ years. This excludes younger 'couple only' households with a head aged 15-44 years, who may go on to establish families.

with growth in supply (based on an increase in the number of smaller, higher-density dwellings) across suburbs of Knox.

Figure 3: Knox's smaller/higher-density housing – theoretical supply and demand gap, 2001-2011.



The data indicates that:

- There is a mismatch between potential demand and supply and the possibility for stress associated with changing household structures. Changes are generating demand for smaller homes, but there is a lack of supply in many parts of Knox.
- Growth in the number of smaller, medium and high-density dwellings between 2001 and 2011 satisfied only half (55%) of the growth in number of households containing a single person or 'empty nester' couple.
- Bayswater and Boronia may be performing a broader role in catering for smaller households needing this type of accommodation.
- The biggest mismatches between supply and demand exist in Wantirna, Ferntree Gully, Rowville and Wantirna South.
- According to the 2011 census data, there were 6,000 people living on their own in a house with three or more bedrooms, including 1,000 living in homes with four or more bedrooms.

#### Possible impact on Knox

- 'Over-consumption' of housing – where smaller households live in larger dwelling stock beyond their needs.
- Consequent implications for energy, resource and running costs, particularly at a time of rapid utility price increases.
- Constraint in the ability of smaller households to 'age-in-place' in their own suburb.
- Potential disruption to social connections among those forced to leave the area they know.

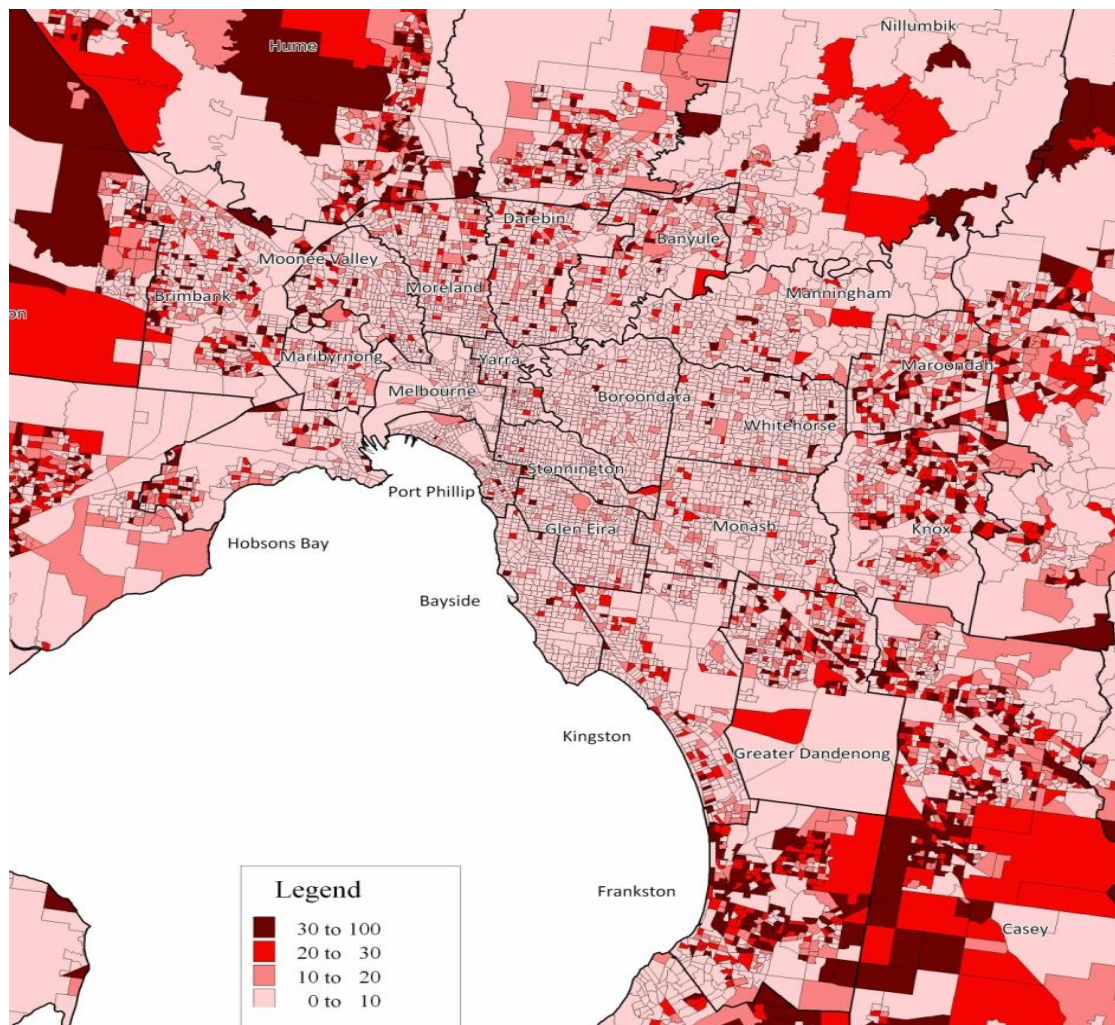
#### 4. Compromised education and skills base

Demographic data suggests a continued pattern of comparatively compromised levels of contemporary and attained educational outcomes among residents.

- Knox has a higher rate of early school leaving among young people compared with the metropolitan average (11.8% of 20-24 year olds having left school before completing Year 11 compared with 9.5% metropolitan-wide in 2011) (see Figure 4).
- There is an ongoing trend for a smaller proportion of young people aged 19 years to have completed Year 12 compared with the regional average (in 2009 this represented 79.5% of the cohort in Knox compared with 87.2% regionally).

- There is a continued lower than average share of young people (15-24 years) participating in tertiary education, whether vocational or university (28% compared with 32% metropolitan-wide in 2011).
- higher than regional rates of youth disengagement (i.e. not engaged in work or study) at 12% compared with 9.5% in the region (2011).
- There is an improving but consistently lower than average share of the total population with Year 12 completion across the decade (2001-11).
- A higher than average share of the Knox population has no post-school qualifications (30.7% compared with 28.1% metropolitan-wide in 2011).
- consistently lower than regional and state average kindergarten participation rate (2005-11).

Figure 4: Percentage of young people (<25 years) who left school before completing Year 11 (2011).



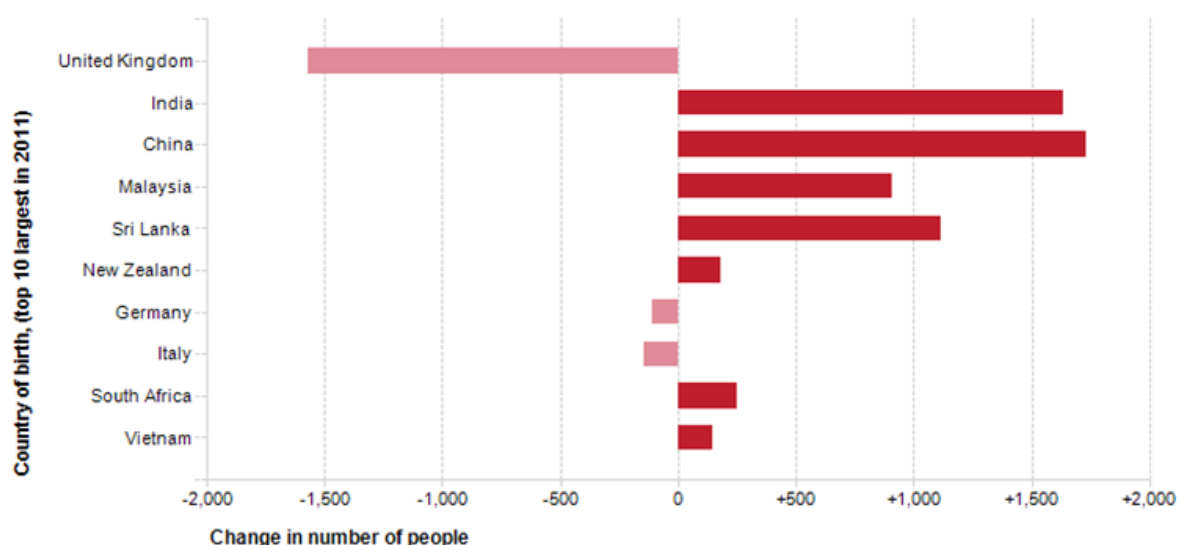
#### Possible impact on Knox

- Education is the key to the skills and knowledge base of the community and therefore its social and economic strength. Deficient education is a potential threat to optimal social and economic outcomes.
- A compromised ability for Knox residents to respond to social, economic and technical change.

#### 5. Changing cultural mix

Figure 5 illustrates the change in composition of overseas-born residents in Knox over the past decade. The red bars indicate an increase in the number of people from a particular birth place, contrasting with losses from others (in pink).

Figure 5: Change in birthplace in the city of Knox, 2001-11.



Source: ABS Census, 2001 and 2011. Compiled by Profile id. 2016.

The data indicates that:

- The share of overseas-born population is increasing (from 24.6% in 2001 to 27.8% in 2011).
- In particular, the proportion of Knox's population born in countries where English is not the first language is increasing (19.7% in 2011 compared with 15.4% in 2001).
- While the largest migrant group remains those born in the United Kingdom (UK), this number is declining, as are the numbers of post-war migrants from Europe, as Knox's population ages. The number of residents born in Asia is growing.
- Consistent with the changing cultural mix, one in five (21.1%) Knox residents now speak a language other than English at home, compared with one in six (16.3%) in 2001. This equates to more than 30,000 residents and represents an increase of 8,200 people over the past decade, with the majority of the increase (5,600) occurring between 2006 and 2011. An increasing share of Knox's population has difficulty in speaking English, representing nearly 3% of Knox's population or 4,000 people in 2011. This compares with 2% (3,000 people) in 2001.
- The biggest increase in numbers speaking a language other than English at home have occurred among those speaking Mandarin, Cantonese, Sinhalese, Hindi and Tamil.
- Chinese languages are now spoken at home by nearly 8,000 residents (5% of Knox's population) and more now speak Chinese at home than speak Italian, Greek or German combined (Knox's earlier wave of overseas migrants born in non-English speaking countries).

#### Possible impact on Knox

- The increase and changing composition of Knox residents born overseas will need to be considered in Council's service planning, delivery and communications.

### Three demographic growth markets in Knox to 2031

The common discourse about the challenges arising from an ageing population and the impact on public infrastructure and finances is dated, according to population experts.<sup>8</sup>

Key shifts in fertility and changes in migration nationwide between 2001 and 2011 suggest that alongside the significant growth in the retirement-aged population, there will be considerable growth in the number of people moving through their peak earning years and in the number of schoolchildren

<sup>8</sup> .id ebook, Three growth markets in Australia – a demographic analysis, January 2016. Available at: <http://content.id.com.au/growth-markets-australia>

to 2031. These additional growth sectors are what online growth experts, i.d., now refer to as the 'three growth markets in Australia'. They will go some way to balancing the baby boomers in the population profile, resulting in population projections that are a lot less concerning than those presented just a decade ago.

Like other cities, Knox will have a growing number of both older and younger residents, creating increased demand for aged services as well as those for young people and families.

## Aspirations for the City of Knox into the future

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This section presents data taken from the State of Knox Master Database 2016, together with a range of program data and information that respond to the future aspirations identified in the Knox Vision 2013–17 (see the references section at the end of this report for a list of the data sources used in exploring progress against Knox’s aspirations). Aspirations are considered within the five themes of the Knox City Plan.

### Healthy, Connected Communities

**The aspiration for Knox is that it is well supported to be strong and motivated and actively engaged in shaping its own future. People in Knox enjoy good health and wellbeing, are active and have access to excellent health, community and leisure facilities and services.**

**There are many opportunities in Knox to make meaningful connections in the community that foster a sense of belonging. Knox is a safe place to live and community members are proud to freely enjoy their local streets, parks and public spaces. Community leaders – for example in sporting clubs and community groups – are supported, and active participation by all members of the community is valued.**

**Knox is a vibrant, resilient and sustainable community that recognises and values the efforts of its volunteers. Community members are physically and mentally healthy, have a sense of wellbeing, are connected to others and have access to a range of services. The Knox community nurtures its children and young people and embraces learning. Similarly, older adults are valued and supported to be actively engaged in community life. Meaningful work, be it paid or unpaid, is available and valued. Knox is a community built on mutual respect, generosity of spirit, and one that enjoys a range of opportunities for people to participate in community life.<sup>9</sup>**

#### *Knox enjoys good personal health and wellbeing (physically and mentally)*

Personal health and wellbeing provide the foundation for productive lives and have been an historical strength in Knox.

Subjective wellbeing is the way people perceive aspects of their wellbeing and remains high overall. Of adults in Knox who self-assessed their health in 2011-12, 42.7% identified as being ‘excellent’ or ‘very good’, although this is below the metropolitan average of 46.7% for the same period.<sup>10</sup>

The age-standardised death rates per 1,000 population have reduced slightly from 5.6 in 2012 to 5.5 in 2014, but are still above the 2014 metropolitan average of 5.0.<sup>11</sup>

Data updates since the first State of Knox Report reveal a deterioration in some important aspects of physical health, including Type 2 diabetes and asthma. In 2011-12, 6.2% of Knox adults were diagnosed with Type 2 diabetes, compared with only 4.4% in 2008, and 14.5% had asthma in 2011-12, compared with 12.4% in 2008.<sup>12</sup> These are significant increases.

Mixed findings are also evident in relation to mental health issues in Knox. Some of the key indicators include hospitalisation for mental health-related conditions and rates of psychological distress. Registered mental health clients per 1,000 population increased from 8.6 in 2010-11 to 8.9 in 2011-12, although this is still below the metropolitan average of 9.6.<sup>13</sup>

Interestingly, however, in recently released data from the 2014 Victorian Population Health Survey only 7.2% of Knox adults reported ‘high’ or ‘very high’ levels of psychological distress, indicated by

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<sup>9</sup> Knox Vision: our city, our future 2013–17, p. 12.

<sup>10</sup> VicHealth Indicators Survey, 2011.

<sup>11</sup> VicHealth Indicators Survey, 2011.

<sup>12</sup> VicHealth Indicators Survey, 2011 and Community Indicators Victoria Survey 2007.

<sup>13</sup> DHHD, Victorian Population Health Survey, 2012.

symptoms such as nervousness, agitation, psychological fatigue and depression. This is a significant decline compared with the 2011-12 levels of 12.2%<sup>14</sup> and far lower than the Victorian average of 12.6%. It is possible that the almost halving of this indicator is a statistical anomaly<sup>15</sup> given that the rate of psychological distress and the percentage of adults diagnosed with depression or anxiety, in particular, were found to be higher than the metropolitan average in the previous (2011-12) survey.

Survey data in future years will identify whether this is the case. In the meantime, the release of data from the 2014 survey – relating to the proportion of Knox adults who have sought professional help for mental health problems or diagnosed with depression/anxiety – will enable cross-checking of the veracity of these findings.

Analysis of data in the State of Knox Master Database,<sup>16</sup> which contains longitudinal data across a number of years<sup>17</sup> and a broader array of indicators from a range of sources, identified a general decline in mental health in Knox over the past 10 years. This includes increasing use of mental health services (from 9.2% in 2008 to 13.5% in 2011-12), and a rate of hospital admissions for mental health-related conditions that is significantly higher than the national average (2011-12).<sup>18</sup>

Mental health problems can also be exacerbated by a range of poor lifestyle choices, including smoking, alcohol misuse, drug misuse and a sedentary lifestyle. However, data from the 2014 Victorian Population Health Survey on modifiable risk factors indicates that efforts to improve lifestyle choices may be gaining traction.

While the prevalence of overweight (now termed 'pre-obesity') and obesity in Knox remains considerably higher than the metropolitan average, at 54.2% compared with 48.6% in 2014, data indicates an arrest in the upward trend and a marginal decline in rates at all geographic levels, including Knox.

Similarly, smoking rates have universally declined. A prevalence rate of 13.3% (2014) in Knox, although still slightly higher than average, is now much closer to the rate of 12.4% across metropolitan Melbourne than has been seen in earlier surveys.

Data on nutrition, alcohol use and physical activity are measured against revised (generally toughened) Australian standards for assessing 2014 survey results, which means it is not directly comparable with earlier data. For Knox, however:

- The rate of physical inactivity, while high and affecting more than half of all adults, continues to be lower (better) than average, consistent with findings in earlier surveys (52.8% not meeting physical activity guidelines compared with 54.1% of adults across Melbourne in 2014).
- A lower than average proportion of adults is at risk from harmful alcohol consumption. This is evident in a lower than average rate of short-term risk,<sup>19</sup> which is also consistent with the findings of earlier surveys (in 2014, at 37.4% of adults in Knox compared with 40.9% metropolitan-wide). Long-term risk,<sup>20</sup> although potentially affecting nearly two-thirds of adults, is also slightly lower than average in Knox (56.8% of adults compared with 58% metropolitan-wide<sup>21</sup>).
- A comparable rate of poor nutrition, which is measured by the proportion of adults that does not meet (revised) fruit and vegetable consumption guidelines (48.8% of adults in Knox compared with 48.4% metropolitan-wide). This rate, although remaining high, is now closer to average than has been found in previous surveys.

While there are signs of improvement, specifically declines in growth of overweight/obesity and smoking rates, the prevalence of health risk behaviours remains high – in some cases extending to a

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<sup>14</sup> The regional average at the same time was 11.6%.

<sup>15</sup> There was a similar anomaly in 2008 VPHS data on the rate of smoking in Knox, which suggested a smoking rate of 27% compared with a metropolitan average at that time of 19%. The rate found in 2011-12 was 18% compared with 15% metro-wide.

<sup>16</sup> Review and analysis of the State of Knox Master Database (2nd edition) 2017–21 – some key issues (preliminary).

<sup>17</sup> As opposed to two points in time between the first and second State of Knox reports.

<sup>18</sup> VPHS, 2011-12.

<sup>19</sup> Measured as 'increased risk of alcohol-related injury on a single occasion (yearly, monthly or weekly)'.

<sup>20</sup> Measured as 'increased lifetime risk' potentially leading to harmful outcomes such as cancer, cirrhosis of the liver, cognitive problems, dementia, etc.

<sup>21</sup> Long-term risk from alcohol-related harm in Knox was indicated as higher than average in the last survey, although due to definitions used at that time and low numbers, caution is advised in interpreting this data.



larger share of the population due to toughened guidelines. Half or more of all adults are affected by any or multiple lifestyle risks, including overweight/obesity, poor nutrition, insufficient physical activity, or at long-term risk from alcohol use.

### ***Knox nurtures its children and young people***

Children and young people in Knox generally experience positive health and wellbeing.

The Australian Early Development Census shows only 6.5% of Knox children (0-6 years) were developmentally vulnerable in 2015 in two or more domains (e.g. physical health and wellbeing, social competence, emotional maturity, language and cognitive skills, communication and general knowledge). This is a significant improvement on the 2012 figure for Knox of 7.4% and much better than the metropolitan average of 9.9% in 2015.

Social and emotional competences are notable exceptions. The 2015 figures show that 80.9% of children were developmentally on track regarding social competence and 77.3% for emotional maturity, which are well below the 2012 figures of 83.1% and 82.8% respectively.<sup>22</sup>

Also, children's immunisation rates in Knox have historically been well above average. However, deterioration has been detected in some areas. For example, the number of key age and stage (3½ years) maternal and child health visits (per 100 enrolled children) reduced from 67.6 in 2011-12 to 64.8 in 2013-14 and immunised one-year-old children dropped from 91.2% in 2013-14 to 90.8% in 2014-15. However, the percentage of fully immunised five-year-old children has remained high and stable, with 92.4% being fully immunised in 2013-15 and 92.9% in 2014-15.<sup>23</sup>

It is notable that breastfeeding has dropped from 38.7% in 2010-11 to 36.8% in 2013-14, but this figure is still above the most recent metropolitan average of 34.3%.<sup>24</sup>

In relation to access to services in Knox, adolescents' 2009 perceptions of good access to shopping, basic services, playgrounds, parks and gyms near their home were significantly higher than metropolitan averages (56% compared with 49.7%).<sup>25</sup>

In relation to youth engagement, 76.1% of 15-19 year olds in Knox who are not at secondary school were fully engaged in work or study at a non-school institution in 2011.<sup>26</sup> This is better than the metropolitan average of 75.3% for the same period.

However, a range of negative indicators have been identified concerning the health and wellbeing of youth in Knox.

In 2009, 85.7% of adolescents perceived themselves as having good health and 74.5% reported feeling satisfied with the quality of their lives, but this was significantly lower than the metropolitan averages of 88.9% and 77.1%, respectively.<sup>27</sup> Also, rates of eating disorders, psychiatric hospitalisations and reported bullying in Knox are worse than the metropolitan averages for the same period.<sup>28</sup>

Contrary to this trend, however, 2009 findings regarding youth and physical activity show that 16.4% of adolescents reported that they participated in sufficient physical activity to support their health, which was far more favourable than the metropolitan average of 12.1%.

Rates of youth substance misuse improved in Knox between the two reviews, with reductions in the rate of alcohol-related assaults by 18-24 year olds and the number of alcohol-related hospital admissions (per 10,000) for 15-24 years (which dropped substantially from 48.8 in 2009-10 to 27.1 in 2012-13).<sup>29</sup> This figure, however, is still higher than the metropolitan average of 22.9, which also experienced significant decline from 50.5 per 10,000 in 2009-10 to 22.9 in 2012-13.<sup>30</sup>

Interestingly, a review of data over the past decade shows large fluctuations in figures year-to-year. A review of data over a longer period encompassing the two years under review indicates a generally

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<sup>22</sup> DEECD, Australian Early Development Census, 2015.

<sup>23</sup> National Health Performance Authority, 2015, Healthy Communities Immunisation Rates for Children.

<sup>24</sup> DEECD, Maternal and Child Health Services Annual Report, 2014.

<sup>25</sup> DHHS, Victorian Population Health Survey, 2011-12.

<sup>26</sup> ABS Census, 2006 and 2011.

<sup>27</sup> DEECD, Adolescent Health and Wellbeing Survey, 2009.

<sup>28</sup> DEECD, Adolescent Health and Wellbeing Survey, 2009.

<sup>29</sup> AOD Statistics, Turning Point, 2012-13.

<sup>30</sup> AOD Statistics, Turning Point, 2012-13.

upward trend in alcohol-related hospitalisations among young people in Knox over the longer term. This is consistent with a rate of alcohol-related emergency department visits that is now double the Melbourne average (41.5 per 10,000 young people compared with 23.3 metropolitan-wide in 2012-13). Faster than average acceleration in the growth of alcohol-related ambulance call-outs has Knox surpassing the Melbourne average (between 2013 and 2014, 67.6 per 10,000 young people in Knox compared with 55.3 metropolitan-wide).<sup>31</sup>

The number of 15-24 year olds being admitted to hospital for drug-related matters also increased from 13.8 (per 10,000) in 2009-10 to 24.8 (per 10,000) in 2012-13 and was well above the metropolitan average of 20.7. A review of additional data on ambulance call-outs and treatment rates since the start of the century<sup>32</sup> identified concerning trends around pharmaceutical misuse and 'ice' use among young people.

The negative 'reach' of ice (as measured by ambulance call-outs and treatment rates) is much less compared with either alcohol or pharmaceuticals in terms of the number of young people affected. However, while the rate of ice-related ambulance call-outs remains lower than the metropolitan average, Knox is experiencing a faster than average rate of growth (with the highest rate in the region in 2013-14). Treatment rates (which have increased in Knox from 12 per 10,000 young people in 2004-05 to 55.1 in 2013-14) also allude to the increasing use of ice, which has occurred at all geographic levels.

### ***Knox values and supports its older people***

Older people tend to engage in positive and active ageing in Knox. However, increased rates of age pension dependency flag some concerns for older people in Knox.

Knox had a high Personal Wellbeing Index Score of 77.5 in 2011, which was just above the metropolitan average of 77.<sup>33</sup> In addition, 73.2% of 55-year-olds and above reported feeling part of the community, which was also above the metropolitan average of 72.9%.<sup>34</sup>

Interestingly, however, 66.7% of households comprising people 65 years and above lived on 'low' or 'very low' incomes in 2011, which was well above the metropolitan average of 63.3%. Further, Centrelink data confirms a growing number of people in Knox (76.2%) were in receipt of the aged pension in 2014, compared with 74.5% in 2010, which is also considerably higher than the Melbourne average of 68%.<sup>35</sup> This raises challenges to ensure that essential health and community services are affordable and appropriately targeted to enable active ageing.

### ***Access to excellent health and leisure facilities and services***

Positive perceptions of access to facilities and services have been strong in Knox, but are declining in some areas.

The number of medical clinics with general practitioners in Knox has increased over the review period, with 0.26 clinics per 1,000 population identified in 2012 compared with 0.4 in 2013, which was under the metropolitan average of 0.5.<sup>36</sup> In addition, 89.3% of adults believed there were good facilities and services in Knox (2011-12<sup>37</sup>). While this dropped significantly from the 2008 figure of 93.4%, it was still above the metropolitan average of 86.3% for 2011-12.

In that same period, 81.5% of adults agreed that they could access community services and resources when needed, but this was below the metropolitan average of 83.9%.<sup>38</sup> In 2016, 49% of residents

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<sup>31</sup>DEECD, Adolescent Health and Wellbeing Survey, 2009.

<sup>31</sup>AOD Statistics, Turning Point, 2012-13.

<sup>32</sup> Review and analysis of the State of Knox Master Database (2nd edition) 2017-21 – some key issues (preliminary).

<sup>33</sup> VicHealth Survey, 2011.

<sup>34</sup> VicHealth Survey, 2011.

<sup>35</sup> ABS Census, 2011.

<sup>36</sup> CIV based on Human Services Data Directory, 2012 and 2013.

<sup>37</sup> DHHS, Victorian Population Health Survey, 2011-12.

<sup>38</sup> DHHS, Victorian Population Health Survey, 2011-12.

surveyed said they were either 'satisfied' or 'very satisfied' with services and facilities that could help with physical and mental health in Knox, which placed it in the top five out of 16 aspects of the city for which perceptions were measured.<sup>39</sup>

Perceptions of access to recreation and leisure facilities have been a long-standing strength in Knox. Overall this trend has continued, but some decline has been identified during the review period. In 2008, 90.2% of adults believed there was 'good' or 'very good' local access to recreational and leisure facilities in Knox. This fell to 84.8% in 2011-12, but was still well above the metropolitan average of 81.6% for the same period.<sup>40</sup>

### ***Knox is a safe place to be***

Data from the 2011 VicHealth Indicators Survey shows perceptions of safety on the streets during the day and at home in Knox tend to be higher than the metropolitan average. In 2011, 98% of adults in Knox reported feeling safe to walk alone in their local area, compared with the metropolitan average of 95.5%. In the same year, 98.7% of adults felt safe at home alone during the day and 96.4% during the night, which was closely aligned with the metropolitan average.

However, there was a very different sense of safety on the streets at night, with only 62.4% of adults in 2011 stating that they felt safe to walk alone in their local area at night. This was significantly lower than their sense of safety during the day (98%) and also below the metropolitan average of 68.4%.<sup>41</sup>

In 2016, the idea that Knox is 'a safe place to be' was rated by residents surveyed as the most important out of 16 aspects of the city for which perceptions were measured, with 97% of residents and 94% of business owners and managers rating the issue as either 'important' or 'very important'. Residents surveyed were also relatively satisfied with safety, with 54% saying they were either 'satisfied' or 'very satisfied' with safety in Knox, putting it in the top three of 16.

However, this aspect of the city was also one of only two aspects – along with the type and affordability of housing – where more people said that things were getting worse in the past four years (32% of residents and 35% of business owners and manager surveyed) than those who said things were getting better (29% of residents and 23% of business owners and managers surveyed).<sup>42</sup>

Crime remains lower than average in Knox but has grown faster than the Victorian average over the past few years, which is of concern.

The number of recorded offences in Knox (per 100,000 population) was 5,756.9 in 2012-13 and rose to 6,589.9 in 2015-16.<sup>43</sup> However, it still remains below the Victorian average. The number of recorded offences against the person and property, as well as deception, also increased in Knox between 2011-12 and 2015-16, but still remains below the Victorian average.<sup>44</sup>

Knox has had the highest rate of reported family violence in Melbourne's outer east for more than 20 years. Data for the review period reveals that the number of recorded offences per 1,000 population has increased from 10.6 in 2012-13 to 11.2 in 2015-16.<sup>45</sup> Also, child abuse substantiations per 1,000 children and adolescents (0-17 years) increased from 5.3 in 2009-10 to 6.4 in 2010-11.<sup>46</sup> This was well above the metropolitan average of 5.4.<sup>47</sup> The rate of child abuse substantiations and re-reports for young children (0-8 years of age) was well below the metropolitan average.

It is arguable that the increased reporting of family violence is a sign that the issue is not as 'hidden' by individuals and society as it has been in the past and, therefore, this better enables appropriate interventions, enforcement and cultural change.

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<sup>39</sup> New Focus Pty Ltd for Knox City Council (2016) *City Plan Municipal Survey Final Report* p. 22 and 24.

<sup>40</sup> DHHS, Victorian Population Health Survey, 2011-12.

<sup>41</sup> VicHealth Indicators Survey, 2011.

<sup>42</sup> New Focus Pty Ltd for Knox City Council (2016) *City Plan Municipal Survey Final Report* p. 22 and 24.

<sup>43</sup> Crime Statistics Agency, 2014-15.

<sup>44</sup> Crime Statistics Agency, 2014-15.

<sup>45</sup> Crime Statistics Agency, 2014-15.

<sup>46</sup> Victorian Child and Adolescent Monitoring System, 2010-11.

<sup>47</sup> Victorian Child and Adolescent Monitoring System, 2010-11.

### ***Knox has thriving economies with local employment desired and encouraged***

This issue is discussed in the 'Prosperous, Advancing Economy' chapter, which explores the economy from both the perspective of residents (including indicators for employment, local employment, work-life balance and personal economic wellbeing) and businesses.

### ***Lifelong learning opportunities support people's full potential in Knox***

Lifelong learning is recognised as a foundation to many aspects of positive health and wellbeing outcomes. This has not been a strength in Knox in the past. In addition, the Knox workforce is ageing, with almost 43% aged 45 and above (April 2016) compared with 37.9% for Greater Melbourne.<sup>48</sup> This suggests a need for planning and interventions through partnerships to continue to build the lifelong learning capabilities and resilience of the existing workforce.

A broad range of indicators were reviewed to assess lifelong learning opportunities for Knox people. This included rates of literacy and numeracy, home internet use, educational status, post-school education, kindergarten participation and library membership.

Literacy and numeracy improved in Knox between 2011 and 2014, remaining higher than the Victorian average. In terms of educational status, 52% of residents aged 15 years or older had completed Year 12 or an equivalent in 2011, compared with a metropolitan average of 57%.<sup>49</sup> Post-school education is also below the metropolitan average, with 28% of 15-24 year old residents participating in vocational or university education compared with 32% across Melbourne.<sup>50</sup> However, the percentages of 15-19 year olds fully engaged in work or study in a non-school institution (76.1% compared with 75.3%) and 17-year-olds still attending school (83.2% compared with 82.9%) are slightly above metropolitan averages.<sup>51</sup>

Contrary to this overall trend, kindergarten participation is strong and first-year enrolments as a percentage of children enrolled in Prep the following year increased from 92.8% in 2011 to 98.9% in 2013. This was well above the Victorian average of 95.2%.<sup>52</sup>

Furthermore, in 2011 home internet use and broadband access in Knox were significantly higher than metropolitan averages (84.9% compared with 81.4% for internet access and 79.5% compared with 75.1% for broadband). However, library membership rates reduced from 310.1 memberships per 1,000 residents in 2010-11 to 299.8 in 2012-13 and remains well below the Victorian average of 446.<sup>53</sup>

### ***Knox has strong community connections***

Data from the VicHealth Indicators Survey (2011) shows community connectedness remains an ongoing strength in Knox. The percentage of adults reporting their satisfaction with feeling part of the community in 2011 was high and similar to the metropolitan average (at 70.8% and 70.9% respectively). However, attendance at local community events such as church fetes, school concerts and craft exhibitions has significantly reduced during the review period.

For 2011-12, 50.9% of adults reported attending a local community event in the past six months compared with 53.4% in 2008. There has also been a decline since 2008 in the ability of residents to get help in an emergency, and these levels are now slightly below the metropolitan average. This is most notable in relation to support from family (79.2% compared with the metropolitan average of 82.4%) and neighbours (50.3% locally, compared with 52% across Melbourne generally).

### ***Volunteering in Knox remains strong and valued***

Volunteering has been strong in Knox for many years and the data shows that it is still well above the metropolitan average.

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<sup>48</sup> Profile id. 2016.

<sup>49</sup> ABS Census, 2011.

<sup>50</sup> ABS Census, 2011.

<sup>51</sup> ABS Census, 2011.

<sup>52</sup> Victorian Child and Adolescent Monitoring System.

<sup>53</sup> ABS Census 2011.

In 2011-12, 36.2% of adults reported that they volunteered at least once a month and 35.3% stated that they 'definitely' or 'sometimes' volunteered with local groups. This rose from 33.5% in 2008 and is well above the metropolitan average of 30.8%.<sup>54</sup>

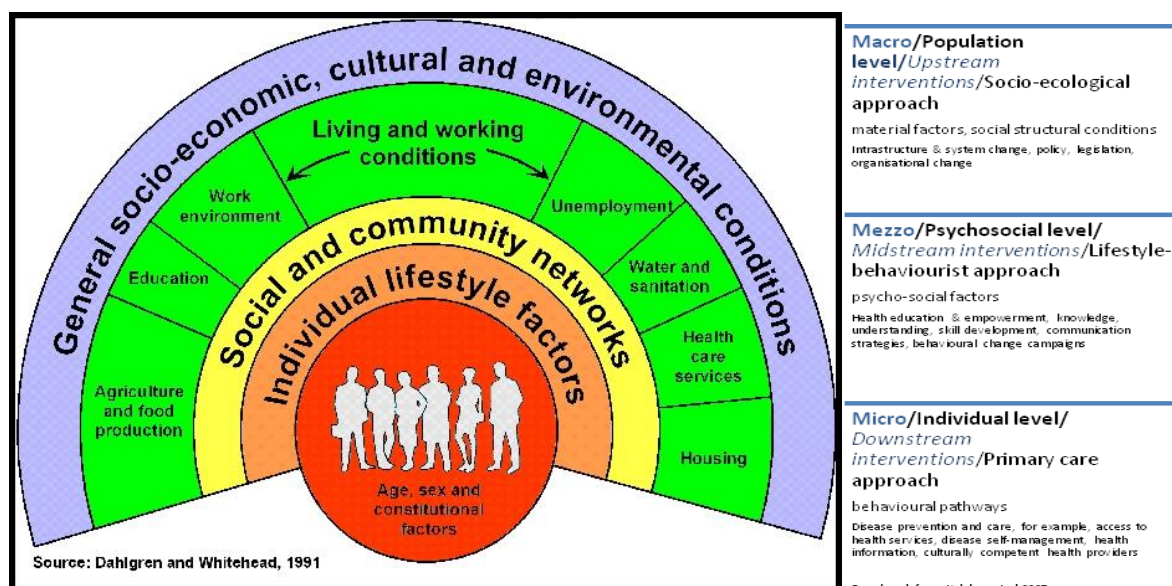
It should be noted that the data concerning the percentage of parents actively involved in their children's school, which shows a large drop in activity between 2008 and 2011-12, is unreliable due to changes in the reporting methodology.<sup>55</sup>

### Drivers and causes affecting achievement of healthy, connected communities

There are a broad range of issues, conditions and environments that influence individual and community health and wellbeing. These are interrelated and mutually supporting or opposing, depending on the circumstances. The issues identified in this chapter are interrelated to each other as well as to issues raised in other chapters. Throughout this chapter it is evident that several of these determinants of health are under threat and affecting the achievement of the aspirations outlined.

The Social Determinants of Health Rainbow (see **Figure 6**),<sup>56</sup> which has been widely used by the World Health Organization, explains the key processes and elements that contribute to the health and wellbeing of the population, including Knox's population. In particular, the rainbow shows the layers and connectivity of the various social, natural, economic and built/physical environments that influence health and wellbeing.

**Figure 6:** Social Determinants of Health Rainbow.



The issues that have an impact on health and wellbeing are based around things such as:

- Healthy living conditions (including access to good-quality water, food and sanitation).
- A sustainable and healthy environment (which enables clean air, biodiversity and access to green and open spaces).
- Life cycle factors (early years, youth and ageing).
- Appropriate and affordable housing.
- Literacy and educational options.
- Job opportunities, employment and unemployment (which affect economic capacity).
- Hereditary and lifestyle factors.
- Cultural, arts, recreation and sporting opportunities and community engagement/connection.

<sup>54</sup> DHHS, Victorian Population Health Survey, Social Capital Report, 2011-12.

<sup>55</sup> DHHS, Victorian Population Health Survey, Social Capital Report, 2011-12.

<sup>56</sup> Dahlgren and Whitehead, 1991.

- Access to appropriate services and social supports (including healthcare, justice and support services, etc.).
- Adequate and appropriate transport access.
- Fair and equitable systems (which address sexism, racism, discrimination, inequity and disrespectful relationships).

## Prosperous, Advancing Economy

The aspiration for Knox is that it enjoys a global economy and business precincts which are recognised nationally with contemporary business opportunities and support for entrepreneurship, business attraction and local employment opportunities. Innovation and creativity are valued, and local economies thrive, recognising that work is integral to community wellbeing and, whether inside or outside the home, it makes a valuable contribution to our individual wellbeing and the economy.

Local employment is highly desired and encouraged as it minimises the personal and environmental costs of travel. Because people work locally they are embedded in the local community and are more inclined to contribute to the social life of the community and spending is retained. Development is undertaken in a sustainable manner with impacts minimised. Businesses pride themselves on, and are recognised for, being environmentally and socially responsible.

Knox enjoys a skilled workforce and fosters opportunities for local education and skill development. Businesses benefit from strong collaborative networks and increased skills and capabilities created locally, and Knox is well regarded as a business and investment destination.

Educational institutions are dedicated to creating capable, confident, emotionally mature young people who are equipped to reach their full potential. Knox businesses and the community have benefited from valuing and encouraging the ongoing contribution and wisdom of Knox's older community members.

Knox has a strong culture of encouraging entrepreneurship and diversification of its economy. Knox supports and facilitates local business and commercial and industrial hubs, with an emphasis on advanced manufacturing and environmental technologies as core drivers of its economy.

Knox businesses are well recognised as being leaders in corporate social responsibility and, because of this, Knox is a place of choice for business and talent.<sup>57</sup>

### *Knox enjoys a globally competitive economy*

Knox participates in a global economy with the value of exports generated estimated at \$8.04 billion in 2016.<sup>58</sup> This represents 40% of the \$20.5 billion gross revenue produced by its industry and accounts for 7% of the exports generated by Greater Melbourne.<sup>59</sup> Manufacturing (75%) and wholesale trade (16.4%) continue to be responsible for the majority of the goods and services produced in Knox and sold to consumers, businesses and governments based outside its boundaries.

Similarly, manufacturing (51.4%) is the largest export generator for Greater Melbourne, although there is a greater balance across its other industry sectors, including financial and insurance services (10.2%), wholesale trade (9%), and professional, scientific and technical services (6.5%) when compared with Knox.

Knox manufacturing exports have been steady, with less than 0.4% decline between 2011 and 2016, while wholesale trade has experienced a stronger downturn of 11.5% from \$1.49 billion to \$1.32 billion for the same period.

### *Knox is well regarded as a location for sustainable business and investment*

The number of registered businesses in Knox has marginally declined (3%) in five years to 12,899 in 2015. Businesses employing fewer than 20 people continue to be the backbone of the Knox economy, representing 97% of all businesses.

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<sup>57</sup> Knox Vision: our city, our future 2013–17 p. 13.

<sup>58</sup> REMPLAN, April 2016.

<sup>59</sup> REMPLAN, April 2016.

Between 2013 and 2014, the Knox resident workforce unemployment rate increased from 4% to 5.7%, with a similar trend experienced at the Greater Melbourne and Australian reporting level. Since then, Knox unemployment has been declining, reaching 4.6% in March 2016 and widening the gap between the Greater Melbourne and Australian unemployment rates by at least 1.6% (Australia 6.2%). This suggests that the transferrable skills, knowledge and abilities of Knox residents and the regional workforce are a key strength of the municipality for companies.

In addition to a highly skilled workforce and quick and efficient access to all areas of Melbourne via Eastlink, Knox is generally well regarded as a location for sustainable business and investment, where development is actively facilitated by Council. Council's engagement with the business community has provided anecdotal evidence of businesses choosing to remain in Knox and expand, as well as of businesses relocating from areas to the west into larger or new premises within Knox. The Scoresby–Rowville, Knoxfield and Bayswater business precincts have been the main beneficiaries of these movements.

To support business growth and investment, Knox City Council provides a Development Facilitation Service for significant and strategic developments. During the 2015-16 reporting period, Council approved 196 commercial and industrial planning applications with an estimated total value of \$148.6 million and 964 residential planning applications with an estimated total value of \$261 million.

### ***Knox benefits from a thriving local economy***

Knox provides a diverse and resilient economic landscape with a mixture of business and employment opportunities.

At April 2016, the Knox economy was providing a Gross Regional Product (GRP) (the measure of wealth generated by the local economy) estimated at about \$8.08 billion, up almost 8% from June 2013. It continues to remain just over 3% of the comparable figure of the Greater Melbourne GRP. This growth is a result of the increase in the value added<sup>60</sup> contributions by industry sectors such as rental, hiring and real estate services, construction, healthcare and social assistance, and professional, scientific and technical services, offsetting a decline in manufacturing between 2011 and 2016.

Equally, the quantity of goods and services produced per annum for Knox has increased by 2.5% from 2011 to 2016 (to \$20.1 billion), with any slight decline in sectors such as manufacturing and wholesale trade being offset by a slight increase in construction and rental, hiring and real estate services.

The value of intermediate goods and services purchased by industry sectors within Knox is also marginally up from \$5.3 billion in 2011 to almost \$5.4 billion (these are input goods or services into a final product common in manufacturing). The greatest purchaser of intermediate goods and services within Knox is manufacturing (36%), although it has declined by 9 percentage points from 2011. This has, however, been offset by industry sectors such as construction, wholesale and retail trade and other services increasing their use of intermediate goods and services within Knox.

The economic performance of the Knox economy is derived from the productivity of the 55,800 jobs estimated to exist in Knox (as at June 2013). While 71% of jobs in Knox are attributable to six industry sectors (manufacturing, retail and wholesale trade, healthcare and social assistance, construction and education), construction, professional scientific and technical services, and rental hiring and real estate services make up 43% of all businesses operating in Knox across 19 industry sectors. The manufacturing sector comprises only 8% of businesses in Knox, declining 7.5% between 2012 and 2015 from 1,082 to 1,001 businesses, but offset by a 12.5% increase in healthcare and social assistance businesses to 555.

In summary, the Knox economic indicators suggest some shifting from a production and processing economy to a knowledge-based economy. However, manufacturing will continue as the key contributor to Knox's economic output (45%) and almost 23% of jobs.

### ***People in Knox have a high level of personal economic capacity***

The Index of Relative Socio Economic Disadvantage (IRSED) measures relative disadvantage (i.e. with a score of below the national benchmark of 1,000) using information from each census. Knox's score of

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<sup>60</sup> The value added for any industry is the value of its sales (output) less the value of its intermediate inputs (other industries' outputs).



1,049 in 2011 is indicative of relatively less disadvantage, ranking it as the 12th least disadvantaged municipality in Victoria.<sup>61</sup> While there are locational concentrations contrary to this, no Knox suburb was technically disadvantaged on this measure.

Seven of Knox's 11 suburbs had IRSED scores in the highest 30% in Victoria, including Lysterfield with a score in the highest 10% in the state and Rowville just outside the top 10%. This makes these suburbs among the least disadvantaged areas in Victoria.

Bayswater (1,003) and Boronia (1,014) remain the most disadvantaged suburbs in Knox and although both fall in the lower half of scores in the state, neither is in the bottom 30%.<sup>62</sup> Knox's ranking (relative to the rest of Victoria's municipalities) did not change between 2006 and 2011, although its ranking improved compared with 10 years ago. However, the data below indicates some challenges to Knox's relative strength around personal and economic capacity and wellbeing. These are:

- **An increase in lower income households.** The percentage of households in the lowest 40% of Australia's income distribution<sup>63</sup> has increased from 31.7% to 33.3% between the two most recent censuses. This includes an increase in the number of households in the lowest 10% from 6.2% to 6.8%. The 40% figure is traditionally used as the benchmark for defining 'lower income'.

Population ageing and the higher than average dependence of older residents on the aged pension is only part of the story. Older households (65+) account for 40% (7,000) of lower income households in Knox. The remaining 60% (10,300) mostly comprise families with children (4,200) and lone parent families (2,400). While 75% of older, lower income households own their own homes outright, younger, lower income households are much less likely to do so and have the added pressure of meeting housing costs, reducing their ability to spend on other essentials such as food and health.

- **Slower than average income growth.** Knox has been characterised by consistently higher than average household, personal and family income compared with the metropolitan average. Median household income is now much closer to the Melbourne average, increasing by 21% between 2006 and 2011 to \$805 per week.<sup>64</sup> This compares with a 24% increase across Melbourne for a median weekly household income of \$802 in 2011 (and the regional average of \$837).
- **Growth in welfare dependency rates.** This includes an increasing share of households receiving rent assistance (from 9.6% of Knox households in 2009, compared with 11.6% in 2014) and upward movement in the percentage of welfare-dependent, low-income families.<sup>65</sup> This has increased from 6.6% of families in 2009 to 7.1% (nearly 3,000 families) in 2014, consistent with the growth in number of lower-income households discussed above.<sup>66</sup>

Families that are solely or largely dependent on government income, with the least access to income and other resources, are more likely to have lower achievements in education, experience housing stress, and have poorer physical and mental health.<sup>67</sup> For children living in such families, there is increased likelihood of limited opportunity and poorer outcomes in terms of wellbeing and learning.<sup>68</sup>

Increasing welfare dependency is consistent across all geographic levels and rates in Knox on all measures (with the notable exception of the aged pension<sup>69</sup>) remain consistently lower than average.

- **Ongoing and emerging indicators of financial stress.** The data indicates an improvement in food security in Knox between the 2008 and 2011-12 Victorian Population Health Surveys. The proportion of adults that reported running out of food in the previous 12 months and being unable

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<sup>61</sup> ABS SEIFA, 2011.

<sup>62</sup> ABS SEIFA, 2011.

<sup>63</sup> Based on equivalised household income that has been adjusted to remove the effect of household size on income.

<sup>64</sup> ABS Census, 2011.

<sup>65</sup> Low income families with children under 16 years of age, with income under \$36,276 (2011) and in receipt of Family Tax Benefit A.

<sup>66</sup> PHIDU, Social Atlas, 2014.

<sup>67</sup> Barnett M, Economic disadvantage in complex family systems: expansion of family stress models, *Clinical Child Family Psychology Review*, 2008: 11(3): 145-61.

<sup>68</sup> Smart D, Sanson A, Baxter J, Edwards B & Hayes A, Home-to-school transitions for financially disadvantaged children. Sydney: The Smith Family: 2008.

<sup>69</sup> See the section on 'Active ageing' in Healthy, Connected Communities.

to buy more declined from 6.6% to 6.3%. Although the rate remains slightly higher than the metropolitan average (6.1%<sup>70</sup>), this gap has narrowed since the earlier survey when the rate in Knox was 6.6% compared with metropolitan and state averages of 5.4% and 5.6% respectively.

The rate of food stress (estimated at around 5,300 adults) excludes any dependent children living in food-stressed households. The true extent of the adverse impact on nutrition, health and wellbeing caused by food stress would be higher if dependent children were included.

A key indicator of financial stress is the ability to respond to an emergency. Those who cannot raise \$2,000 in two days in an emergency are considered to have a low level of resources and at risk of having a negative event turn catastrophic, for example, a car breaking down leading to job loss or the need for unpaid time from work due to injury or illness leading to poverty.<sup>71</sup>

The capacity of people in Knox to raise funds in an emergency is comparable to the metropolitan average according to the most recent General Social Survey.<sup>72</sup> However, a review of this data indicates a decline during the review period from 90.3% in 2008 to 86.2% by 2011-12. This downturn in capacity is of some concern given that it is contrary to small increases in capacity at a metropolitan and state level (from 85% at both geographic levels in 2008 to around 86%, with a regional average in 2011-12 of 89.6%). In addition, data from previous surveys in 2004 and 2006, while not directly comparable due to a change in survey methodology, also found a previous pattern of higher than average capacity to respond to an emergency among Knox respondents (e.g. 78% in Knox compared with a 69% metropolitan average in 2006).<sup>73</sup>

### ***Local employment is desired and encouraged***

In 2011, 32% of the Knox resident workforce (defined as people who live in the Knox municipality and are employed) worked in Knox while another 32% worked in a neighbouring municipality. Of the Knox resident workforce working in Knox in 2011, 24% (ABS 2011 Census) were employed in highly skilled occupations, an increase of more than 6% in five years. This suggests that the Knox resident workforce aspires to work locally in highly skilled occupations.

Almost 39% of all Knox's labour force jobs (i.e. regardless of the worker's place of residency) in 2011 were filled by the Knox resident workforce, with an additional 43% of Knox jobs filled by our immediate neighbour resident workforce. Key sources of neighbouring inbound workers were, in order of significance: Yarra Ranges (7,398), Maroondah (4,937), Casey (4,524), Greater Dandenong (4,475), Whitehorse (2,862), and Monash (2,848).

In 2011, the majority of non-Knox workers (those who live in Knox, but do not work in Knox) travelled to jobs in adjacent municipalities and still considered this to be 'working locally'. By contrast, almost 35,000 workers travelled into Knox, occupying more than 62% of the jobs available locally.

A lower than average percentage of employed people living in Knox perceived an adequate balance between work and life in 2011 (51% compared with 55% metropolitan-wide and 57% regionally).<sup>74</sup> Perceptions of balance were particularly low among men in Knox (42% of employed men compared with 53% metropolitan-wide), but it was better than average among local working women (62% compared with 57%).<sup>75</sup>

These tendencies among men and women in Knox replicate what was found in the 2007 survey.<sup>76</sup> However, while satisfaction with work-life balance has remained stable among women, it has declined significantly among men (from 49% in 2007 to 42% in 2011-12).<sup>77</sup> This may be reflective of data from the last VicHealth Survey (2011), which found a slightly higher than average long daily commute (two or more hours daily) for Knox employees (one in seven compared with one in eight metropolitan-wide); that more than one-third of adults in Knox were suffering inadequate sleep (less than seven hours per weekday); and that a slightly higher share cited time pressures were preventing them from spending time with family and friends.

<sup>70</sup> Regional average was 4.1% and the state benchmark was 4.6% in 2011.

<sup>71</sup> DHHS, Victorian Population Health Survey, 2011-12.

<sup>72</sup> Data compiled by PHIDU, from the General Social Survey, 2010 Australian Bureau of Statistics.

<sup>73</sup> PHIDU, Social Atlas.

<sup>74</sup> VicHealth Survey, 2011.

<sup>75</sup> VicHealth Survey, 2011.

<sup>76</sup> Community Indicators Victoria Survey, 2007.

<sup>77</sup> Community Indicators Victoria Survey, 2007.

### ***Educational providers assist people to realise their full potential through access to quality education options***

People living and working Knox have access to higher and vocational education pathways in Melbourne's east.

Data on the 2015 study destinations of completing Year 12 students from Knox show the institutions most used by Knox students entering higher education.<sup>78</sup> As would be expected given their proximity, Deakin University (28%) and Monash University (18%) were the most popular, with Swinburne University at nearly 9% and The University of Melbourne at nearly 6%. In the area of vocational training, Box Hill Institute led the field at more than 7%, followed by Holmesglen Institute and Swinburne TAFE at 6% and 3% respectively.

On average over a five-year period (2011–15), fewer Knox Year 12 or equivalent completers (46%) undertook a bachelor's degree when compared with Victoria (52%), with more Knox Year 12 or equivalent completers undertaking a certificate/diploma (22%) or apprenticeship/traineeship (6%) when compared with Victoria (17% and 8% respectively).<sup>79</sup>

This suggests a diverse and responsive local skilling and employment pathways framework. Such a framework supports workforce productivity, economic and community prosperity, and maintains Knox's lower unemployment rate.

The education and skills base of residents influences capacity to gain employment; affects outcomes for income and personal economic wellbeing; and contributes to equity and the ability to make lifestyle choices. Data from the 2014 HILDA Survey<sup>80</sup> found that the pay gap between high and low income earners is gradually increasing – with education making a major difference.

The educational qualifications of Knox residents will also influence their ability to engage in the emerging knowledge economy and respond to technological advancement that will create new professions and render traditional jobs obsolete.

While a review of indicators around Knox's educational status suggests ongoing improvement (see 'Lifelong learning opportunities support people's full potential in Knox' in the Healthy, Connected Communities section), educational indicators that underpin resident workforce skills remain lower than average. These include:

- A smaller share of Knox's 15 years or older population had post-school qualifications in 2011 (55% compared with 58% metropolitan-wide). Those that did were more likely to hold a vocational qualification (20% compared with 15%) and correspondingly less likely to hold a diploma or higher degree (27% compared with 32%).
- Completion rates for a higher education qualification (a bachelor's degree or higher) were considerably lower than the metropolitan average for every age group across the life cycle. In 2011, 21.8% of people in Knox held a bachelor's degree or higher, compared with 33.1% in the Eastern Metropolitan Region.
- According to the 2011 census, there were fewer professionals (19% compared with 24% across Melbourne) or in management positions (11% compared with 24%), while there were more in technical and trade roles (16% compared with 13%).

### ***Knox enjoys a skilled and contemporary workforce***

While diversity in employment opportunities exists, the Knox labour force (those who work in Knox regardless of their place of residency) is increasingly becoming more highly educated, with 55% of employees having vocational through to postgraduate degree qualifications as at April 2016, compared with 49% in October 2011.<sup>81</sup>

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<sup>78</sup> DEECD, 2016.

<sup>79</sup> DET, On Track Surveys, 2011–15.

<sup>80</sup> Household, Income and Labour Dynamics in Australia Survey (2014) – annual survey in which 17,000 Australians are interviewed on issues ranging from family structures, superannuation, income, health and education.

<sup>81</sup> REMPLAN, April 2016.

In 2016, 87% of business owners and managers surveyed rated availability of a skilled workforce as either 'important' or 'very important', while only 42% said they were either 'satisfied' or 'very satisfied' with this aspect of operating a business in Knox.<sup>82</sup> This is likely to be a result of the changing demands of business production and global competitiveness. Jobs in Knox are comprised mainly of professionals (17%), clerical and administrative workers (15%), technicians and trade workers (15%), and managers (13%). The only significant variation when compared with Greater Melbourne is that 25% of workers in Greater Melbourne are employed as professionals.<sup>83</sup>

### ***Businesses in Knox benefit from strong collaborative networks and increased skills and capabilities***

One method of advancing the Knox economy is through collaboration between business and industry. Knox is fortunate to be home to two incubator type organisations – the Small Technologies Cluster (STC), located in the Caribbean Business Park at Scoresby, and the Victorian Centre for Advanced Materials Manufacturing (VCAMM), located on Burwood Highway in Knoxfield. In addition, Council also supports the Monash Enterprise Centre and Business Incubator and Realm (a working space in Ringwood) and can refer local entrepreneurs to these facilities and services.

Despite Knox not having the more traditional forms of business networks such as chambers of commerce or business representative groups, evidence suggests through business visits and contacts that businesses in Knox are members of a variety of industry associations including Australian Industry Group (AiGroup) and the Victorian Employers Chamber of Commerce and Industry (VECCI), and also participate in local offerings from the South East Melbourne Manufacturers Association (SEMMA), the Australian Manufacturing Technologies Institute Ltd (AMTIL), South East Melbourne Innovation Precinct (SEMIP), and the STC.

### ***Knox exhibits sectors and firms representative of an advancing, knowledge-based economy built on the use of modern technologies***

The Knox workforce operates across a diverse range of industry sectors. The growth and resilience of Knox's economy (see 'Knox enjoys a globally competitive economy' above) suggest that businesses across all sectors are responding to the drivers and causes of change through innovation such as high-technology investments and information.

In employment terms, the dominant sector in 2016 is manufacturing, which provides 23%<sup>84</sup> of Knox jobs (down from more than 24% in 2011), followed by retail trade at 13% (down from 14% in 2011). Wholesale trade provides 11% of jobs (down from 12% in 2011), and construction has held steady across both years at 7%. In the knowledge sectors, healthcare and social assistance employs 11% (up from 9%), education and training employs 6% (up from 5%), and professional, scientific and technical services, 6% (up from 4%). The growth in these sectors suggests some adjustment in Knox's economic structure towards more knowledge-based activity.

### ***Aspiration: Knox businesses are environmentally and socially responsible***

Internal program data<sup>85</sup> suggests that businesses in Knox are actively involved in supporting activities that have a positive impact, particularly through their participation in Knox City Council initiatives that embrace the environment and focus on employees and the community. Between 2012 and 2015, Knox businesses have actively and increasingly participated in initiatives such as National Tree Planting Days, Gardens for Wildlife, Healthy Together Knox (Workplaces), Youth Careers in Action, and speaking at Knox business events.

### ***Knox offers contemporary business opportunities built upon entrepreneurship, innovation and creativity***

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<sup>82</sup> New Focus Pty Ltd for Knox City Council (2016), City Plan Municipal Survey Final Report, p. 73 & 79.

<sup>83</sup> REMPLAN, 2013a and 2013b.

<sup>84</sup> REMPLAN, April 2016.

<sup>85</sup> Internal Program Schedule – Knox Organisations CSR Activities.

Knox has a framework in place, through its Economic Development Program, that is focused on creating, attracting, retaining and expanding (the C.A.R.E. framework) within business and industry in Knox. Some contemporary business development opportunities are provided to business through Council's business education and events program and through partnerships with neighbouring councils and educators, such as Knox Innovation, Opportunity and Sustainability, Swinburne University of Technology and the Learn Local in Knox network.

Interestingly, 96% of businesses told us at the conclusion of Council's 2015 education and events program that the seminar or workshop they attended had assisted them to start or expand their business. In addition, 90% of the post-program survey respondents told us that the program had assisted them to 'increase product sales or service income' or had contributed to 'increased profitability'.

### ***Aspiration: Knox benefits from local business, commercial and industrial hubs***

Knox has a range of business, commercial and industrial hubs. The most significant of these in terms of economic contribution are the Scoresby–Rowville Employment Precinct (SREP) (covering 240 hectares (ha) of business-zoned land) and the Bayswater Business Precinct (covering 750ha and three municipalities). The Bayswater Business Precinct<sup>86</sup> accommodates more than 4,400 businesses and employs 25,497 people in the broader catchment area,<sup>87</sup> making it important both locally and regionally.

The SREP is home to 470 businesses.<sup>88</sup> This area is experiencing some transition from the more traditional forms of industry to newer and more advanced industries, driven primarily by the age of the building stock and changes in technology and equipment. This has resulted, in some circumstances, in the need for different and more contemporary premises. Continued focus on assisting traditional industries to transition to different forms of commerce will be necessary if the precinct is to maintain its presence and contribution to the Knox economy.

The SREP is a high amenity employment precinct for production economy-related activities. It has a primary focus on research and development, industry/technology, warehousing/distribution, and office use. The SREP is located adjacent to the Eastlink tollway and enjoys good access to the Monash Employment Cluster at Clayton. Several businesses in the area have relocated from within Knox or elsewhere to larger or purpose-built premises. This has occurred in the Stamford Business Estate. The Caribbean Business Park is continuing to develop as a world-class commercial destination with new office buildings, expansive parkland, new retail areas and lifestyle facilities.

Knox has several smaller but still significant business and industrial hubs, including the Mountain Gate industrial and business area; Knoxfield industrial precinct (including the Kingston Business Park); and the Lewis Road industrial area (within the Knox Central area in Wantirna South).

Knox also has four substantial activity centres at Knox Central, Boronia, Stud Park and Bayswater and is supported by several smaller local activity and shopping precincts and villages.

Knox Council is completing a 'Land for Business: Strategic Review and Future Directions Plan'<sup>89</sup> to ensure that the city has an appropriate supply of land for business into the future and is able to leverage this land to ensure it meets the current and future needs of the community. Initial findings from this are that Knox should plan for additional industrial land in the range of 20 ha to 40 ha over the next 20 years.

### ***Drivers and causes affecting achievement of a prosperous, advancing economy***

- Structural adjustment in the Australian economy influences the types of businesses and economic activity. Australia is changing from a strong traditional manufacturing economy with a reliance on mining and agriculture to a knowledge and production-based economy.

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<sup>86</sup> The Bayswater Business Precinct incorporates Bayswater, Bayswater North and Kilsyth across three municipalities – Knox, Maroondah and Yarra Ranges.

<sup>87</sup> Note these figures are significantly different to the previous report but based on the recent research undertaken for the Bayswater Business Precinct – 19,000 businesses and 35,000 jobs.

<sup>88</sup> REMPLAN Economy 31/08/16.

<sup>89</sup> Knox City Council (2016), Preliminary Land for Business Review.

- Contemporary forms of production and service delivery – often referred to as ‘The Internet of Things’ – together with the development of new technologies and infrastructures.
- Rising commodity prices resulting in greater contributions to the Australian economy.
- Increased globalisation, which provides greater access to more and different markets, cheap skilled labour and competition.
- Asian economic expansion, including global shifts in trade, activity and wealth to Asia.
- The ageing of the Australian workforce.
- Aspirations for greater wealth for both individuals and businesses.
- Low inflation accompanied by a fluctuating Australian dollar.
- Overall growth is continuing to be moderate, despite a decline in business investment.

## Vibrant and Sustainable Built and Natural Environment

**The aspiration for Knox is that its residents identify and strongly value Knox being made up of a network of villages with access to urban facilities and services. Growth and change through development occurs at a rate and type that is responsive to Knox's character while meeting the needs of a changing community. Development respects and celebrates the strong sense of character of Knox's villages while making positive design and investment contributions. Knox is known for getting the balance right!**

**Knox has proactively planned to support residential housing choices that are available and accessible to Knox residents considering stages in life, household size and income. The Knox community and businesses are leaders in sustainable management and living, valuing and protecting significant environmental assets, celebrating a healthy local environment, a green and leafy municipality, and sustainable living opportunities for all. Biodiversity is valued and protected in Knox. Knox has proactively and innovatively encouraged investment in sustainable technologies, industries and products.**

**Knox's community is benefiting from this as genuine opportunities for renewable energy sources, reduction of greenhouse gas emissions and application of sustainable design products and features are common.**

**Through continued advocacy and increased investment, public transport services in Knox are readily available, accessible and highly patronised. Knox has a strong functioning network of bicycle and walking paths, which support mobility for all, serve commuters working and shopping locally and for recreation, thereby reducing the reliance on the car and minimising greenhouse gas emissions.<sup>90</sup>**

### ***Knox identifies with and strongly values its network of villages***

In 2013, the Knox community identified with a desire for living, working and playing in their local area. Reasons for this included: a desire to maintain a 'village feel' (including knowing one's neighbours); and reducing travel times and fuel costs.<sup>91</sup> However, there are tensions in the Knox community between wanting to 'know the neighbours' and challenges associated with new higher density housing in established suburbs. Evidence of this tension includes objections to planning applications for new residential development (of a higher density than typical residential lots in the area), often centred on concerns about car parking and overlook from new development.<sup>92</sup>

The potential for creating 'hubs' was a strong theme during community consultation conducted in 2013 as part of Knox@50. The community anticipates greater flexibility in employment in the future, including working from home and addressing family needs.

There has been a reduction in the percentage of adults in Knox who rate the local area as being a pleasant environment with nice streets and well-planned open spaces (from 87.4% in 2008 to 82.1% in 2011-12). Although positive perceptions are higher than the metropolitan average (at 79.8%), the decline in positive perceptions is contrary to trends across the state and metropolitan Melbourne, where positive perceptions have remained stable (about around 80%).<sup>93</sup>

### ***Knox has access to a full range of urban facilities and services***

As indicated in 'Access to excellent health and leisure facilities and services' in the Healthy, Connected Communities section, while the percentage of Knox residents who believe there are good facilities and services in Knox has declined, it still remains higher than the metropolitan average. In a community

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<sup>90</sup> Knox Vision: our city, our future 2013–17, p. 14.

<sup>91</sup> Knox City Council (2013), Knox@50 Final Report, p. 4.

<sup>92</sup> Knox City Council (2013), Housing Monitoring and Review Program 2012 (Annual Report).

<sup>93</sup> State of Knox Master Database (The metropolitan average has remained stable at around 80%; state average at 81% between 2008 and 2011-12).

survey (completed as part of Knox@50), 85% of residents said access to parks and open space was very important.<sup>94</sup> Similarly, in 2016, 86% of residents surveyed rated bushland and natural spaces as either 'important' or 'very important' while 79% felt the same about sporting, recreational and leisure opportunities.<sup>95</sup>

The level of service provision was also seen as important, particularly footpath connections, consistency of parks maintenance, amenity provisions (such as seating and toilets), the quality of the treescapes and consistency around Council's approach to nature strips. In 2014, the overall mean score for satisfaction with the level of maintenance for parks within the City of Knox was 8.1 (out of a possible 10). This is higher than the last survey from 2008 (at 7.5).<sup>96</sup> In 2011 almost half of Knox residents (49.6%) had visited green space at least weekly in the previous three months. This is similar to the state average of 50.7%.<sup>97</sup>

The 2016 City Plan Municipal Survey gauged community perceptions on importance of and satisfaction with a range of issues, including several types of facilities and services. Overall, residents surveyed were either 'satisfied' or 'very satisfied' with most of these, including sporting, recreational and leisure activities (66%); services and facilities for physical and mental health (49%); and education and training for all stages of life (48%). However, a vibrant arts and cultural scene was rated relatively low by residents with respect to satisfaction (36%).<sup>98</sup>

### ***Growth and change in Knox is responsive to local character while meeting the needs of a changing community***

Amid the changes experienced during the 20th century, Knox has retained much of its green and leafy character and open spaces. The imposing Dandenong Ranges continue to be central to the identity of the city. A sense of openness is delivered through large backyards, not just formal open space. The 'feeling of openness and country feel' is highly valued throughout the Knox community and is perceived by the community to be 'under threat from development'.<sup>99</sup>

In 2016, only 32% of residents surveyed were either 'satisfied' or 'very satisfied' with type and affordability of housing, the lowest rating out of 16 aspects of the city for which perceptions were measured. In addition, this aspect was seen by the community as the only aspect of the city that was getting much worse over the past four years.

More than two-thirds of those surveyed said it was getting worse, with 38% saying it was 'a little worse now' and 31% saying it was 'a lot worse now'.<sup>100</sup> In 2012, a post-occupancy survey was sent to residents living in newly developed higher density homes in Knox. Of those surveyed, 68% had been living at their residence for less than five years. The top two things that people would change about their home were 'more car parking' and 'more open space'.<sup>101</sup>

The look, feel and location (the 'character') of an area are an essential component of people's acceptance or resistance to different types of housing. Over recent years there has been a shift in the types of dwellings constructed. This change in streets and neighbourhoods has led to significant angst and concern in the community about the rate and scale of change and the perceived impact of this change. The 2015 Knox Housing Strategy is Council's plan to manage residential development, responding to the current and future needs of the community.<sup>102</sup>

Key issues relating to residential growth and change have not changed since the last State of Knox Report. They include: lower than average housing choice; a mismatch between the supply of smaller housing options and demand; and housing affordability, particularly around lack of supply of social housing.

<sup>94</sup> Knox City Council (2013), Knox@50 Final Report, p. 40.

<sup>95</sup> New Focus Pty Ltd for Knox City Council (2016), City Plan Municipal Survey Final Report, p. 22.

<sup>96</sup> Parkscape (2014), Melbourne and Regional Victoria City of Knox SCAPE DATA, November–December 2014, p. 25.

<sup>97</sup> VicHealth (2011), Indicators Survey Data (LGA profile – Knox).

<sup>98</sup> New Focus Pty Ltd for Knox City Council (2016), City Plan Municipal Survey Final Report, p. 48.

<sup>99</sup> Knox City Council (2013), Knox@50 Final Report, p. 25.

<sup>100</sup> New Focus Pty Ltd for Knox City Council (2016), City Plan Municipal Survey Final Report, p. 24.

<sup>101</sup> Knox City Council (2012), Knox Housing Policy Monitoring and Review Program Annual Report (2011 calendar year).

<sup>102</sup> Knox City Council (2015), Knox Housing Strategy, January 2015, p. 5.



There is a clear mismatch between the size of dwellings, declining household size, and the limited number of one and two-bedroom dwellings. For every smaller dwelling built between 2006 and 2011 there were three additional smaller households.<sup>103</sup> Between 2009 and 2015, 46% (2,475 dwellings) of dwellings approved in Knox were for small dwellings (zero to two bedrooms).<sup>104</sup> In 2015, smaller dwellings (one and two-bedrooms) represented 71% of all approvals in activity centres (compared with 13% of approvals outside of activity centres). This suggests that smaller (and typically more affordable) living options are being provided in areas closest to shops, activities and public transport. Despite the new supply of smaller dwellings, 84.1% of private dwellings in Knox contain three or more bedrooms, (compared with 70.1% across metropolitan Melbourne).<sup>105</sup>

In line with Council's current Housing Policy (and the former 2005 Housing Statement), the location of approved dwellings has started to shift away from dispersed areas (including the Dandenong foothills) to strategic sites and activity centres. There was a significant increase in approvals in activity centres in 2012 (this was largely as a result of the approval of the 236 units within the 'Kubix' apartments in Knox Central).<sup>106</sup>

In 2015, the Knox median house price overtook the Melbourne metropolitan median (\$575,000 compared with \$460,000). The percentage of total Knox households with mortgage costs in excess of 30% of gross income was 28.5%, which was lower than the metropolitan average of 32.3%. While suburbs in the north-east of Knox have relatively better housing affordability (based on median house price), median prices in those areas are increasing. In 2014 the affordable dwelling benchmark for a typical Knox household was \$380,000 (up from \$281,000 in 2011).

Private rental affordability is an issue in the outer suburban ring of Melbourne (including Knox). This area has the lowest vacancy rates in the state, around 1-2% over the past year. The critical shortage of rental premises is placing upward pressure on rents. The Knox median rental cost increased by 22% between 2001 and 2006 and by 50% between 2006 and 2011.<sup>107</sup>

The percentage of rental housing that is affordable for lower income households receiving a Centrelink benefit in Knox was 3.5% (as of the first quarter in March 2016). This is lower than the metropolitan average and has declined over the past two years. Typical rental properties in Knox are not affordable for lower income households in any suburb of Knox. For residents who live in private rental properties, the 2011 census revealed an increase in the proportion of households in housing stress from 24% in 2006 to 38% in 2011.<sup>108</sup>

In 2011, the amount of social housing within Knox was below the metropolitan figures, both in terms of the average as a percentage of housing stock (2.1% compared with 2.9%) and as a ratio of the number of dwellings per head of population (7.4 per 1,000 residents, compared with 10.6). For the fourth year in a row, no social housing projects were approved in Knox in 2015.<sup>109</sup>

Council developed a methodology to quantify the minimum requirement for locally affordable (social) housing dwellings to meet the needs of the most vulnerable and disadvantaged households in Knox.<sup>110</sup> In 2014 there were an estimated 390 households whose needs could not notionally be met locally within existing social housing dwellings or affordable private lettings. This represents an increase over the 2010 estimate of 280. Without intervention to increase the level of social housing and/or supply of affordable, private rentals, the social housing shortfall in Knox is forecast to increase to 860 dwellings by 2036,<sup>111</sup> an increase over the previous estimated shortfall of 700 dwellings by 2030.

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<sup>103</sup> Defined as lone person and couple only households.

<sup>104</sup> Knox City Council (2016), unpublished data from the Knox Housing Policy Monitoring and Review Program.

<sup>105</sup> Derived from Australian Bureau of Statistics, Census of Population and Housing 1991–2011. Compiled and presented by .id.

<sup>106</sup> Knox City Council (2016), Knox Housing Policy Monitoring and Review Program Annual Report (2015 calendar year).

<sup>107</sup> ABS (2011), Census of Population.

<sup>108</sup> ABS (2011), Census of Population.

<sup>109</sup> Knox City Council (2016), Knox Housing Policy Monitoring and Review Program Annual Report (2015 calendar year), p. 26.

<sup>110</sup> Knox City Council (2011), Defining affordable housing and a minimum supply of social housing for Knox.

<sup>111</sup> Knox City Council (2015), Minimum supply of social housing, Knox (2014–2036).

### ***The Knox community and businesses are leaders in sustainable management and living (green and leafy municipality and sustainable living opportunities, minimising greenhouse gas emissions)***

Achieving sustainable outcomes in the planning process (most of which contribute to a reduction in household running costs) is addressed through the application of Sustainable Tools for Environmental Performance Strategy (STEPS). Annual reporting on STEPS for 2014-15 found that the residential applications complying with sustainable design measures in 2013-14 would save approximately 1,461 tonnes of carbon dioxide equivalent and 30,805 kilolitres of water every year for the life of the dwellings, as compared with standard Victorian developments of the same size and number.<sup>112</sup>

In 2007, the average consumption of gas for Knox households was higher than the state average. Consistent with broad state and metropolitan trends, the volume of both residential and non-residential gas use in Knox has remained fairly steady since 2009 at approximately 5,200,000 gigajoules (GJ).<sup>113</sup> In terms of electricity, in 2007 the average household use in Knox was consistent with the state average.

Since 2010, total electricity usage across Knox has fallen steadily from a high of 886,186 megawatt-hours (MWh) to 811,169MWh in 2014, a reduction of 8.5%.<sup>114</sup> Over this time, the total amount of solar electricity exported to the grid has increased from 287MWh to 10,911 kilowatt-hours (KWh).<sup>115</sup> Energy use is strongly influenced by climate. The Bureau of Meteorology estimates that in metropolitan Melbourne there are 35 hot days (30 degrees or above) and 159 cold days (18 degrees or below) over the year.<sup>116</sup> Increases in temperature extremes will affect future energy use.

Metropolitan waste generation has declined since 2010-11. However, the latest data (2013-14) shows a continued increase in garbage generation (waste to landfill) to 486 kilograms (kg) per Knox household (compared with 460kg in 2009-10). This is 11kg more than the metropolitan average. While the household yield of recyclables in Knox (in 2013-14) was higher than the metropolitan average, with 289kg compared with 259kg, the volume is declining.<sup>117</sup> The recyclable/green diversion rate has stabilised at both a metropolitan and local level. The diversion rate of 55% in Knox is considerably better than the state average of 45%.

The 2015 audit of Knox contamination rates of recycling and green waste also revealed a higher than previous average rate of contamination. In Knox in 2013-14 the average rate of contamination for recycling was 12.6%, while in 2015 the rate was 16%. Similarly, for green waste in Knox, the average contamination rate in 2013-14 was 2.7%, while in the 2015 audit this rate was more than double at 7%.<sup>118</sup>

### ***Public transport networks in Knox are reliable and accessible***

The importance of the provision of public transport, particularly for older people, young people and multicultural groups, was a common issue raised through Knox@50. It was argued that public transport contributes to helping prevent social isolation and reduces traffic congestion and parking burden.<sup>119</sup> This is an issue, particularly as statistics indicate an increase in the percentage of older and/or frail groups.

The Belgrave train line travels through the north-east of the municipality, with stations in Bayswater, Boronia, Ferntree Gully and Upper Ferntree Gully. There are 15 regular bus routes operating in Knox, two SmartBus services and three Telebus services. The Night Bus service also services parts of Knox. While Knox does not have a tram service, the Knox Transit Link is a bus service that connects the route 75 tram terminus at Vermont South to Westfield Knox, operating at the same frequency as the tram service.<sup>120</sup>

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<sup>112</sup> Knox City Council (2015), Knox Housing Strategy, January 2015, pp. 28-9.

<sup>113</sup> Multinet gas unpublished data.

<sup>114</sup> AusNet data unpublished.

<sup>115</sup> AusNet data unpublished.

<sup>116</sup> Sustainability Victoria (2016), Victorian Households Energy Report, p. 3.

<sup>117</sup> State of Knox Master Database.

<sup>118</sup> EnviroComm (2015), Domestic Kerbside Audit, City of Knox, December 2015.

<sup>119</sup> Knox City Council (2013), Knox@50 Final Report, p. 4.

<sup>120</sup> Knox City Council (2015), Knox Integrated Transport Plan, pp. 10-11.

Knox is a significantly car-dependent municipality, particularly in the southern area which has poor access to public transport services.<sup>121</sup> Households in Knox have a higher car ownership rate (2.01 cars) in comparison with the average metropolitan Melbourne household (1.84).<sup>122</sup> This is reflective of the lack of other transport options in the municipality.

The suburbs with the highest car ownership rates are areas where there are fewer transport options, including Lysterfield, Rowville, The Basin and Wantirna.<sup>123</sup> Three-quarters (74.9%) of Knox residents travel to work by car, compared with a metropolitan average of two-thirds (64%). Almost two-thirds (64%) of Knox households have two or more cars compared with half of the households across metropolitan Melbourne.<sup>124</sup> Knox is ranked third of all Melbourne municipalities in terms of weekly expenditure on fuel.<sup>125</sup>

In terms of public transport, Community Indicators Victoria (CIV) data shows a higher than average proportion of Knox residents with good physical access to public transport: within 400 metres (m) of bus stop and 800m of a train station (48% compared with 15% for metropolitan Melbourne).<sup>126</sup> However, it is important to note that this figure includes three Telebus areas in the southern part of Knox, which offer only a limited service. Therefore, they are often not a viable alternative to the car. The proportion of Knox workers travelling to work by public transport has increased between 2006 and 2011 (6.6% to 7.8% – around half the metropolitan average).

In 2016, 88% of residents surveyed rated ease of getting around by walking, cycling, or public transport as either 'important' or 'very important', while only 48% said they were either 'satisfied' or 'very satisfied' with availability in Knox.<sup>127</sup> In 2009, the percentage of adolescents in Knox who perceived that their capacity to work, study or socialise was affected by lack of access to transport, at 8.9%, was comparable with the metropolitan average.

Overall, fewer Knox residents have experienced limitations in their access to transport (public or private) than the metropolitan average (18.1% compared with 23.2%). In Knox the percentage of residents who experienced limitations in their access to transport has reduced since an earlier survey in 2007. However, a higher proportion of females (27.2%) have experienced limitations in their access to transport than the state average (24.8%) and this has increased since the 2007 survey.

### ***Knox has a strong network of bicycle and walking paths***

Knox has a large bicycle network, catering predominantly for recreational users. There are more than 100 kilometres (km) of shared paths, many of which follow creek corridors. They connect parks, reserves, schools, train stations and shopping precincts. While the off-road network is quite extensive, there are still several gaps, particularly in the on-road network.<sup>128</sup>

In 2012, Knox City Council's bicycle expenditure (\$/person) was \$4.02. This was below the outer zone council average of \$5.65. However, the five-year average for Knox City Council was \$5.87, above the outer zone average of \$5.80.<sup>129</sup> The percentage of residential areas within 400m of the Principal Bicycle Network (23.5%) is less than the metropolitan average of 28.5%.<sup>130</sup>

There are more than 1,200km of footpaths within Knox, but 'walkability' is typically poor (based on connectivity, density and mix of land uses). The Metropolitan Melbourne Walkability Index gives Knox a rating of 2.0 (where 1 is low and 10 is high).<sup>131</sup> Similarly, average school walkability in Knox is lower than the metropolitan average for both primary and secondary schools at 1.1 compared with a metropolitan average of 1.2 (where 0 is less walkable and 2 is more walkable).<sup>132</sup> In 2016, 88% of residents surveyed rated ease of getting around by walking, cycling or public transport as either

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<sup>121</sup> Knox City Council (2015), Knox Integrated Transport Plan.

<sup>122</sup> Australian Bureau of Statistics (2011), Census of Population.

<sup>123</sup> Knox City Council (2015), Knox Integrated Transport Plan.

<sup>124</sup> ABS Census, 2011.

<sup>125</sup> State of Knox Master Database (from Community Indicators Victoria).

<sup>126</sup> State of Knox Master Database (from Community Indicators Victoria).

<sup>127</sup> New Focus Pty Ltd for Knox City Council (2016), City Plan Municipal Survey Final Report, p. 22 & 24.

<sup>128</sup> Knox City Council (2015), Knox Integrated Transport Plan, p. 18.

<sup>129</sup> Bicycle Network (2012), The Bicycle Expenditure Index.

<sup>130</sup> State of Knox Master Database (from Community Indicators Victoria).

<sup>131</sup> State of Knox Master Database (from Community Indicators Victoria).

<sup>132</sup> State of Knox Master Database (from Community Indicators Victoria).

'important' or 'very important', while only 48% said they were either 'satisfied' or 'very satisfied' with availability in Knox.<sup>133</sup>

### ***Knox values and protects significant environmental assets, celebrating a healthy local environment***

Knox has evolved around several creeks, which provide a significant contribution to the sense of openness that residents enjoy. They are vital to the municipal drainage system, host remnant bushland and are key components of the 100km of shared paths. Many of the 118 sites of biological significance are located along or near these creeks. These sites consist of remnant indigenous vegetation and associated flora and fauna, and many of them bring the bush feel of the Dandenong Ranges into residential areas, contributing to Knox's identity as 'green and leafy'.

In addition, the wealth of open space is enhanced by views of the adjacent Dandenong Ranges National Park, Churchill National Park to the east and open space in the Dandenong Valley Parklands to the west. In 2016, 57% of residents surveyed said they were either 'satisfied' or 'very satisfied' with bushland and spaces for flora, fauna and habitat in Knox – the second highest satisfaction level out of 16 issues surveyed.<sup>134</sup>

Biodiversity indicators reveal a lower than average percentage of vegetation cover as measured by the percentage of the Local Government Area (LGA) that is 'green' (43.7% within Knox compared with a metropolitan average of 53%).<sup>135</sup> Native vegetation or areas with indigenous tree cover occupy less than 5% of the municipality. A 2010 study into sites of biological significance in Knox revealed that indigenous flora is not well conserved, with 84% of indigenous plant species locally threatened (critically endangered and endangered). In 2016, 43% of residents surveyed said they were either 'satisfied' or 'very satisfied' that the environment was cared for by the community.<sup>136</sup>

While it is not surprising that there have been local extinctions of plants and animals during Knox's urban development, a massive increase in the rate of local extinctions could be imminent unless countermeasures are taken.<sup>137</sup> Of all plant species that are threatened in Knox, 42% are not found in reserves managed for conservation.<sup>138</sup> Some of these threatened plants that are not found in local Council reserves are highly reliant on sites owned by the state or federal government, such as schools, roadsides, utility installations or freeway reservations. This means private residential land is critical.

The greatest threats to the natural environment in Knox include changing climate patterns (rainfall and temperature), environmental weeds and a lack of fire.<sup>139</sup> CSIRO's State of the Climate Report (2014) found that Australia's mean surface air temperature has warmed by 0.9°C since 1910. The south-east of Australia has experienced a 15% decline in rainfall in late autumn and early winter since the mid-1990s, with a 25% reduction in average rainfall across April and May.<sup>140</sup>

This is reflected in the monitoring of Council's bushland reserves (conducted at various intervals since 1999), which details species loss and recovery due to a range of factors such as the millennium drought. The observations pre, during and post the millennium drought (c. 2000–09) may provide an insight into the effects of climate changes with a reduction of moisture-reliant species. The monitoring reveals that the class of plants facing the greatest risk of extinction comprise those which are confined to poorly drained soil (not subject to inundation). The millennium drought decimated these species (and eliminated some) and there has been very poor recovery since the drought broke.<sup>141</sup>

The Knox community understands this threat and in 2016 there are six 'friends' groups that work to control weeds, increase habitat and restore degraded remnant vegetation in bushland reserves and waterways. Since 2013-14, there has also been an increase in community participation at National Tree Day events, with more Knox residents, schools, businesses and community groups attending. Overall,

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<sup>133</sup> New Focus Pty Ltd for Knox City Council (2016), City Plan Municipal Survey Final Report, p. 22 & 24.

<sup>134</sup> New Focus Pty Ltd for Knox City Council (2016), City Plan Municipal Survey Final Report, p. 24.

<sup>135</sup> State of Knox Master Database (from Community Indicators Victoria).

<sup>136</sup> New Focus Pty Ltd for Knox City Council (2016), City Plan Municipal Survey Final Report, p. 24.

<sup>137</sup> Lorimer, G (2010), Sites of Biological Significance in Knox – 2nd Edition, Knox City Council.

<sup>138</sup> Lorimer, G (2010), Sites of Biological Significance in Knox – 2nd Edition, Knox City Council.

<sup>139</sup> Lorimer, G (2010), Locally Threatened Species in Knox – 2010, p. 8, and Lorimer, G. (2010), Sites of Biological Significance in Knox – 2nd Edition, Knox City Council.

<sup>140</sup> Bureau of Meteorology and CSIRO (2014), State of the Climate 2014.

<sup>141</sup> Lorimer, G (for Knox City Council) Monitoring of Council's Bushland Reserves (conducted at various intervals since 1999) unpublished.

there has been a significant increase in the number of volunteers (from 628 to 1,341) and the total volunteer hours (from 2,031 hours to 4,567 hours) across friends groups and other biodiversity activities.<sup>142</sup>

Seven hundred and forty-one Knox households have participated in the Gardens for Wildlife program between its inception in late 2005 and July 2016.<sup>143</sup> This program (in partnership with the Knox Environment Society) is designed to encourage residents and businesses to create an area in their garden for local wildlife by protecting and enhancing native vegetation. In the past two years, 822 Knox households have become members of the Garden for Harvest program (as at 30 June 2016). This program aims to help build the skills and knowledge of residents to help them grow their own fresh fruit and vegetables. Recent workshops (during May and June 2016) have attracted an average of 40 residents per session.<sup>144</sup>

Knox City Council plants approximately 150,000 plants each year for a wide range of purposes, such as street tree replacement, bushland habitat management, amenity, gardening and stormwater management. This represents a substantial commitment of resources commensurate with the substantial benefits that planting offers, including: helping the survival of wild plants, animals and natural ecosystems; improving the community's contact with nature; and contributing to the green and leafy sense of place.<sup>145</sup> In the 2011-12 financial year, 84% of the 165,412 plantings were indigenous species.<sup>146</sup>

#### Drivers and causes affecting achievement of a vibrant and sustainable built and natural environment

- The community's desire to maintain a 'village feel' and living, working and playing locally.
- Community perception of the character that determines acceptance or resistance to housing diversity.
- Level of service provision of public amenities including pathways, park maintenance and the quality of streetscapes.
- Public transport access, particularly for young and older people, is critical for maintaining community connections.
- The impact of a changing climate on the built form and natural environment.

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<sup>142</sup> Knox City Council (2016), Biodiversity volunteer records unpublished data.

<sup>143</sup> Knox City Council (2016), Gardens for Wildlife unpublished data.

<sup>144</sup> Knox City Council (2016), Gardens for Harvest unpublished data.

<sup>145</sup> Knox City Council (2012), Knox Revegetation Plan Version 1.0 20 November 2012, p. vi.

<sup>146</sup> Knox City Council (2012), Knox Revegetation Plan Version 1.0 20 November 2012, p. vi.

## Culturally Rich and Active Communities

**The aspiration for Knox is that it enjoys an active and engaged community, in which a range of major and local events and festivals thrive, and in which the local community comes together and diversity is valued. Public open space is valued, accessible and plentiful, and public art is appreciated for its contribution to public life. Diverse leisure and recreational activities are abundant, and people have access to a range of contemporary cultural and leisure facilities. Cultural activities are enjoyed in parks and public spaces.**

**Knox's unique local character is valued and preserved through celebration of local heritage sites, villages and neighbourhoods, and the contribution and role of the local Indigenous community. The community participates in a diverse range of sporting and recreational activity, which is supported by flexible and multi-use facilities and public space. Transport infrastructure encourages participation, physical activity and connection and supports an active community life. Lifelong learning is valued in Knox, and services and facilities provide learning options at all life stages to foster a diverse local skill set.**<sup>147</sup>

### ***Knox people have access to shared open space***

Knox is well served with public open space. The 2011 Victorian Environment Assessment Council's Metropolitan Melbourne Investigation states that Knox has 1,553.2ha of open space (within the urban growth boundary). This equates to 7.4ha per 1,000 people, which places Knox within the top six metropolitan councils per capita, behind Hume (10.4), Hobsons Bay (10.1), Manningham (9.1), Brimbank (8.9) and Melton (7.7).<sup>148</sup>

Additionally, almost all households (97%) have unimpeded access to open space within 500m of their home.<sup>149</sup> This exceeds Clause 56.05-2 in the Victoria Planning Provisions, which states: "there should be a network of neighbourhood open space that includes local parks within 400 metres of 95 per cent of all dwellings; these should be generally one hectare in size where not designed to include active open space."

The community recognises that its open space network provides a significant contribution to the 'green and leafy' image that Knox is known for and residents enjoy. This view was supported by community engagement conducted in 2013 as part of the Knox@50 project. In 2016, sporting, recreational and leisure activities and bushland and natural spaces received the highest satisfaction ratings by residents surveyed, out of a total of 16 different aspects of the city.<sup>150</sup>

However, while positive perceptions remain slightly higher than the metropolitan average (89.8% compared with 86.3%), they have declined since the first State of Knox Report, resulting in a rating that is now closer to the metropolitan average.

### ***Knox encourages participation where physical activity and connections support an active Knox community***

There is still a strong connection between the provision of open space and sport/leisure facilities and the ability for residents and visitors to participate in physical activity.

Recent municipal recreation plans<sup>151</sup> and the trend observations identified a rise in the casual sports market and a shift towards more informal and unstructured activities. Walking, jogging, cycling and swimming all have strong participation rates based on modelling that considers population and

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<sup>147</sup> Knox Vision: our city, our future 2013–17, p. 15.

<sup>148</sup> Victorian Environmental Assessment Council (2011), Metropolitan Melbourne Investigation Final Report, August 2011.

<sup>149</sup> Knox City Council (2012), Knox Open Space Plan 2012–21.

<sup>150</sup> New Focus Pty Ltd for Knox City Council (2016), City Plan Municipal Survey Final Report, p. 24.

<sup>151</sup> Knox Leisure Plan 2014–19.

participation data<sup>152</sup> and the enhancement of shared recreation trails is a high priority. This change also relates to time constraints and the need for activities and facilities fitting in with people's available leisure time.

It is commonly accepted that opportunities to participate in sporting and recreation activities are a precursor to actual participation, which is recognised as contributing to an individual's overall health and wellbeing. The relationship between participation in physical activity and physical health and wellbeing has long been recognised<sup>153</sup> and incorporated in public health recommendations.<sup>154</sup> The data indicates that while perceptions of access to leisure and recreation also dipped at other geographic levels, the downturn in Knox was more pronounced, declining by more than 5% in 2011 compared with declines of less than 2% at metropolitan and state levels.

Despite this, perceptions remain high and better than average with 84.8% of adults in 2011 (compared with 81.6% across metropolitan Melbourne generally) or eight in 10 residents in Knox perceiving good access and opportunities to participate.

It is worth noting that some sports membership data is changing. In the past, clubs required participants to be members of their sports club, whereas now people can participate casually in many different sports and leisure pursuits without joining. As a result, some sports are now looking to collect participation data rather than membership data (for example, tennis has moved to this model in recent years).

The Melbourne East Regional Sport and Recreation Strategy (2016) created some projections for participation based on extrapolating data from the 2010 Exercise, Recreation and Sports Survey (ERASS) to the population size and composition forecast for 2031. This predicted that the three top participation activities will continue to be walking, recreational cycling and swimming.

Research indicates that sport and leisure provide several benefits for individuals and the community. These benefits range from improving the physical and mental health of individuals, to improving community connections, building social and economic capital and enhancing environmental sustainability.<sup>155</sup>

### ***Diversity is valued in Knox***

Of the more than 154,000 Knox residents in 2011, 41,000 (26%) were born overseas, with 30,800 (20%) from non-English speaking backgrounds.

Data indicates that 47.2% of Knox adults disagree 'that Australia is weakened by groups sticking to their old ways'.<sup>156</sup> This is 3.8% lower than the state measure. This implies that Knox adults are less accepting of cultural diversity than the state average. Indeed, in 2016 celebration of cultural diversity received the second-lowest importance rating by residents surveyed, out of a total of 16 different aspects of the city.<sup>157</sup> As such, an opportunity exists to better engage with the multicultural community and to enhance relationships and connections with and between these groups and the broader community.

The data also indicates that 50.3% of Knox adults feel that multiculturalism makes life in the area better; this is 3.7% lower than the Melbourne metropolitan average. As such, an opportunity also exists to promote cultural diversity more extensively and highlight its value.

### ***Knox's local character is valued and preserved (celebration of local heritage, Indigenous community, village and neighbourhood)***

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<sup>152</sup> Melbourne East Regional Sport and Recreation Strategy (2016) incorporating data on population (Forecast .id); and participation (ERASS – Exercise, Recreation and Sports Survey); and children's participation (Cultural and Leisure Activities, ABS, 2012).

<sup>153</sup> US Department of Health and Human Services 2008.

<sup>154</sup> Department of Health and Ageing 2005.

<sup>155</sup> West Australian Government, More Than Winning, accessed 2016; Heart Foundation Blueprint for an Active Australia 2nd edition, November 2014; and Latrobe University's Centre of Sport and Social Impact (2015).

<sup>156</sup> VicHealth, 2011.

<sup>157</sup> New Focus Pty Ltd for Knox City Council (2016) *City Plan Municipal Survey Final Report* p. 24.

Suitable measures for this aspiration are yet to be developed. However, it should be noted that it appears through recent community consultation for Knox@50 that the community is able to articulate a distinct local character that it identifies with. This local character includes a strong sense of a green and leafy environment, a village feel within their individual neighbourhoods, and a sense of a mix of city and country lifestyles.

### ***Knox enjoys a range of major and local events and festivals. Public art is a valued aspect of community life***

Arts and culture are integral to supporting healthy people and strong communities and has previously been viewed as a strength in Knox.<sup>158</sup> Events and facilities provide activities and places to develop social cohesion and reduce isolation. People who participate in arts and cultural activities are able to be creative, connect with each other, develop shared identities and enjoy life. In 2016, a 'vibrant arts and cultural scene' received the lowest importance rating by residents surveyed, out of a total of 16 different aspects of the city. Only 36% of residents surveyed said they were either 'satisfied' or 'very satisfied' with this aspect of the city in the same survey.<sup>159</sup>

A key indicator for an active arts and cultural environment is participation in community events. The 2011 Victorian Public Health Survey (Social Capital Report) reveals that there has been a negative shift from a consistent, long-standing and higher than average rate of participation in community events in Knox over the past several years (in 2004, 2006, 2008) to a rate that is now comparable or below average (50.9% of adults in Knox in 2011-12 compared with 50.7% metropolitan-wide and 55.2% state-wide).

The downturn in participation in community events in Knox is even more concerning given that it has occurred at the same time that participation rates have increased in other geographic levels. This turnaround is consistent with other challenges, such as lower levels of community engagement and cohesion.

Despite this data, Knox continues to appreciate and value its three major festivals and events – Knox Festival, Stringybark Festival and Carols by Candlelight. Knox's Carols by Candlelight event is the largest in Melbourne outside the Christmas Eve event held at the Myer Music Bowl. Such large attendance at local events shows a high level of engagement with the cultural and social life of the city. The 2015-16 festivals and events program reached 60,000 people.

It is worth noting that not all events are large and there has been a growth in more localised events run by various community groups such as school fetes, music events, markets and weekend events. Knox has several public locations where large and small community events can be and are readily held such as Tim Neville Arboretum, Rowville Community Centre, Wally Tew Reserve, The Basin Triangle and Marie Wallace Reserve. The growth in popularity and demand for more localised events also highlights the value to the local community.

There is no change in the available data on the share of the total Knox labour force employed in the arts and related activities (the percentage of people employed in arts and the media is around half the Victorian average at a ratio of 0.56 of the Victorian benchmark at 1.0, and ranking it at 22nd of 31 metropolitan LGAs in 2011<sup>160</sup>). The Eastern Makers and Creators Hub, previously called the Knox Craft Collective, is an initiative that has grown over the past two years. This group brings together artists, community groups, businesses and anyone else with a genuine interest in craft.

### **Drivers and causes affecting the achievement of culturally rich and active communities**

- Community desire to maintain accessibility and/or affordability of programs and services.
- An increased awareness of individual and community health, including physical and mental health.
- Importance and appreciation of cultural and diversity values among the community.
- Provision of many and varied sport, leisure and arts opportunities to enable community connections.

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<sup>158</sup> Knox Arts and Cultural Plan, 2012–22.

<sup>159</sup> New Focus Pty Ltd for Knox City Council (2016), City Plan Municipal Survey Final Report, p. 24.

<sup>160</sup> ABS Census 2011.



## Democratic and Engaged Communities

**The aspiration for Knox is that its community is engaged and values opportunities to be actively involved in community life. Community members regularly participate in community groups and organisations and have a genuine opportunity to influence decision making.**

**Local government processes are transparent and accountable, and actively encourage and build community involvement. The Knox community has confidence that government and other local decision making groups and agencies will make decisions for the greater good of the Knox community, and community members seek opportunities to be involved and influence.**

**Because they are engaged they feel empowered that they have personal political efficacy and that they are in control of their destinies. Knox enjoys an empowered community that encourages and enables different forms of governance of community groups and organisations. Members of the Knox community are proud that Knox City Council works in partnership with the community to achieve outcomes on their behalf. The Council operates in an efficient, effective and sustainable manner, demonstrates strong local governance practices for the benefit of the Knox community, and exercises sound financial management.<sup>161</sup>**

### *People in Knox are actively involved in community life*

Being 'actively involved in community life' implies that members of the community feel connected to one another, have a sense of belonging and are involved in community or organised groups.

As there has been little new data collected since the first State of Knox Report, it is difficult to see if there have been any shifts in this area.

As stated in the first report, the VicHealth data in 2011 indicated an average index score<sup>162</sup> for 'satisfaction with feeling part of the community' of 70.8 out of 100. No new data has been collected against that measure. However, since the last report data from the 2011-12 Victorian Population Health Survey indicates that approximately half (48.2%) of Knox adults felt they were 'valued by society', a slight increase from the 47.6% in 2008 but below the metropolitan average of 52.4%. In 2016, 82% of residents surveyed rated 'community spirit' as either 'important' or 'very important'. Although only 49% said they were either 'satisfied' or 'very satisfied' with this aspect of Knox, it was in the top four of the 16 issues for which community perceptions were measured.<sup>163</sup>

There are several reasons why people may or may not feel connected to or valued by their community. These include issues such as cultural diversity, gender and age, and how these are valued by society in general – forming an opinion on someone by the way they look, sound or act and treating them differently can affect a person's sense of belonging in a community. Where essential daily activities are affected by discrimination and prejudice, a person's ability to establish themselves in the community and build a sense of belonging is compromised. This can lead to a cycle of disconnection and disengagement with the broader community.

In the first State of Knox Report, approximately half of the adults in Knox in 2008 (54%) identified themselves as being part of an 'organised group', which was lower than the metropolitan average (59%). In the Victorian Population Health Survey, an 'organised group' includes sports, church or community groups, among others. In the most recent Victorian Population Health Survey (2011-12) the reporting methodology was changed and membership of an organised group was broken down by the type of group. Knox's results were slightly higher across all areas except 'other' (which includes community or action groups), at 15.5% compared with 17.3% metropolitan-wide. Membership of sports groups was 28% in Knox compared with 25% metropolitan-wide; religious groups 20% compared with 18%; school groups 14% compared with 12%; and professional groups 30% compared with 25%.

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<sup>161</sup> Knox Vision: our city, our future 2013–17, p. 16.

<sup>162</sup> Index score, 0-100, completely dissatisfied = 0; completely satisfied = 100.

<sup>163</sup> New Focus Pty Ltd for Knox City Council (2016), City Plan Municipal Survey Final Report, p. 22 & 24.

The reasons for low involvement in 'organised groups' are many and varied, including access to public transport, connecting with groups of people 'unofficially' via social media or the fact that Knox has an ageing population.

Another way of being involved in community life is by volunteering, which is strong in Knox as indicated in the Healthy, Connected Communities section under 'Volunteering in Knox remains strong and valued'. The first State of Knox Report showed us that approximately one-third of adults (34.6%) helped out as volunteers at least once a month. This was very similar to the state average at the time (34.3%). However, this data from the 2011 VicHealth Survey is unlikely to be updated and replaced with the Victorian Population Health Survey. According to data from the latter, the percentage of Knox adults that helped out a local group by volunteering ('yes, definitely' and 'sometimes'), which allows for more casual instances of volunteering, was higher than the metropolitan average (35.3% compared with 30.8%). The incidence of regular volunteering ('yes, definitely') at 19% in Knox compares with a metropolitan average of 21%.

The term 'help out as a volunteer at least once a month' would seem to suggest a more traditional definition of volunteering. As the world evolves and the internet and social media make the world a smaller place, the concept of volunteering is changing. Younger people, for example, may not connect with their immediate 'local' community and perform traditional volunteering duties but may be very well connected to the wider community, their state, the nation as a whole, or even other countries and 'help out' or be 'actively involved' via other means.

Conversely, as outlined in the first State of Knox Report, volunteering for the Meals on Wheels service has been a critical part of the Home and Community Care (HACC) program at Knox. Evidence would indicate that older adults ('seniors') are more likely to volunteer for this service. Review of program data suggests that:

- Meals on Wheels volunteering has remained at a constant level of 80 active volunteers for more than a decade.
- Service planning for Meals on Wheels included workshops with volunteers, who reported high levels of satisfaction with their volunteering role.
- Feedback from Meals on Wheels volunteers is that volunteering for Meals on Wheels has been a 'tradition' within some families.
- The present Meals on Wheels volunteers are mainly aged in their 70s.

There is also some evidence that community members from the baby boomer generation are not as interested in 'traditional' areas of volunteering but are attracted to more educative forms, such as mentoring programs. However, no data has been collected for this in Knox to date. Consistent feedback from the Knox Active Ageing Advisory Committee (KAAAC) is that they are interested in more educative forms of volunteering such as University of the Third Age, and that volunteering for mentoring programs targeting younger people would be of interest.

In the context of the Transitioning to Retirement Project being auspiced by Knox's departments of Active Ageing and City Futures/Economic Development, KAAAC members have indicated that a mentor skills program would be of interest to members and a belief that such a program would attract great community involvement. While no statistically valid, quantitative data has been collected for Knox, café-style survey stalls run by the KAAAC at the Stringybark Festival in 2011 and 2012 received strong feedback that 'different' volunteering opportunities, including mentoring programs, would be of interest to seniors.

As outlined in the first report, other reasons for low participation rates in volunteering could include issues such as time pressures affecting the ability to contribute to community life due to a long daily commute. As discussed under the heading 'Local employment is desired and encouraged', in 2011 almost two-thirds of Knox's working residents travelled outside the area to work and Knox had a higher than average share of workers commuting more than two hours daily.

Further contributing factors may be changing family structures and working arrangements. Of particular note is the very high workforce participation rate, higher than average participation of mothers in the workforce (73% of Knox mothers compared with 68% metropolitan-wide) and slightly higher than average one-parent families.

### ***Knox citizens are engaged***

Some mixed findings have arisen in the citizen engagement data over the review period.

In 2011, 46.2% of adults reported having been involved in some sort of citizen engagement activity, such as town meetings, public hearings, contacting a local politician, joining a protest or signing a petition in Knox, which was below the metropolitan average of 47.5%.<sup>164</sup>

Interestingly, in relation to having a say about issues that are important to them, 37.3% of Knox residents in 2011-12 felt that good opportunities were available to them.<sup>165</sup> Even though this was below the metropolitan average of 39.3% (2011-12), it was a significant improvement on the 2008 figure for Knox of 33.7%.<sup>166</sup>

However, 57.1% of adults viewed their local area as being an active community in which people do things and get involved in local activities and issues.<sup>167</sup> While this was higher than the metropolitan average of 55.4%, it was well below the 2008 figure of 59.8% and suggests that people in Knox are becoming less inclined to involve themselves in these sorts of activities.<sup>168</sup>

### ***People in Knox participate in community groups and have opportunities to influence decision making***

The first State of Knox Report highlighted that in 2008, 59.8% of adults in Knox rated their community as 'active' with people involved in local issues and activities. This figure dropped slightly in 2011-12, with 57% rating their community as active, although this was still higher than the metropolitan average of 55.4%.<sup>169</sup> In 2016, 85% of residents surveyed rated opportunities to have a say in matters affecting the community as either 'important' or 'very important'. However, only 49% said they were either 'satisfied' or 'very satisfied' with this aspect of Knox, which was in the bottom five of the 16 issues for which community perceptions were measured.<sup>170</sup>

The above figures do not take into account all methods of engaging with the community or having an 'active' community.

In 2012, for example, Knox City Council conducted a large community engagement program called Knox@50, which demonstrated there were many ways of engaging with the community. More than 130 activities were conducted and more than 10,000 direct engagements were made over a 12-month period. These included vox pops, focus groups, dialogue groups, attendance at festivals, youth consultations, community and partners' forums, postcards, workshops, online and video.

The Knox@50 program also established a Community Leadership Group that met regularly over a 12-month period to discuss various topics and contribute to the development of the new Vision, City Plan and draft Housing Strategy. This type of direct community engagement provides greater opportunities and will be used more often when planning for the future of the Knox community.

Other factors that may influence a community member's perception of having genuine opportunities to influence decision making are things such as home internet use/broadband access, sharing information about Council or important issues on social media, and transport limitations (see 'Lifelong learning opportunities support people's full potential in Knox' in the Healthy, Connected Communities section).

In terms of Council's performance in this space, the Annual Community Satisfaction Survey shows that Knox's rating (on an index score 0-100) for 'community satisfaction with consultation and engagement' was 59 in 2013 and 60 in 2016, with the Melbourne metropolitan average at 58. 'Lobbying on behalf of the community' was 58 across both years with a metropolitan-wide average of 56.

A new measure has since been developed in the Annual Community Satisfaction Survey, which also indicates that Knox is performing better than the metropolitan average. Knox received an index score

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<sup>164</sup> VicHealth Indicator Survey, 2011.

<sup>165</sup> DHHS, Victorian Population Health Survey, 2011-12.

<sup>166</sup> DHHS, Victorian Population Health Survey, 2011-12.

<sup>167</sup> DHHS, Victorian Population Health Survey, 2011-12.

<sup>168</sup> DHHS, Victorian Population Health Survey, 2011-12.

<sup>169</sup> DHHS, Victorian Population Health Survey, 2011-12.

<sup>170</sup> New Focus Pty Ltd for Knox City Council (2016), City Plan Municipal Survey Final Report, p. 22 & 24.

of 59 for 'decisions made in the interest of the community' in 2014, the first year of this measure. The 2016 score is 62, higher than Knox's previous score and higher than the metropolitan average of 59.

The community also has an opportunity to influence decision making by voting in local government elections. In the 2012 Knox Council elections, two wards were uncontested and the effective participation rate was 73.88%. In 2015, a by-election was held for the Scott Ward, where the effective participation rate was 70.53%.

Another way to influence decision making is to ask questions or lodge petitions at Council meetings. During the course of the 2012-13 financial year 62 questions were asked at Council meetings. This figure dropped in 2014-15 to 37. During 2012-13, 16 petitions were tabled at those meetings, containing more than 8,000 signatures. Again in 2014-15 these figures dropped, with seven petitions tabled containing 273 signatures.

In 2011-12, 15% of Knox adults surveyed indicated they served on a decision making board or committee. This is slightly lower than the previous figure (17.5% in 2008) and the metropolitan average for 2011-12 of 16.6%.

Community members also have the opportunity be a member of one of Council's committees. Knox has 17 committees whose primary purpose is to provide advice and feedback. These committees contain approximately 125 community representatives.

Interestingly, in the last State of Knox Report only 33.7% of adults reported that they 'feel there are opportunities to have a real say on issues that are important'. This figure has risen to 37.3% for Knox but is still lower than the metropolitan average of 39.3%.

This would seem to suggest that although there may be opportunities to influence decision making, the community may not be aware of them or prepared to take them up.

### ***Local government operates in an effective and efficient manner with processes and practices that are transparent and accountable***

This element focuses solely on the performance of Council. The Knox community aspires to have a Council that is effective, efficient, transparent and accountable. These and other factors all contribute to good governance.

In addition to the figures quoted in the previous section, the Annual Community Satisfaction Survey measures Council's customer service, direction and overall performance. Knox's performance remained stable from 2013 to 2016, with some slight increases ('Council direction' increasing from 48 to 52 and 'overall Council performance' shifting from 62 to 64, while satisfaction with 'customer service' remained stable at 74 and 73 across the two respective years). However, the satisfaction levels of the Knox community remain slightly lower than the metropolitan averages, which are 73 for 'customer service', 55 for 'Council direction'; and 66 for 'overall Council performance'.

In order to improve its effectiveness and efficiency, Knox Council is about to embark on a Customer Focused Business Improvement Program. Aimed at improving processes that affect the community, this program should see improved satisfaction in the above areas, particularly customer service, in the coming years.

In 2014-15, the Local Government Performance Reporting Framework (LGPRF) became mandatory. This framework, developed by Local Government Victoria, aims to improve the transparency and accountability of council performance, ensuring all councils are measuring and reporting on their performance in a consistent way. The framework comprises 66 measures and a governance and management checklist of 24 items, which together build a picture of performance for all councils in Victoria.

Included in the LGPRF is a specific measure around transparency. In the 2014-15 financial year, Knox Council reported that 3% of Council decisions were made at meetings closed to the public. This is a favourable result compared with 8% for Melbourne metropolitan and 12.2% for all councils in the state.

In 2015-16, 4.92% of Council decisions were made in a meeting that was closed to the public. While the number of reports considered at closed meetings only increased by one (from 12 to 13), there has been a significant decrease in the overall number of reports presented to Council for resolution (down from

354 to 264). The figures for Melbourne metropolitan and the state have not been released at the time of writing this report.

#### Drivers and causes affecting the achievement of democratic and engaged communities

- Embracing cultural, gender and age diversity may contribute to people feeling connected to or valued by their community.
- Access to public transport, connecting with groups of people 'unofficially' via social media or the fact that Knox has an ageing population may all lead to Knox having a relatively low percentage of residents that are members of an 'organised group'.
- The concept of volunteering is changing. People may be very well connected to the wider community, their state, the nation as a whole, or even other countries via the internet/social media and 'help out' via other means.
- Home internet use/broadband access, facilitating the sharing of information about Council or important issues on social media, and transport limitations may all influence perceptions of having genuine opportunities to influence decision making.

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