# **Growing Brimbank**

A COLLABORATIVE APPROACH TO LIFTING HEALTH AND EDUCATION OUTCOMES.



### The Brimbank Collaboration

The Australian Health Policy Collaboration at Victoria University and the City of Brimbank have been working in partnership on policy-based research strategies for improving health and education outcomes in the Brimbank community.

The Brimbank Collaboration will use an integrated, collective approach based on the principle that good health and quality education outcomes are fundamental to individual wellbeing and critical to the creation of thriving and prosperous communities.

The Collaboration aims to improve the understanding of Brimbank's strengths and challenges enabling policy makers, service providers, funders and residents to work together towards building a more successful and prosperous community for all.

In collaboration with the Public Health Information Development Unit at The University of Adelaide, and the Institute of Sport, Exercise and Active Living at Victoria University, two Brimbank population reports have been prepared: The Brimbank Atlas of Health and Education and Physical Activity, Sport and Health in the City of Brimbank. Both documents are based on nationally available data, enabling them to be replicated in later years and for other communities. They are publicly available at www.vu.edu.au

These reports were designed to enable Victoria University and Brimbank community leaders and organisations to plan and develop integrated policies, services and strategies to lift health and education outcomes across the Brimbank community now and in the future

#### **BRIMBANK PROFILE**

Established in 1994 after the merger of the former Cities of Keilor and Sunshine, the City of Brimbank spans 123 km<sup>2</sup> with a population of 195,469 in 2013. It is the second most populous municipality in metropolitan Melbourne, and the largest in the Western Region.

Brimbank is culturally diverse with more than 150 different languages spoken, about 43 per cent of the population born overseas, and more than half the population speaking a language other than English.

Brimbank is currently experiencing strong residential, industrial and commercial development, and incorporates one of the largest industrial areas in Melbourne. It has a number of important institutions including Sunshine Hospital and Victoria University's St Albans and Sunshine campuses.

### The Brimbank reports

Together, The Brimbank Atlas of Health and Education and the Physical Activity, Sport and Health in the City of Brimbank reports present a detailed regional profile that provides substantial data across a range of health, education and other social and demographic characteristics.

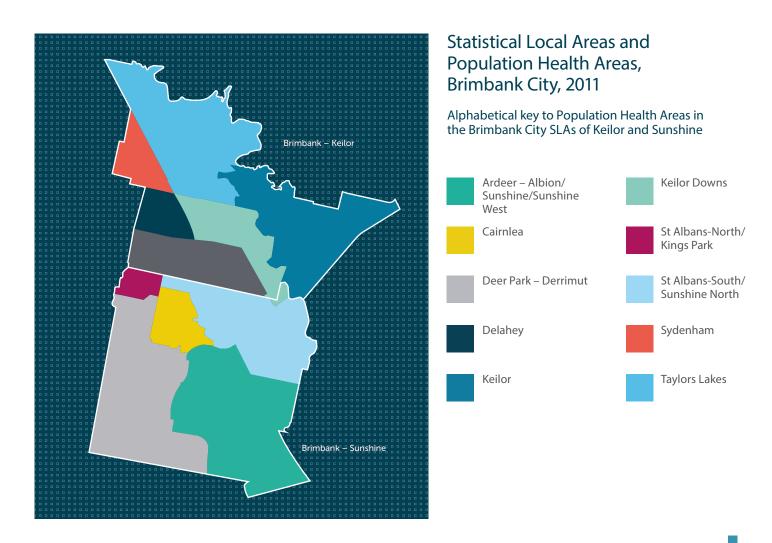
In addition, the reports provide comparative information showing the extent to which residents in the City of Brimbank are above, below or at a similar level against national, state and Melbourne averages on a range of measures.

These two documents bring together all the current measures of strengths and areas for improvement within the Brimbank community, enabling interrelating factors and influences to be considered in policy and planning.

The Brimbank Atlas utilises data from the Australian Bureau of Statistics, National Centre for Vocational Education Research, Victorian Curriculum and Assessment Authority, Victorian Department of Education and Early Childhood Development, the Commonwealth and Victorian Departments of Health and the Australian Institute of Health and Welfare.

It provides baseline data describing the current health and education status of Brimbank's population, mapping characteristics of people in the areas in which they live. The data provides a deep understanding of the impact that social, physical and economic factors have on learning, development, health and wellbeing, and highlights variations in indicators of access and outcomes both within Brimbank, and compared to other communities.

The Physical Activity, Sport and Health in the City of Brimbank report utilises a range of datasets including: the Exercise, Recreation and Sport Survey; Victorian State Sporting Association participant, coach and official data for seven major sports; Victorian Sport and Recreation facility and infrastructure data for seven major sports; and health data including indicators of population levels of physical activity. This report provides an overview of access to, and participation in, both organised and recreational leisure-time physical activity, and shows how these connect to health and education outcomes within the Brimbank population.



### What do the reports tell us?

#### **COMMUNITY CHARACTERISTICS**

Brimbank residents possess resilience and a desire to come together and succeed.

The proportion of people aged 15 years and over in Brimbank living with disability is greater than compared to Melbourne and Australia. However, the proportion of residents who feel they can get support in times of crisis from someone outside of the household is similar to the Melbourne and national averages, as are the proportion of people who feel safe walking alone after dark.

Brimbank has a crime rate higher than Melbourne or Victoria, particularly for property-related crimes. While the exact incidence of family violence is not known, reporting is at a lower rate in Brimbank compared to either Melbourne or Victoria.

The proportion of the Brimbank population that has experienced food insecurity (unable to afford food) in the last 12 months is lower than for Melbourne or Victoria.

### CULTURAL AND LINGUISTIC DIVERSITY

Brimbank is a city of cultural and linguistic diversity.

The proportion of Brimbank residents born in Vietnam, India, Malta, Philippines and Italy (the five main countries of birth) is greater than for Melbourne and Australia. Similarly, the proportion of recent arrivals or long-term residents from countries in which English is not the predominant language is greater than for Melbourne and Australia. As a consequence, poor English proficiency in the City of Brimbank is almost three times that of Melbourne, and more than four times that of the Australian average.



### LABOUR FORCE AND SOCIO-ECONOMIC MEASURES

The proportion of adult and youth unemployment amongst Brimbank residents is higher than the Melbourne and Australian averages.

There are a large number of jobless families across the City of Brimbank, twice the Melbourne average. As a result, government support is the main source of income for almost twice as many families in the City of Brimbank as the Melbourne and Australian average.

The percentage of individuals learning or earning at ages 15 to 24 years in Brimbank-Keilor (74.7 per cent), Brimbank-Sunshine (70.2 per cent) and across the City of Brimbank (72.5 per cent) is similar to the Melbourne and Australian averages of 77.5 per cent and 73.1 per cent, respectively.

#### **ACCESS TO SERVICES**

About twice as many Brimbank residents do not have internet access at home compared to the Melbourne average, with access particularly low in Brimbank-Sunshine.

People living in Brimbank are more likely to delay accessing medical and pharmaceutical services compared to the Melbourne and Australian average, due to prohibitive costs.

For the seven association sports in Victoria for which data are available (Australian football, basketball, cricket, field hockey, lawn bowls, netball and tennis) Brimbank has only 3.1 facilities per 10,000 persons compared to 5.7 per 10,000 persons for Melbourne. However, this does not include data for other major sports, such as football/soccer, or data on community sports, which may be preferred. Access to other sport associations' data and collection of data on community sports facilities is required.

To provide a broad and easy to understand picture of the key findings for both reports, this summary is presented as a set of key themes. The full reports are available at www.vu.edu.au

In some cases, the reports note variations within the overall Brimbank area. Where applicable, the summary refers to differences in distinct catchment areas.

#### MATERNAL AND CHILD HEALTH

There is a high proportion of mothers with low educational attainment in Brimbank, roughly double the Melbourne average.

The number of women who smoke during pregnancy in Brimbank is now lower than in Melbourne and Australia.

Brimbank has a higher infant mortality rate and higher rates of asthma-related and overall hospitalisation in 0–14 year olds compared to the Melbourne averages. The specific area of Brimbank-Sunshine has a comparatively higher child mortality rate than Melbourne. There is also a higher proportion of low birth weight babies compared to the Melbourne and Australian averages, particularly in Brimbank-Keilor.

For Brimbank infants, the proportion of those who are breastfed at discharge is similar to the Victoria average, although by the time infants reach 6 months of age, breastfeeding rates are below the average. Immunisation rates are equivalent to the Melbourne and Australian averages with 90.9 per cent of children in Brimbank immunised at 5 years of age.

### EDUCATION AND CHILD DEVELOPMENT

Compared to either Melbourne or Australia averages, Brimbank has lower preschool participation and fewer children are on track upon school entry particularly in relation to physical, linguistic and cognitive skills (based on the Australian Early Development Census). In years 3 and 9, children achieve poorer NAPLAN literacy and numeracy outcomes compared to the Melbourne average.

There is a higher proportion of early school-leavers in Brimbank compared to the Melbourne average. However, the proportion of young people aged 16 years participating in full-time secondary school education is only slightly below the Melbourne average, and above the Australian average. Of those who complete secondary school in Brimbank, the proportion admitted to university is greater than in Melbourne, and much greater than for Australia. Participation in vocational education and training is also higher in Brimbank, particularly in Brimbank-Sunshine, compared to Melbourne or Australia. However, the rates of attainment of Advanced Diplomas or Bachelor Degrees are lower than for either Melbourne or Australia.

#### **HEALTH RISK FACTORS**

Overall, the prevalence of female smokers in Brimbank decreased between 2007-08 and 2011-13, however, the prevalence of male smoking increased during the same period and is higher than for Melbourne or Australia.

The proportion of residents eating the recommended daily serves of fruit and vegetables is lower in Brimbank than for Melbourne or Victoria.

Compared to other local government areas, Brimbank has the second lowest proportion of people who are sedentary for at least seven hours a day (24.9 per cent). This is well below the Melbourne average (33.5 per cent). However, the number of residents who engage in health-enhancing leisure time physical activity or meet physical activity guidelines is below the Melbourne average. The prevalence of obesity amongst both Brimbank males and females is higher than for Melbourne.

While Brimbank has a lower rate of alcoholrelated hospitalisations than in Melbourne or Victoria, Brimbank-Keilor has higher rates of hospitalisation among those aged 15 years or older overall and for type 2 diabetes, angina, and chronic obstructive pulmonary disease.

Type 2 diabetes is twice as prevalent in Brimbank as in Melbourne and Australia.

The prevalence of psychological stress and distress is higher in Brimbank than the Melbourne or Australian averages.



# A SNAPSHOT OF THE FINDINGS

STRENGTHS TO BUILD ON

90%

of residents feel they can get appropriate support in times of crisis.

82%

of young people aged 16 years are in full-time school education (83% Melbourne average; 79% national average).

41%

of those completing school are admitted to university (40% Melbourne average; 31% national average).

7%

of those completing school are admitted to vocational education (8% Melbourne average; 8% national average).

9%

Prevalence of women smoking during pregnancy (9% Melbourne average; 14% national average).

### Implications: Potential risks and vulnerabilities

## SOCIAL INCLUSION AND PARTICIPATION

Brimbank is a city of cultural and linguistic diversity and this has many rich and positive effects for individuals and the community overall.

However, cultural and linguistic difference can lead to social exclusion and disadvantage when low levels of English proficiency make it difficult to access services and fully participate as a member of the community.

Migrant children, particularly those from non-English speaking backgrounds or with low English proficiency, may be at greater risk of developmental vulnerability in one or more domain(s) of the Australian Early Development Census (particularly language, cognitive skills, communication and general knowledge). They are also likely to exhibit low levels of sport registration, have poor access to sport coaches and facilities, and be more likely to experience unemployment, poor health (disability, psychological distress and diabetes), and poor learning outcomes.

#### **HEALTH OUTCOMES**

Factors contributing to poor health outcomes are prevalent in Brimbank where there is poor access to sports coaches and facilities for some sports, high prevalence of male smokers, lower rates of people who meet recommended guidelines for daily fruit and vegetable intake, and low levels of physical activity and sport.

Furthermore, with Brimbank residents reporting that they delay access to medical and pharmaceutical services due to financial barriers, they are more likely to be hospitalised for diabetes, and to experience high levels of disability.



#### INTERGENERATIONAL EFFECTS

A combination of factors identified in this work can lead to the risk of intergenerational disadvantage. Children in jobless families are more likely to have poor participation in all levels of learning, child developmental vulnerability, disability among those 15 years and older, poor self-reported health, psychological distress and diabetes.

Encouragingly, Brimbank is performing strongly in terms of 15-24 year olds learning or earning. Participation rates in secondary school at age 16 and the proportion of young people going on to tertiary education may help to overcome socio-economic disadvantage.

#### MATERNAL AND CHILD HEALTH

Maternal and child health in Brimbank shows some areas of strength, as well as areas for improvement. There are low rates of smoking during pregnancy, child immunisation rates are comparable to Melbourne, and a high proportion of infants are breastfed upon discharge. However, these positive indicators are countered by a large number of low birth weight babies, infants not breastfed at 6 months of age, and high rates of infant death (under one year of age), child mortality and child hospitalisations – outcomes that clearly correlate with socio-economic disadvantage and low educational attainment.

The proportion of mothers with low educational attainment is high – a troubling statistic given the strong evidence of direct links between a mother's level of educational attainment and their children's birth weight, participation in all levels of learning, child developmental vulnerability, as well as measures of health and wellbeing. This includes prevalence of smoking, psychological distress, overweight/obesity, diabetes, circulatory disease, ambulatory care sensitive conditions and disability (amongst children and adults).

# A SNAPSHOT OF THE FINDINGS

**IMPROVEMENT AREAS** 

14%

of residents say they are more likely to delay pharmaceutical use due to the cost (11% Melbourne average; 11% national average).

24%

of children are born to mothers who have completed school to year 10 equivalent or below (15% Melbourne average; 24% national average).

87%

of Brimbank's babies are being breastfed when they leave hospital but this drops to 41% once they reach 6 months of age.

37% of children attend preschool (48% Melbourne average; 44% national average).

2%

The proportion of residents eating the recommended daily serves of fruit and vegetables (5% Victorian average).

#### Where to from here?

### STRENGTHENING THE BRIMBANK COLLABORATION

In partnership with the City of Brimbank, the Australian Health Policy Collaboration at Victoria University will draw upon data from the two reports to identify, design, and secure funding and implementation partners for a program of work to lift health and education outcomes in the community.

Beginning with a small suite of initiatives reflecting current health and education risk factors in the Brimbank population, the Australian Health Policy Collaboration will develop a larger, sustained program of work in collaboration with the Brimbank community.

#### GROWING BRIMBANK: A PLACE-BASED APPROACH TO LIFTING HEALTH AND EDUCATION OUTCOMES

Growing Brimbank aims to establish place-based approaches – targeting the entire Brimbank community and addressing issues at the local level – similar to those observed in Framingham, USA, the North Karelia Project in Finland and the Northern Swedish Cohort Project. Like these communities, the health, wellbeing and development of the Brimbank population would be followed longitudinally.

This place-based approach will highlight the complex interactions between the social and physical environment of Brimbank and demonstrate ways to better integrate its services and social systems in collaboration with the local community. The lessons learned from the Brimbank Collaboration will help inform national, state and local policies, services and practices.





### **About**

The purpose of the Growing Brimbank Collaboration is to transform the health and education experiences and real life outcomes for people in this community through evidence-based inquiry, public debate and the development of practical, workable policy for change at local and system-wide levels.

The Australian Health Policy Collaboration's mission is to contribute to the development of public policy and its practice to improve health outcomes, particularly for socioeconomically disadvantaged Australians.

The Australian Health Policy Collaboration has grown out of the Mitchell Institute's health policy program, established in 2013 by Victoria University.

# FURTHER INFORMATION

#### JASON LEUNG

Program Co-ordinator, The Brimbank Collaboration Australian Health Policy Collabroation P +61 3 9919 1899 E Jason.Leung@vu.edu.au vu.edu.au

#### KATH BRACKETT

Manager, Community Planning and Development Brimbank City Council P +61 3 9249 4861 E KathB@brimbank.vic.gov.au brimbank.vic.gov.au

# **Supplementary Summary Tables:**

Brimbank Atlas of Health & Education

Physical Activity, Sport & Health in the City of Brimbank

#### **Household and Community Characteristics**

#### **Areas of Strength**

- The proportion of Brimbank residents who feel they can get support in times of crisis from someone outside of the household is similar to the Melbourne and Australia averages.
- The proportion of Brimbank residents providing support to relatives outside of the household is similar to the Melbourne and Australia averages.
- > The proportion of Brimbank residents who feel safe walking alone after dark is similar to the Melbourne and Australia averages.
- > The rates of family violence in Brimbank are lower than for either Melbourne or Victoria.
- > The proportion suffering food insecurity (unable to afford food in the last 12 months) in Brimbank is lower than for Melbourne or Victoria.

#### **Areas for Improvement**

- The proportion of people aged 15 years and over in Brimbank living with disability is greater than compared to Melbourne and Australia.
- > The crime rate in Brimbank is higher than for Melbourne or Victoria, particularly property-related.

#### **Cultural and Linguistic Diversity**

#### **Areas of Strength**

- There is cultural diversity across the Brimbank LGA with the proportion born in Vietnam, India, Malta, Philippines and Italy (the five main countries of birth) greater than for Melbourne and Australia.
- > There is linguistic diversity across the Brimbank LGA with the proportion of recent arrivals or longer term residents from countries in which English is not the predominant language, and the proportion that speak Vietnamese, Maltese, Greek, Italian or Macedonian (the five main non-English languages spoken at home) greater than for Melbourne and Australia.

#### **Areas for Improvement**

> Poor English proficiency in the Brimbank LGA is almost three times that of Melbourne, and more than four times that of Australia.

#### **Socioeconomic Measures**

#### Areas of Strength

The percentage of individuals learning or earning at ages 15 to 24 years across the Brimbank LGA in Brimbank-Keilor (74.7%), Brimbank-Sunshine (70.2%) and Brimbank LGA (72.5%) are similar to the Melbourne and Australia averages of 77.5% and 73.1%, respectively.

#### **Areas for Improvement**

- > There are a large number of jobless families across the Brimbank LGA, twice the Melbourne average.
- > There are a high proportion of mothers with low educational attainment across the Brimbank LGA, roughly double the Melbourne average.

#### **Labour Force**

#### **Areas for Improvement**

> The proportion of those unemployed and youth unemployed across the Brimbank LGA are higher than the Melbourne and Australia averages. As a result, government support is the main source of income for almost twice as many in the Brimbank LGA compared to Melbourne and Australia.

#### **Access to Services**

#### **Areas for Improvement**

- The proportion of Brimbank residents without internet access across the Brimbank LGA is roughly twice the Melbourne average, and particularly low in Brimbank-Sunshine.
- Residents of the Brimbank LGA are more likely to delay accessing medical and pharmaceutical services due to prohibitive costs than compared to Melbourne and Australia.
- The provision of sports facilities within the Brimbank LGA is the lowest of all LGAs in Melbourne at 3.1 facilities per 10,000 persons compared to 5.7 per 10,0000 persons for Melbourne.

#### **Maternal and Child Health**

#### Areas of Strength

- > The proportion of women smoking during pregnancy is lower than the Melbourne and Australia averages across the Brimbank LGA\*.
- > The proportion of infants breastfed at discharge is similar between Brimbank and Victoria.
- There are a high proportion of children immunised at 5 years of age across the Brimbank LGA (90.9%), equivalent to the Melbourne and Australia averages.

#### **Areas for Improvement**

- > There are a higher proportion of low birth weight babies across the Brimbank LGA than compared to Melbourne and Australia, and is highest in Brimbank-Keilor (8.1%).
- > The proportion of infants breastfed at 6 months of age is lower in Brimbank than Victoria.
- > The rate of infant death in the Brimbank LGA is higher than for Melbourne and Australia.
- Child mortality and premature mortality rates are higher in Brimbank-Sunshine than for Melbourne.
- Compared to Melbourne, there are higher rates of hospitalisation in 0-14 year olds across the Brimbank LGA overall and for asthma

#### **Health Status**

#### **Areas for Improvement**

- Compared to Melbourne, there are higher rates of hospitalisation among those aged 15 years or older for type 2 diabetes, angina, COPD and overall in Brimbank-Keilor.
- > The prevalence of diabetes mellitus in the Brimbank LGA is roughly double than for Melbourne and Australia.
- > The prevalence of psychological stress and distress is higher across the Brimbank LGA than compared to either Melbourne or Australia.

<sup>\*</sup> Prevalence of women smoking during pregnancy has decreased, most notably in Brimbank-Sunshine where it has significantly decreased from 14.4% in 2007-08 to 9.0% in 2011-13.

#### **Education and Child Development**

#### Areas of Strength

- Participation in secondary school across the Brimbank LGA is only slightly below the Melbourne average, and above the Australian average.
- Participation in vocational education and training is higher in the Brimbank LGA, particularly in Brimbank-Sunshine, compared to Melbourne or Australia.
- > The proportion of young people aged 16 years participating in full-time secondary school education across the Brimbank LGA is only slightly below the Melbourne average, and above the Australian average.
- > The proportion of school leavers admitted to university across the Brimbank LGA is greater than in Melbourne, and much greater than for Australia.

#### **Areas for Improvement**

- > There is low preschool participation across the Brimbank LGA than compared to either Melbourne or Australia.
- > There are a higher proportion of early school leavers across the Brimbank LGA than for Melbourne.
- Fewer children are on track physically, in language and cognitive skills on the AEDC, and a greater proportion are vulnerable on one or more domain of the AEDC across the Brimbank LGA than for Melbourne or Australia.
- Children across the Brimbank LGA achieve poorer NAPLAN literacy and numeracy outcomes in years 3 and 9 compared to Melbourne.
- There are fewer attaining Advanced Diplomas or Bachelor Degrees across the Brimbank LGA than for either Melbourne or Australia.

#### **Health Risks**

#### **Areas of Strength**

- > There are fewer alcohol-related hospitalisations in Brimbank than in Melbourne or Victoria.
- ▶ Brimbank City has the second lowest proportion of people who sat for at least seven hours a day (24.9%), well below the Melbourne average (33.5%).

#### **Areas for Improvement**

- > The prevalence of male smoking across the Brimbank LGA is higher than in Melbourne or Australia\*\*.
- > The proportion eating recommended daily serves of fruit and vegetables is lower in the Brimbank LGA than for Melbourne or Victoria.
- ➤ Of all the 31 LGAs in Melbourne, Brimbank has the third lowest proportion of people who met physical activity guidelines, and the second lowest rate of participation in health-enhancing leisure time physical activity (activity of moderate to vigorous intensity).
- > Brimbank has the second lowest rates of participation in organised leisure-time physical activity (whether club, association or other organisation) and leisure-time physical activity, all below the Melbourne averages.
- Compared with other Melbourne LGAs, sport participation rates in the Brimbank LGA were consistently very low across all age ranges.
- > The prevalence of obesity in both males and females across the Brimbank LGA is higher than for Melbourne.

<sup>\*\*</sup> The prevalence of male smokers has increased across the LGA between 2007-08 and 2011-13 while female smokers have decreased across the LGA.