

Regional Needs Assessment: Report

November 2023



The Southern Metropolitan Regional Needs and Investment Framework is being delivered by the City of Kingston in partnership with the Victorian Government.



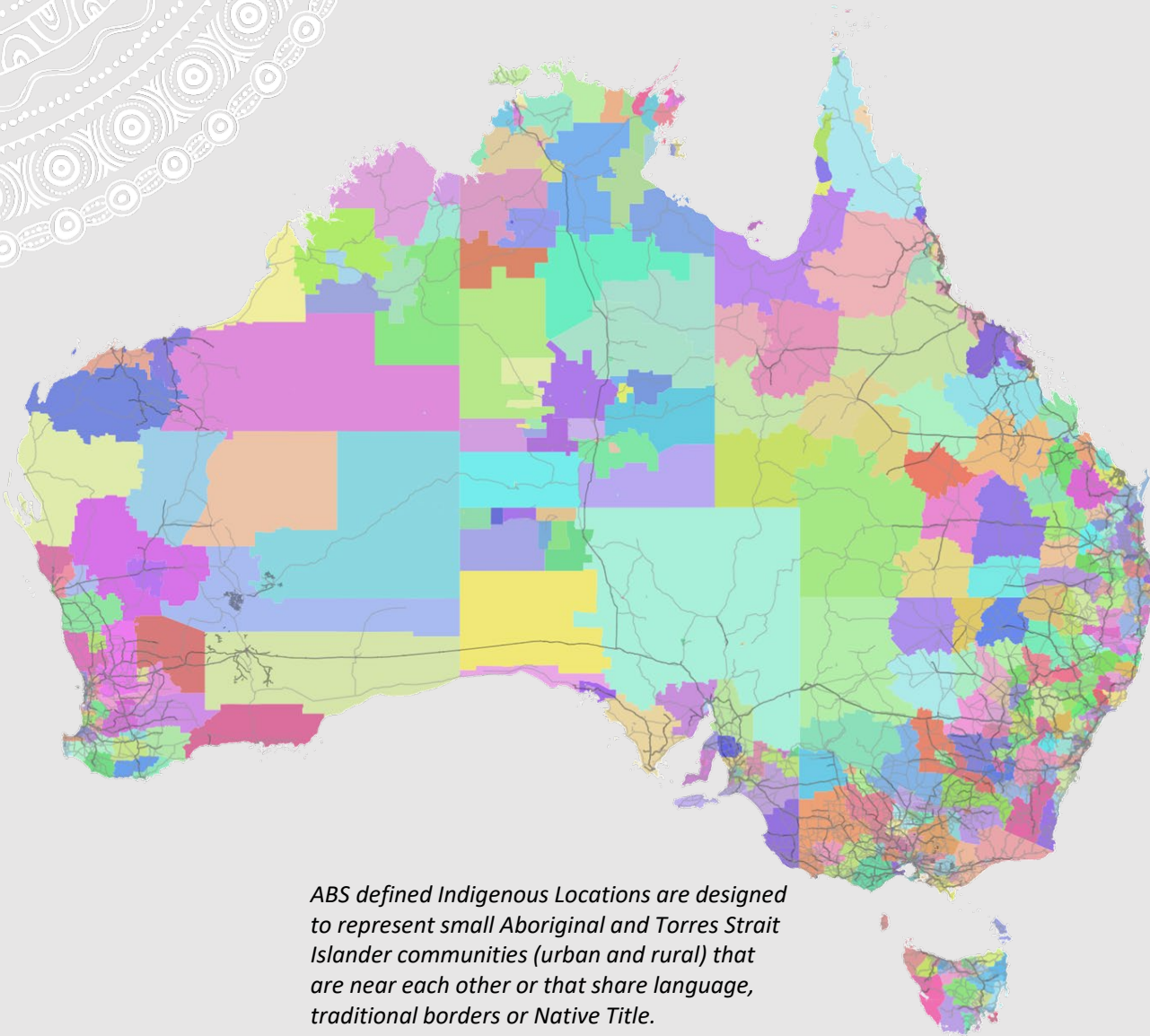
Jobs, Skills,
Industry
and Regions

Acknowledgement of Country

We acknowledge Aboriginal and Torres Strait Islander peoples as the First Peoples of Australia. We pay our respects to Elders past, present, and future as the Traditional Custodians of the land, water and skies of where we work.

We acknowledge that our work takes place across the lands of Aboriginal and Torres Strait Islander peoples, their communities and cultures.

We also acknowledge the Bunurong and Wurundjeri people as the Traditional Custodians of the Southern Metropolitan Region.



ABS defined Indigenous Locations are designed to represent small Aboriginal and Torres Strait Islander communities (urban and rural) that are near each other or that share language, traditional borders or Native Title.

Glossary

Word/Acronym	Meaning
ABS	Australian Bureau of Statistics
Accessibility	A measure of the ease of reaching a specific destination. This is heavily used in the needs assessment across several threshold criteria to measure whether certain destinations are reachable within a given timeframe by different transportation modes.
CBD	Central Business District
Investment Framework	The Investment Framework determines the importance of needs and methods to address these needs. It will also explore pathways to seek funding for priority investments.
LGA	Local Government Area
MAC	Major Activity Centre
Mesh Blocks	Mesh Blocks are the smallest geographic areas defined by the ABS and form the building blocks for the larger regions of the Australian Statistical Geography Standard (ASGS).
Needs Assessment	The Needs Assessment details a quantifiable methodology to access current and project needs and highlights the results relative to the rest of Greater Melbourne.
NEIC	National Employment and Innovation Cluster
OCSKP	This variable describes the skill level of a person's occupation. Level one is the highest level of skill and level five is the lowest level of skill.
SALUP	Small Area and Land Use Projections
SEIFA	Socio-Economic Indexes for Areas
SSIP	State Significant Industrial Precinct
Sports and Recreational Facilities of Regional Significance	These are defined by Sports and Recreation Victoria to include sports and recreation facility that have a large regional catchment.
SRL	Suburban Rail Loop
Travel zones	Victoria is split into 6,973 transport zones that are used to represent population, employment and enrolment data.
VITM	Victorian Integrated Transport Model – data from this model has been used to determine accessibility for several threshold criteria.

Context

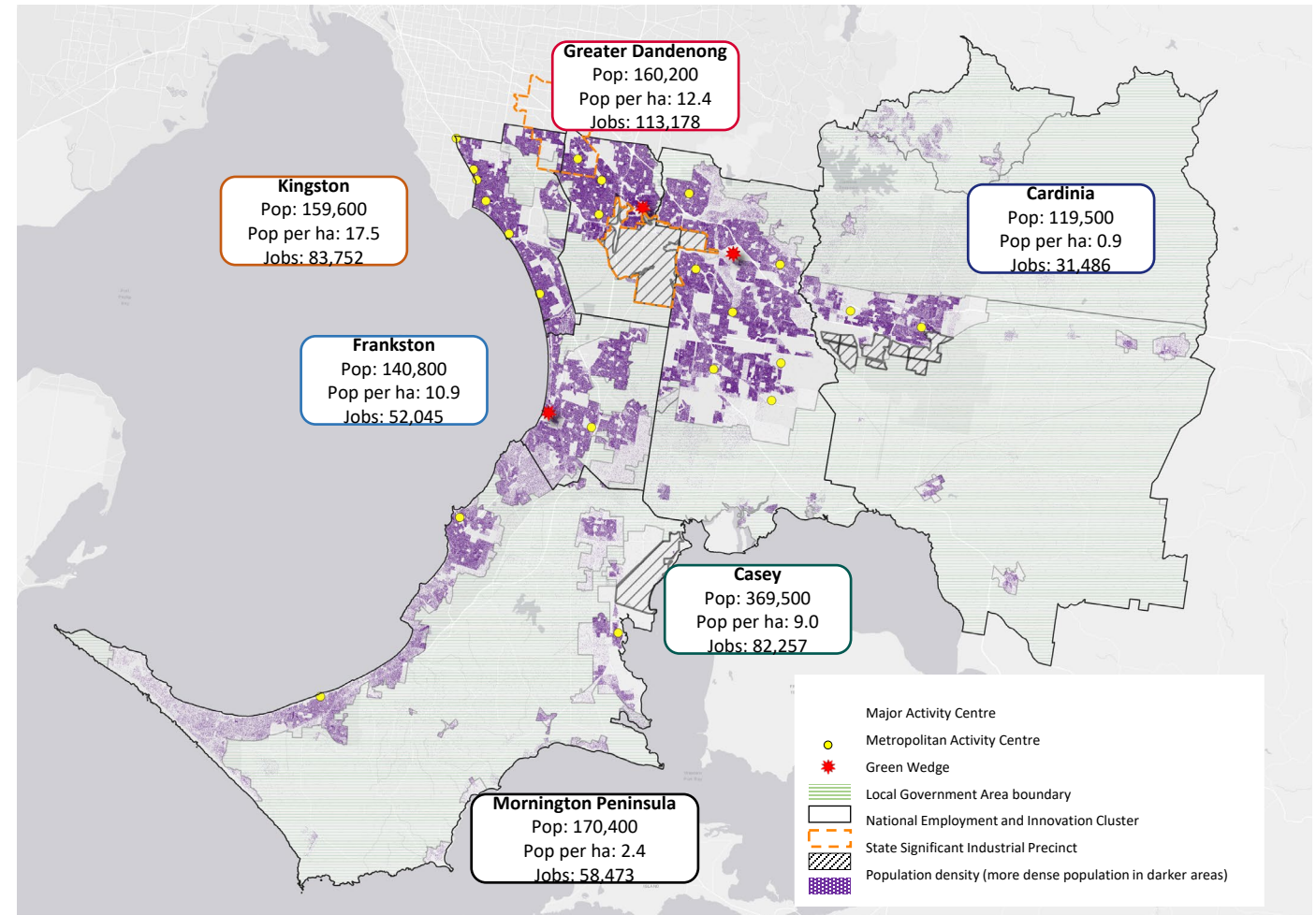
The Southern Metropolitan Region Partnership, comprises of the shires and councils of Cardinia, Casey, Greater Dandenong, Frankston, Kingston and Mornington Peninsula.

The Partnership has agreed to undertake a needs assessment and investment framework **to identify key priorities and infrastructure opportunities in the Region**. This reflects the Partnership's objective to develop a clear evidence-based to inform policy and investment decisions supported by community engagement and improved regional-level coordination.

This **Needs Assessment Report** details the development of an **objective, quantifiable methodology to assess current and projected needs** of the Southern Metro Region **relative to the rest of Greater Melbourne**, leveraging a **range of robust data sources**.

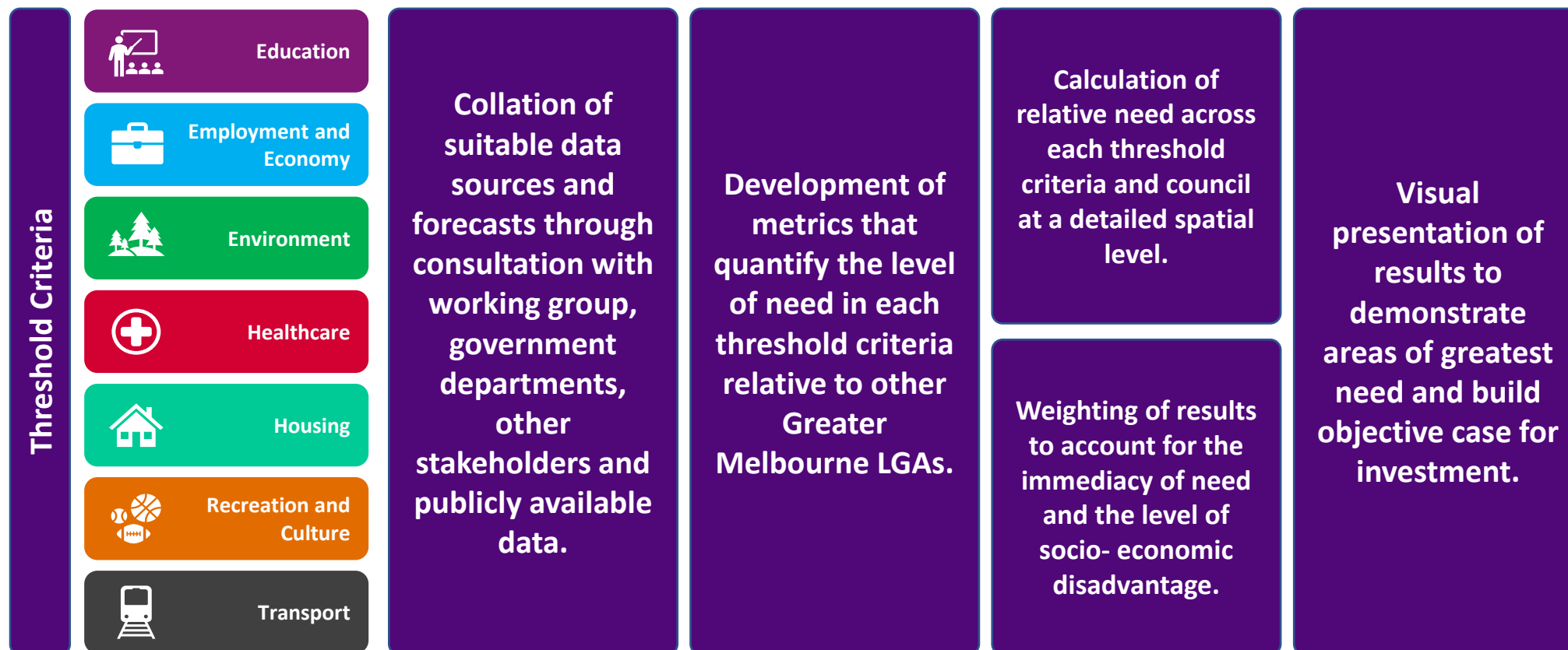
It presents the findings of the Needs Assessment for each threshold criteria, highlighting the current magnitude of need for each shire and council, and projected needs well into the future.

The analysis performed in this report will inform the development of the **Investment Framework** which will identify priority infrastructure investments.



Executive summary

This report outlines the methodology adopted to determine current and projected needs across the Southern Metropolitan Region against defined threshold criteria. It presents these results and contextualises them with supplementary analysis to inform an evidence base to underpin future investments in the Region.



Quantitative analytical approach

Objective metrics have been defined for each threshold criteria, providing a robust mechanism to quantify the level of need across the Southern Metropolitan Region. The key questions posed for each threshold criteria and the metrics used to answer them are summarised here, with additional detail on data sources and methodologies provided in the body of the report.

 Education	 Employment and Economy	 Environment	 Healthcare	 Housing	 Recreation and Culture	 Transport
<p>How many students cannot access education facilities within a reasonable timeframe, given supply constraints across the Region?</p>	<p>How many working-age people cannot access a reasonable number of jobs within a practical commute time?</p>	<p>To what extent can the LGA mitigate emissions, agricultural water use and landfill, and adapt to growing climate risk impacts?</p>	<p>How many people cannot access a reasonable amount of healthcare and social assistance services within a practical commute time?</p>	<p>How severe are housing needs by LGA given current housing supply shortages and a projected increase in housing unaffordability and high population growth?</p>	<p>How many people cannot access a reasonable number of regionally significant sports/leisure centres and arts/recreation services, within a practical commute time?</p>	<p>How many people cannot access a public transport network connection within walking distance?</p>
<p>This metric utilises a supply shortfall test to consider the mismatch between supply and demand. We considered early childhood, primary, and secondary.</p> <p>Tertiary accessibility is measured by assessing the number of tertiary enrolments that cannot be accessed within a given timeframe.</p> <p>Data sources used do not account for the 'Best Start, Best Life' reforms and there is significant complexity involved in quantifying impact, which is outside the scope of this report. This will be further considered in the Investment Framework.</p>	<p>This metric utilises a threshold test. It measures the number of people who do not have access to at least 560,000 jobs (based on approximately 20% of total jobs across Greater Melbourne), within a given travel radius.</p>	<p>This metric is split into two sub metrics, mitigation and adaptation.</p> <p>Mitigation considers scope to decarbonise, reduce agricultural water consumption and reduce waste, by considering current levels.</p> <p>Adaptation considers current bushfire and flooding risks, as well as the number of properties at risk from climate change impacts, to determine resilience to environmental risks.</p>	<p>This metric utilises a threshold test.</p> <p>It measures the number of people who do not have access to a threshold level of healthcare and social assistance employment within a given radius. This serves as a proxy for access to the health services provided by employment in these industries. Tests are carried out at 5% and 10% of total industry jobs across Greater Melbourne).</p>	<p>This metric is an aggregate of several factors to determine housing needs.</p> <p>It considers the shortfall in current dwelling stock relative to future demand. It also takes into account increased unaffordability for lower-income residents and projected populations at level 2-5 occupational skill levels, as housing challenges are more likely to affect those who are lower-income earners.</p>	<p>This metric utilises accessibility and threshold tests.</p> <p>It measures the number of individuals who cannot access a regionally significant sports and leisure centre within a given time frame.</p> <p>It also measures number of arts and recreational jobs within a given radius, as a proxy for access to arts and recreational services. Tests are carried out at 10% of such jobs across Greater Melbourne.</p>	<p>This metric utilises an accessibility test.</p> <p>It measures the number of individuals who cannot access a PT network connection within 400 metres (tram), 400 metres (bus) and 800 metres (train).</p> <p>This is measured as a reasonable walking distance to access public transport (according to Victoria Walks and VicHealth).</p>

Summary of results

This summarises three areas of significant need for each council, based on the findings of the analysis and feedback from council CEOs and the Project Working Group. While this is not an exhaustive summary of need across the six Councils and seven threshold criteria, it shows there are strong interdependencies between each metric – for example, poor accessibility may be a symptom of geographic isolation and poor transport connectivity.

Numbers denote rankings in each threshold criteria across Greater Melbourne's 31 LGAs (i.e. 31/31 = the LGA with the most need across Greater Melbourne)

Cardinia



Cardinia experiences high levels of bushfire risk, with a high number of properties at risk. It also has high agricultural water use.

27/31



Cardinia demonstrates accessibility challenges to key employment centres, with a relatively low level of employment self-sufficiency.

26/31



Areas of Cardinia demonstrate the highest level of need for secondary education in all of Melbourne. It also has relatively high tertiary education needs.

26/31

Casey



Casey has the highest level of housing need in Melbourne, showing significant shortfalls in peri-urban areas such as Cranbourne and Clyde.

31/31



Casey demonstrates accessibility challenges to key employment centres and shows a relative lack of employment self-sufficiency.

31/31



Casey demonstrates key transport accessibility challenges, particularly in key growth areas around Cranbourne East and Clyde North.

31/31

Frankston



Frankston has accessibility challenges to key employment centres, coupled with a relative lack of transport access in parts of the LGA.

27/31



Frankston demonstrates moderate flood risk along the bay. It also has moderate usage of water for agricultural purposes.

25/31



Frankston demonstrates the greatest increase in rental affordability across Melbourne, equal with Casey and Greater Dandenong.

20/31

Greater Dandenong



Greater Dandenong faces significant housing challenges, including the largest proportion of people experiencing homelessness in the State.

21/31



Access to tertiary education by public transport is in need of improvement, but is expected to improve following the Suburban Rail Loop.

20/31



Greater Dandenong has high levels of industrial jobs, however, it is insufficient for the local population. Diversification of jobs is required.

16/31

Kingston



Kingston has relatively high emissions due its industrial centres and ranks highly in terms of properties at risk from climate change.

28/31



Some areas of Kingston currently have poor access to health care services, especially by PT. However, this is expected to improve with SRL.

21/31



There are opportunities for local employment growth and increased job accessibility, including converting industrial land to office parks.

16/31

Mornington Peninsula



Mornington Peninsula does not have any significant health service hubs. Many residents travel long distances to access health care.

31/31



MP faces high levels of bushfire and flood risk. There is also intense usage of water for agricultural purposes.

31/31

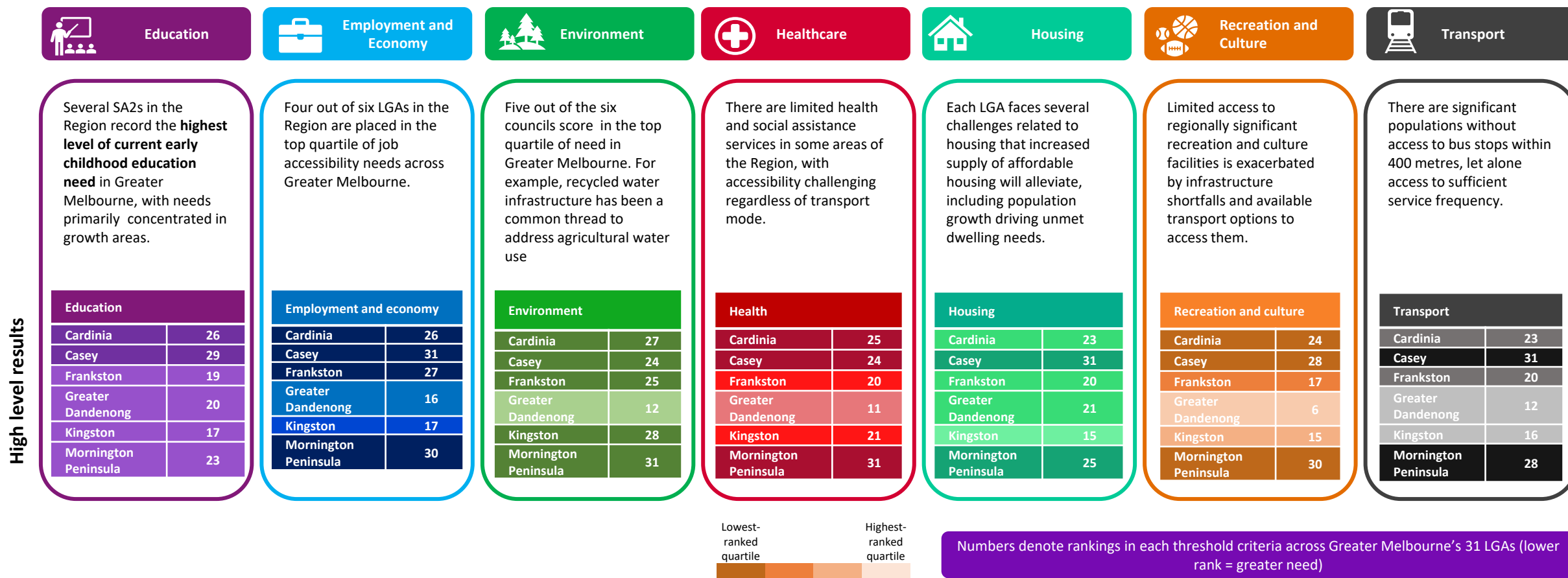


MP has a low level of employment self-sufficiency. There are opportunities to improve local employment beyond the tourism sector.

30/31

Additional detail on the Needs Assessment results is provided the table below, with the rank of each LGA provided within Greater Melbourne's 31 LGAs. Each of the metrics and sub-metrics should be interpreted in their full context, however, which will enable the data to tell a full spectrum of stories.

At a glance, the ranking table below reveals likely correlation between the Employment and economy, Health, Recreation and culture and Transport metrics as each of these are largely based on accessibility according to road and public transport travel time data (then adjusted to particular contexts). Suggested areas of focus are identified below.



As explored in the **Background Report**, there are several potential investments across the Southern Metropolitan Region that will address low levels of need identified in this assessment. This page highlights investments that are regionally significant and can therefore benefit multiple councils. These investments also demonstrate interdependencies across threshold criteria. The provision of infrastructure under one criterion can have positive outcomes for other criteria. More details regarding potential investments will be explored in the **Investment Framework**.



Education

Potential investments identified include:

- ✓ Increased funding to support early childhood education provision, particularly through the 'Best Start, Best Life' reforms
- ✓ Additional tertiary education capacity through the Government's investment in TAFE infrastructure and Fee-Free TAFE.

Improving early childhood education can enable carers to return to **employment**. Better education outcomes also boost the local **economy**.



Employment and Economy

Potential investments identified include:

- ✓ Thompsons Road extension
- ✓ South East Airport
- ✓ Industrial renewal and expansion



Healthcare

Potential investments identified include:

- ✓ Additional health infrastructure – Cranbourne & Pakenham Hospital
- ✓ Funding for mental health support
- ✓ Funding for maternal and child health services

The provision of additional health infrastructure and services in the Region can also boost **employment** opportunities.



Housing

Potential investments identified include:

- ✓ Additional provision of social and affordable housing
- ✓ Address mobile blackspots in growth areas
- ✓ Increase funding of the National Housing and Homelessness Agreement



Environment

Potential investments identified include:

- ✓ Gas Transition Fund
- ✓ Community Transition Fund
- ✓ Integrated water management opportunities

Improving environment outcomes can enable more **employment** opportunities and ensure **housing** security in vulnerable areas.



Recreation and Culture

Potential investments identified include:

- ✓ Redevelopments to multiple sports and recreation facilities across the Region
- ✓ Active transport links across the Region.
- ✓ Potential feasibility studies on arts and culture infrastructure

The improvement of access to recreation and culture can improve **health** outcomes. Active **transport** links can also increase access.



Transport

Potential investments identified include:

- ✓ Thompsons Road upgrade
- ✓ New train stations on Frankston and Cranbourne Lines
- ✓ Increased bus services

This will improve accessibility across all other metrics: **education, employment and economy, environment, housing, healthcare** and **recreation and culture**.

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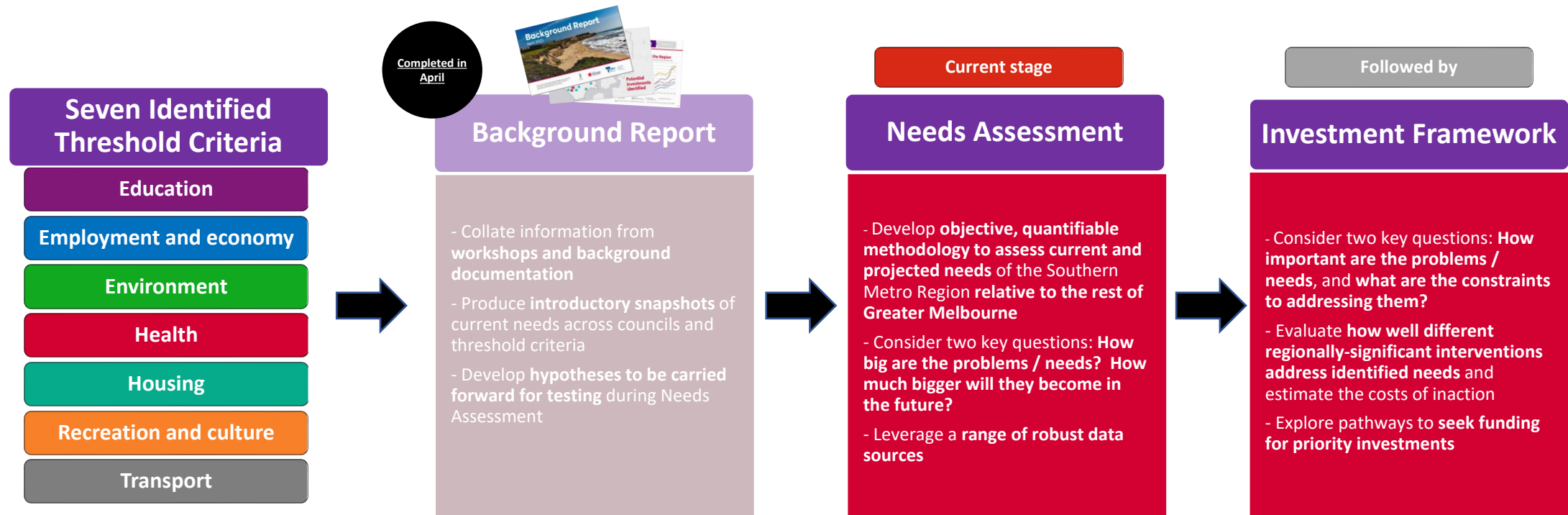
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Part 1:

Introduction

Project outputs

The Southern Metropolitan Region Partnership, comprising the shires and councils of Cardinia, Casey, Greater Dandenong, Frankston, Kingston and Mornington Peninsula, has completed a needs assessment and investment framework **to identify key priorities and infrastructure opportunities in the Region**. This reflects the Partnership's objective to develop a clear evidence-based to inform policy and investment decisions supported by community engagement and improved regional-level coordination.



Needs Assessment and Investment Framework

This Needs Assessment report provides an **objective and quantifiable evidence base** used to measure relative need across Greater Melbourne. It applies this approach to answer the two key questions shown below.

Develop quantitative methodology to objectively assess need and quantify need relative to other Greater Melbourne LGAs to support case for Victorian Government investment

Question 1: How big is the problem?

Question 2: How big will the problem become?

A **workshop held on 28 July 2023** was an opportunity to obtain feedback from CEOs and other council stakeholders regarding key focus areas to be explored in the Needs Assessment and/or subsequent Investment Framework. Some examples and key areas highlighted are identified below and reflected throughout the Needs Assessment report.

Cardinia	Casey	Frankston	Greater Dandenong	Kingston	Mornington Peninsula
<ul style="list-style-type: none"> Opportunities to increase local job provision as one of the only areas in the Region with material amounts of developable industrial land Challenges with accessing health services (e.g. mental health services) which are predominantly concentrated in other areas Lack of early childhood and tertiary education access 	<ul style="list-style-type: none"> Challenges with ensuring employment opportunities keep up with population growth, exacerbated by barriers to accessing up-to-date State forecasts Lack of adequate bus services in many growth areas, contributing to traffic congestion Barriers to effective land use, including land stockpiling for duplicative retarding basins 	<ul style="list-style-type: none"> Ensuring essential workers (such as nurses and cleaners) have access to affordable housing near their places of work, potentially utilising State-owned land in the area Sustainable funding models for council initiatives to rely less on external grants Renewing existing industrial land to secure future benefits via expanded capacity 	<ul style="list-style-type: none"> Significant levels of homelessness and challenges with obtaining adequate funding for related programs Repurposing industrial land to enable higher-value developments and maintain job opportunities without displacing local operators Barriers to local use of recycled water and resulting land speculation by developers in green wedge areas 	<ul style="list-style-type: none"> Significant aspirations for growth in local employment opportunities, including by transitioning industrial land to office parks Repurposing land to increase open space and recreational infrastructure in the Region, such as through a Chain of Parks and new facilities to accommodate organised sport Lack of effective bus services 	<ul style="list-style-type: none"> Rezoning land around the Port of Hastings to reduce reliance on tourism in the local economy Opportunities for local farms to access significant recycled water flows currently being poured into Gunnamatta Significant levels of short-term accommodation across the Peninsula which is exacerbating existing housing affordability challenges Barriers to access public transport with lack of effective bus services, particularly in the western parts of the Shire.

Part 2:

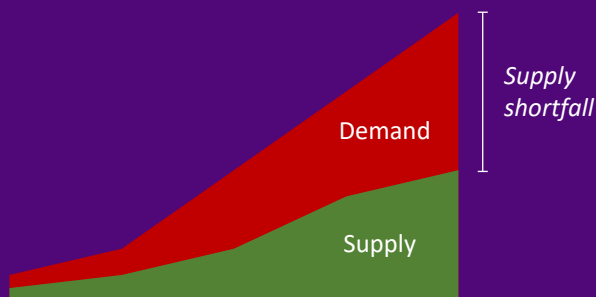
Methodology

The methodology measures need in various ways

In order to consider the needs of the region, a number of metrics have been defined for each of the threshold criteria. One of the three methodologies summarised here has generally been applied in each metric to assess need.

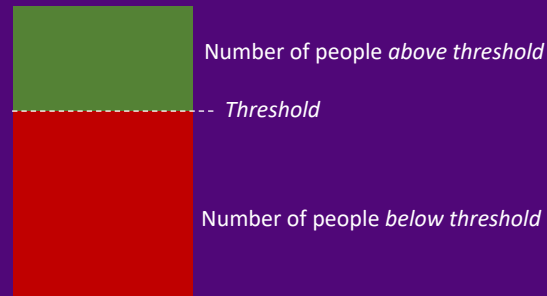
Supply Shortfall

This metric assesses the disparity between the quantity of available supply, such as dwellings or education enrolments, and the corresponding demand. By quantifying the absolute value of shortfall in supply and demand, it enables direct comparisons between Southern Metropolitan councils with other councils across Greater Melbourne.



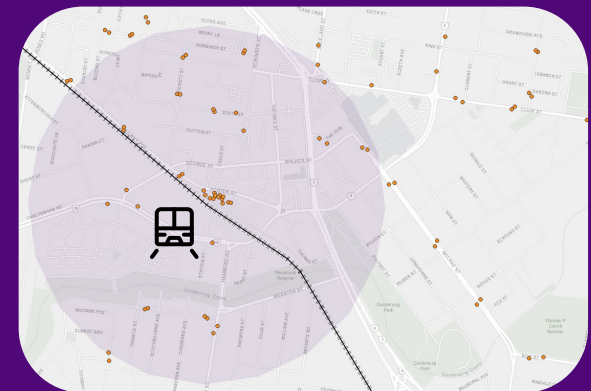
Threshold Test

This metric assesses the number of individuals who fall below or above a given threshold. For instance, in the context of employment accessibility, the metric evaluates the number of people who can access approximately [20%] of the jobs available in Greater Melbourne.



Accessibility Test

This metric assesses the number of individuals who do not have access to quality services within a given radius. For example, in the context of public transport, it assesses the number of people who do not have access to rail, tram or bus services within 400 or 800m of their home.



The methodology uses a range of robust inputs

The following key inputs and data sources are used in the calculation of each metric to evaluate need across the seven threshold criteria.

Future demographic projections

Future population projections are derived from Small Area Land Use Projections (SALUP) that provide projections on dwellings and population demographics, labour force, employment (by place of work), and school enrolments.

Various metrics utilise SALUP data as inputs for future demand assumptions:

- Future population projections out to 2051 by age group and small land area
- Corresponding future projections for employment and average dwelling size by small land area

Travel time data to measure accessibility

A number of metrics measure accessibility within a particular travel time radius based on origin and destination pairings.

Travel time is derived from the Victorian Integrated Transport Model (VITM), which can be used to estimate travel time based on origin-destination pairings, taking into account confirmed future transport initiatives and its impact on the transport network.

Economic, social, population and environmental data from the ABS

The Australian Bureau of Statistics (ABS) provides a vast array of statistical publications such as population demographics, social trends, economic indicators, labour market statistics, and environmental data.

The ABS also provides Socio-Economic Indexes for Areas (SEIFA) which ranks areas according to their relative socio-economic advantage and disadvantage using Census data.

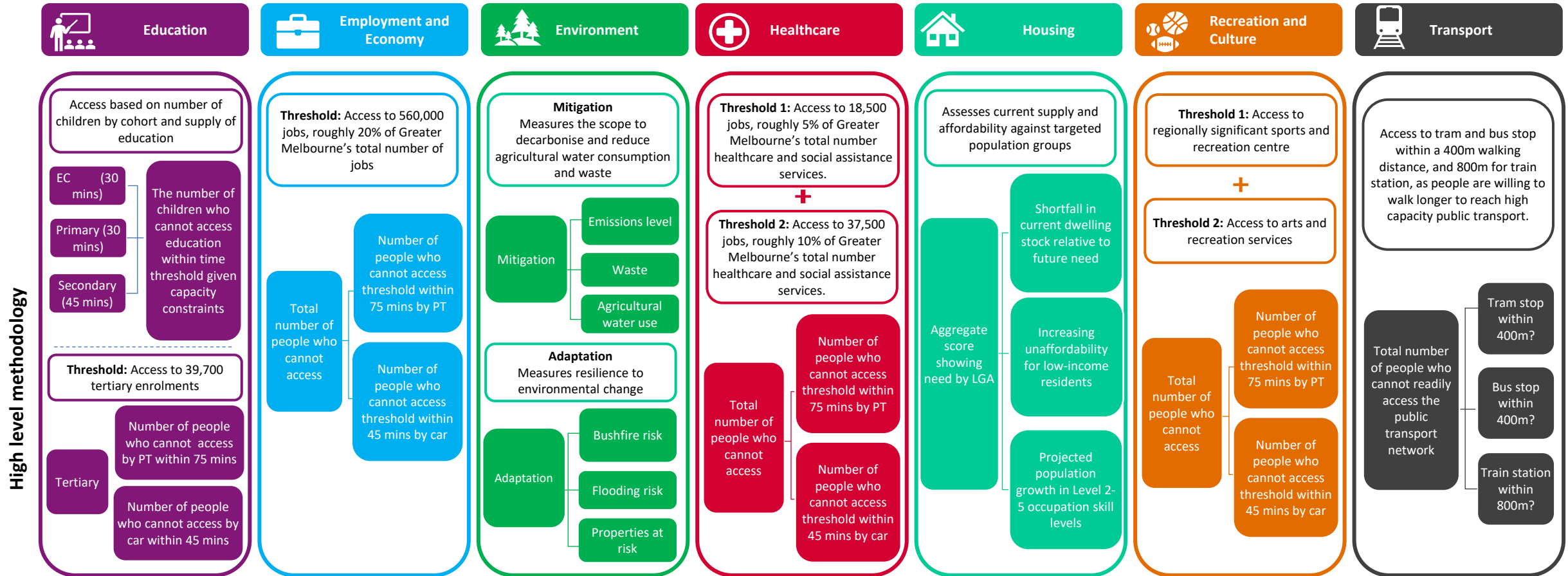
Others

Some other data sources used include:

- **Sports and Recreation Victoria** – Location and numbers of regionally-significant recreation and cultural infrastructure.
- **Public Transport Victoria (PTV)** – datasets include location of tram, bus and train stations.
- **Snapshot Climate** – datasets include LGA-specific emissions figures.

State-level data has been utilised to ensure data integrity and to enable robust comparisons across all of Greater Melbourne.

For each threshold criteria, a number of metrics have been used to measure different aspects of need. These include different tiers in the case of education, and the different transportation modes that are used to access, employment, healthcare and other services. The methodology followed for each metric is summarised here, with additional detail provided within each section of the report.

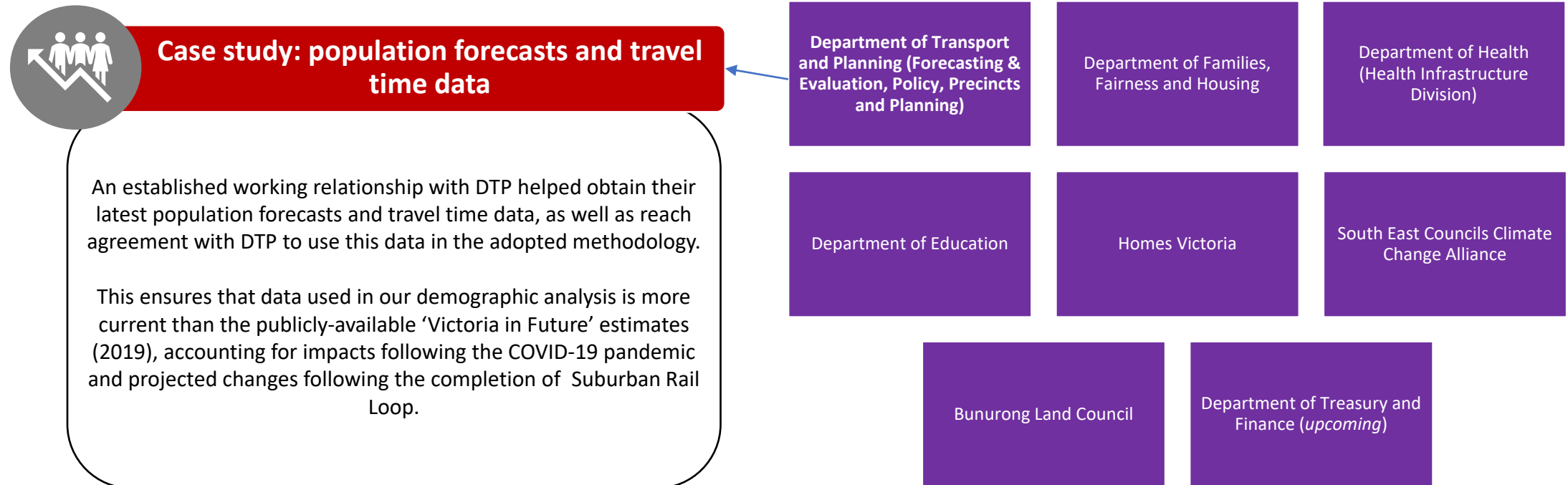


Temporal weightings are applied across each metric, increasing the importance of needs that are current relative to those forecast in the future.

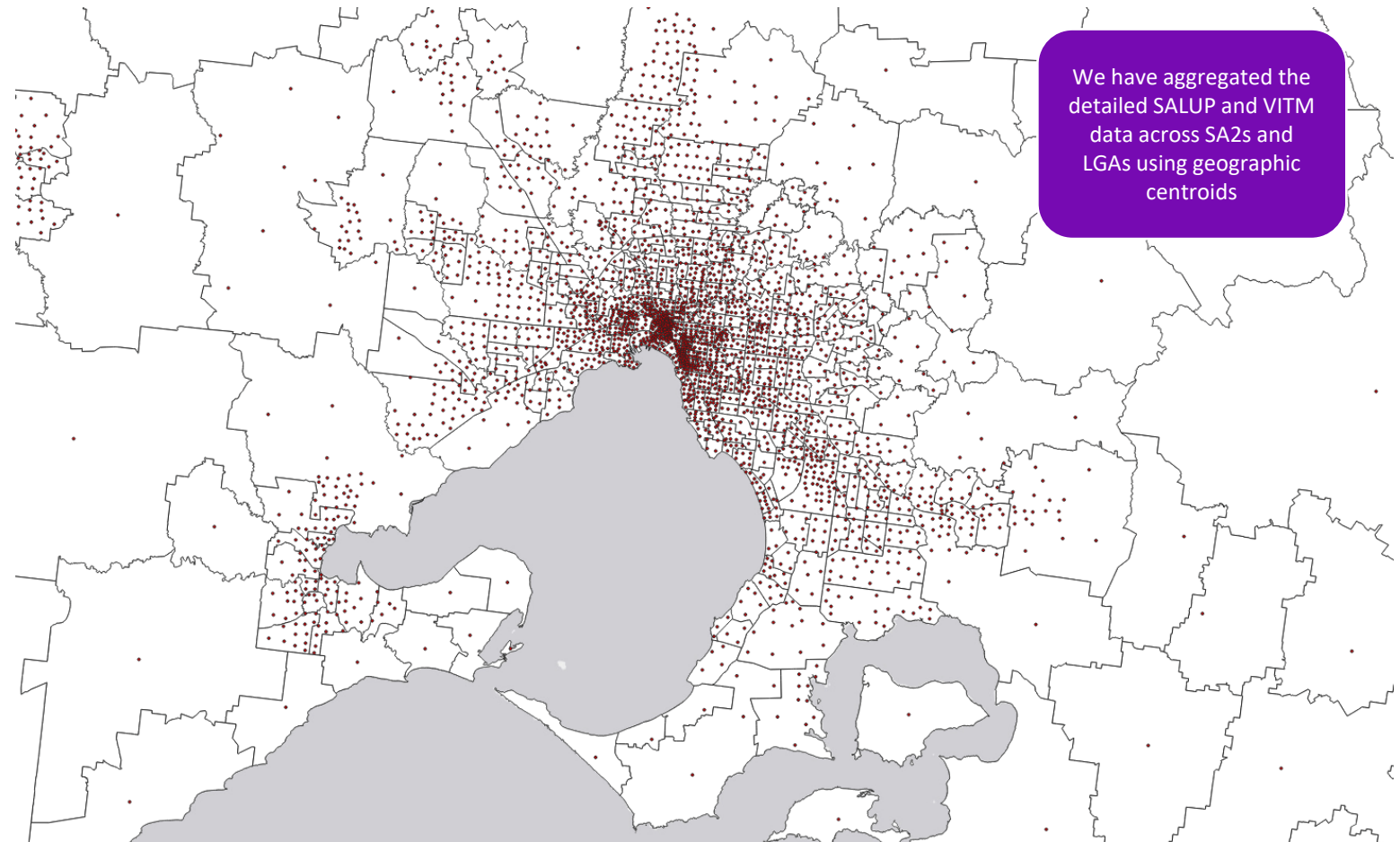
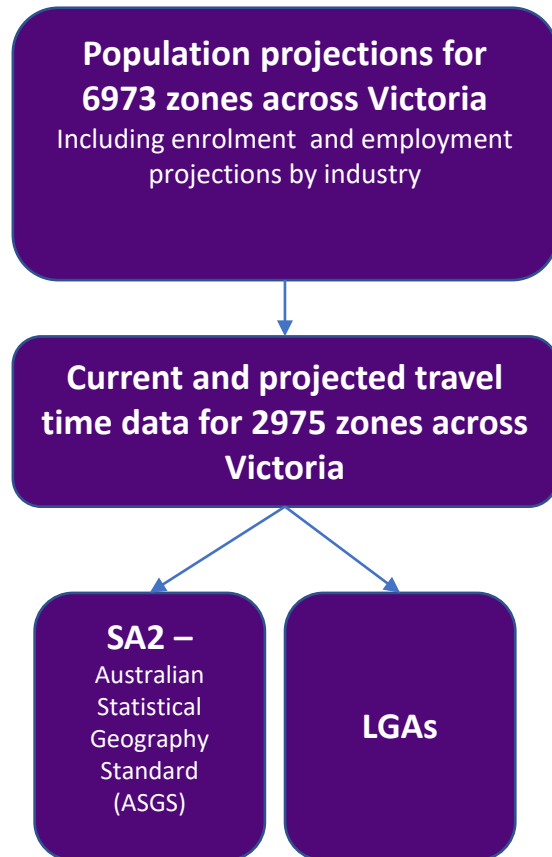
Socioeconomic weightings are applied across each metric via the ABS' SEIFA index, increasing the importance of needs observed in areas experiencing socioeconomic disadvantage.

The Needs Assessment has been framed by ongoing stakeholder engagement

Stakeholder engagement strengthened the evidence base, enabling breadth and depth of data inputs to inform the adopted methodology. Stakeholders have been selected in consultation with the Office of Suburban Development and provided both data for use in the Needs Assessment as well as advice on current levels of need and how these can be measured. Below is a case study regarding how engagement with the Department of Transport and Planning (DTP) delivered invaluable, detailed and up-to-date datasets for use in this project.



The methodology adopted ensures consistency amongst inputs

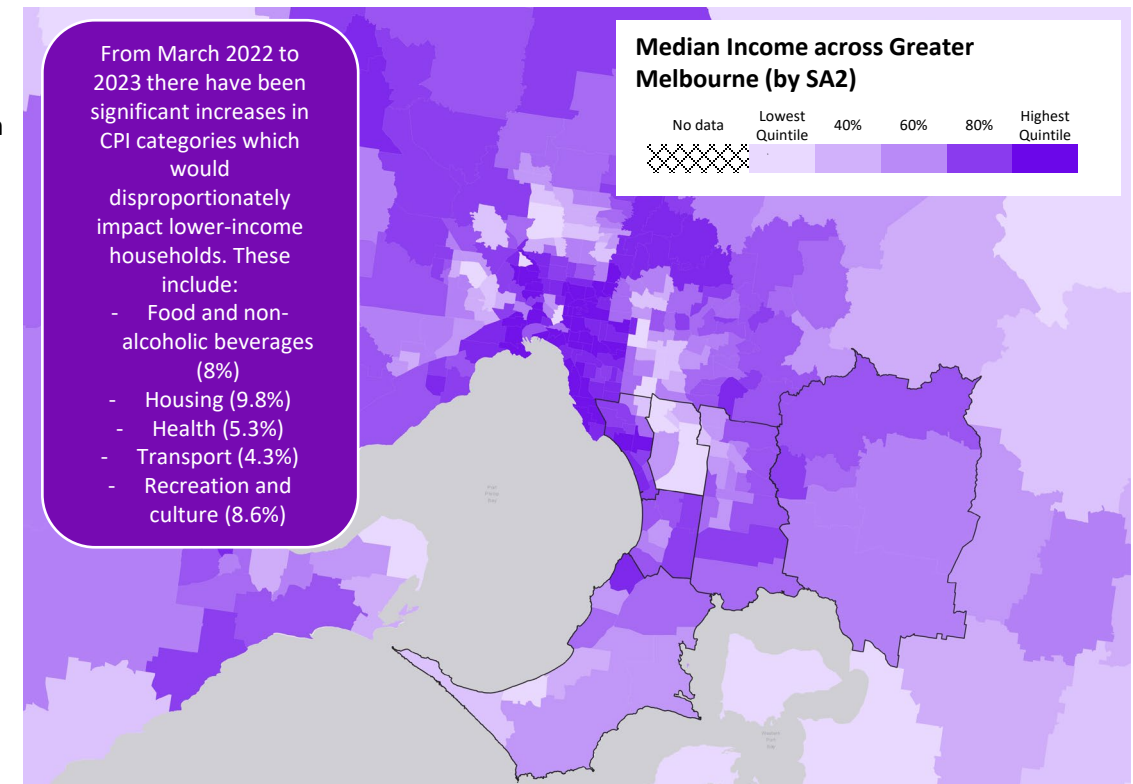
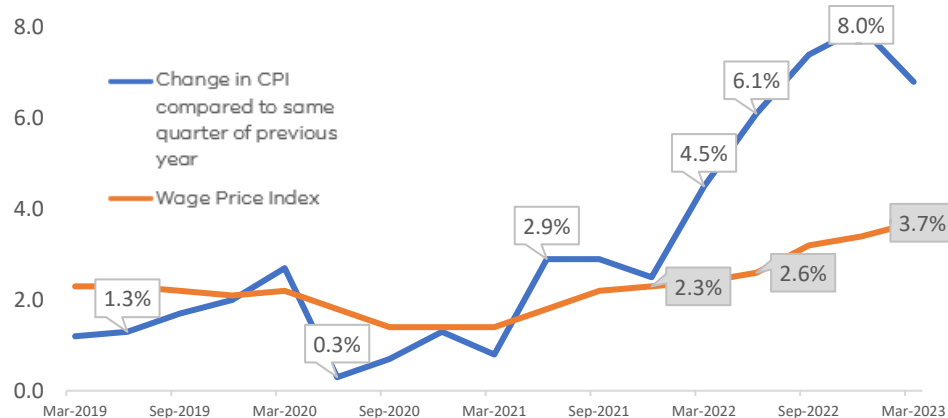


Part 3:

Results

Results in the following sub-chapters must be interpreted with broader economic challenges in mind, with affordability making it more difficult for households to meet needs across all domains

- Several challenges transcend the defined threshold criteria, including the current cost of living crisis heavily impacting the Region.
- The median income across several SA2s in Greater Dandenong, Casey and Mornington Peninsula fall below the median personal income of \$52,338 (2019-20).
- This is problematic amidst the current cost of living crisis, with a lack of real wages growth putting cost pressures on households across the Region.
- The cost of living pressures disproportionately affect households in the SA2s of Springvale, Keysborough, Noble Park, and Dandenong in Greater Dandenong and Rosebud-McCrae in Mornington Peninsula, which have low median incomes relative to the rest of Greater Melbourne.



Source: Australian Bureau of Statistics (2021), Median Income 2019-2020

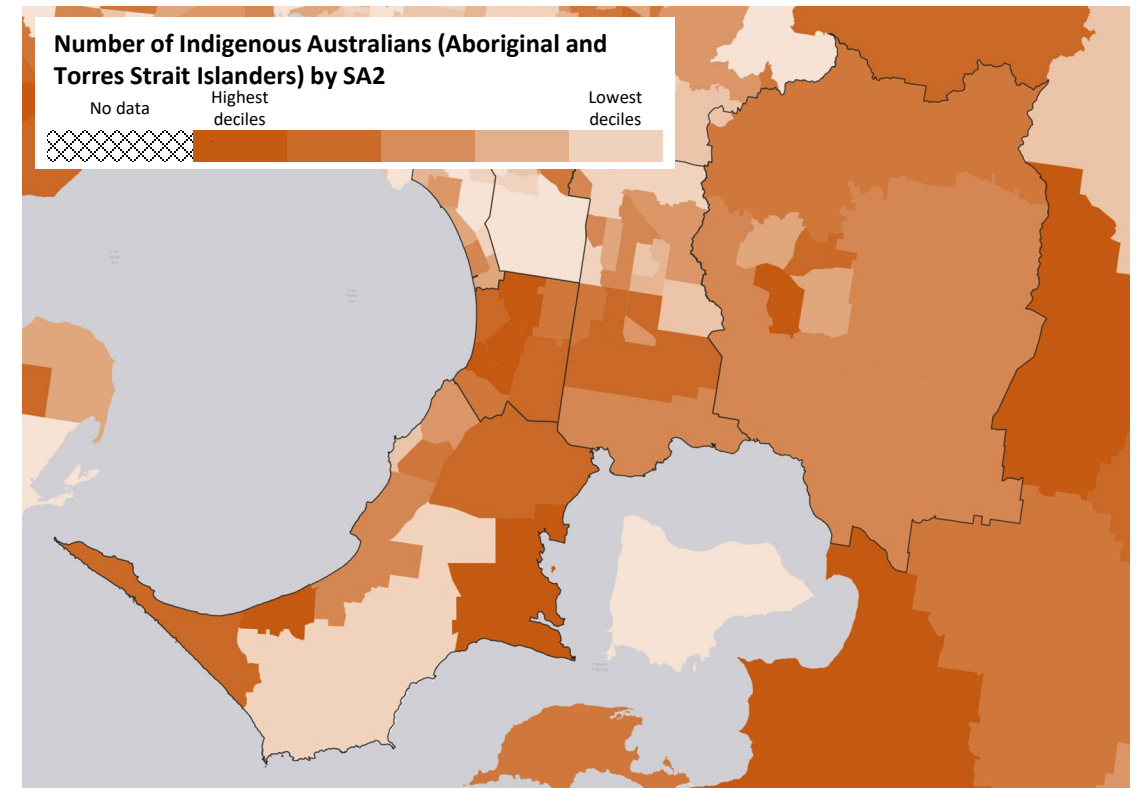
Source: Australian Bureau of Statistics (2023), Consumer Price Index, Australia, March Quarter 2023

The Region's diverse demographic needs also mean that analysis in this report must be interpreted within specific contexts

- For example, the Region is home to a large number of Indigenous Australians, representing approximately 26% of the total Indigenous population in Greater Melbourne. Casey is home to over 2,400 Indigenous Australians, representing the third largest population in Greater Melbourne, and the seventh largest in Victoria.
- All councils in the Region have implemented Reconciliation Action Plans and are working with Aboriginal and Torres Strait Islander communities and traditional owners to enhance social, economic and environmental outcomes.

Largest population of Indigenous Australians in the Region by SA2s

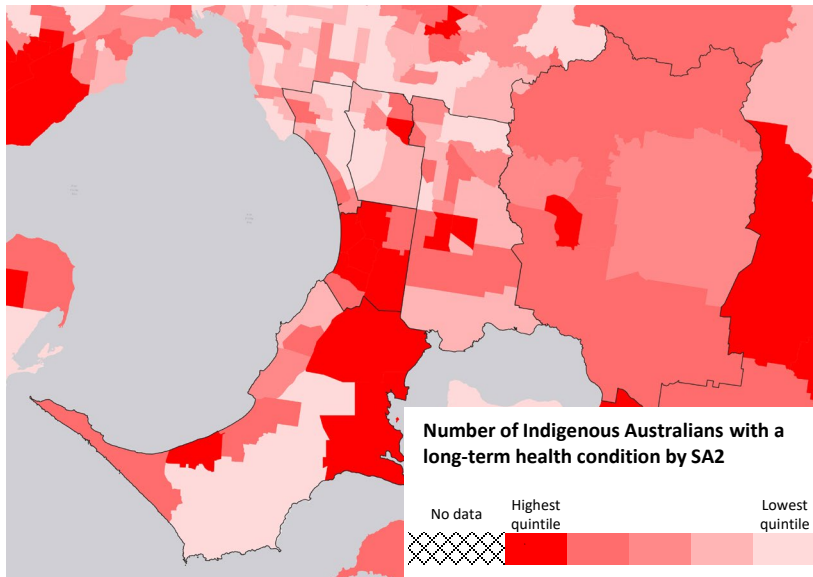
SA2	Indigenous Population	Proportion of population
Hastings - Somers	468	2.0%
Frankston North	376	1.9%
Carrum Downs	350	1.6%
Frankston	320	1.4%
Rosebud - McCrae	309	1.3%
Pakenham - South West	282	1.1%



Source: Australian Bureau of Statistics (2021)

The areas with the highest level of health needs correspond with areas of high Indigenous Australian population

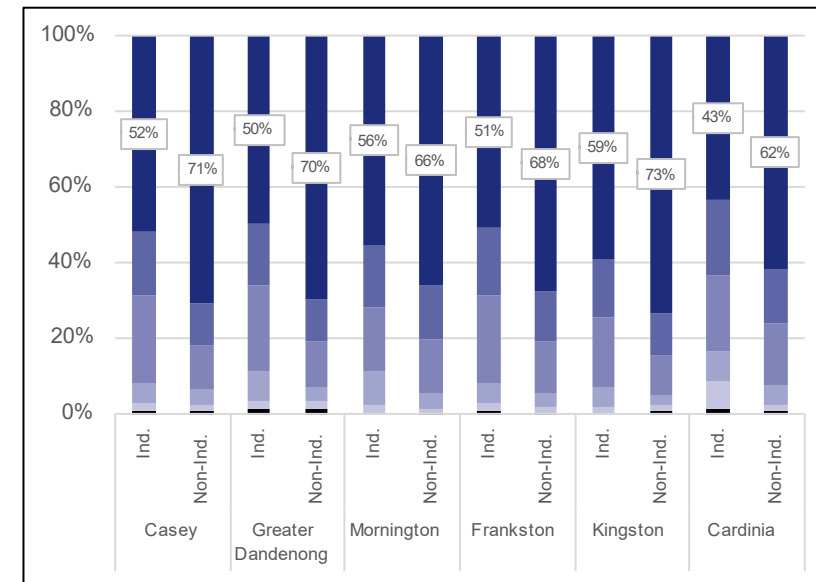
- The areas of highest need include areas on the Western Port including Hastings-Somers and Somerville. This area has low access to health services, as they are located in more populated areas of the peninsula, such as in Mornington. This is exacerbated by limited access to public transport in this area and has implications on equitable access to health services for Indigenous Australians.



Source: Australian Bureau of Statistics (2021) – INGP Indigenous Status and Long-term health condition

Indigenous Australians are less likely to complete Year 12 than non-Indigenous Australians.

- There are many factors that influence the completion rates for Indigenous students. There are barriers including geographic isolation to schools, reducing accessibility, especially in areas with high Indigenous populations in Mornington Peninsula, Casey and Cardinia. Other factors include differing social and cultural backgrounds, different languages and generational economic disadvantage.

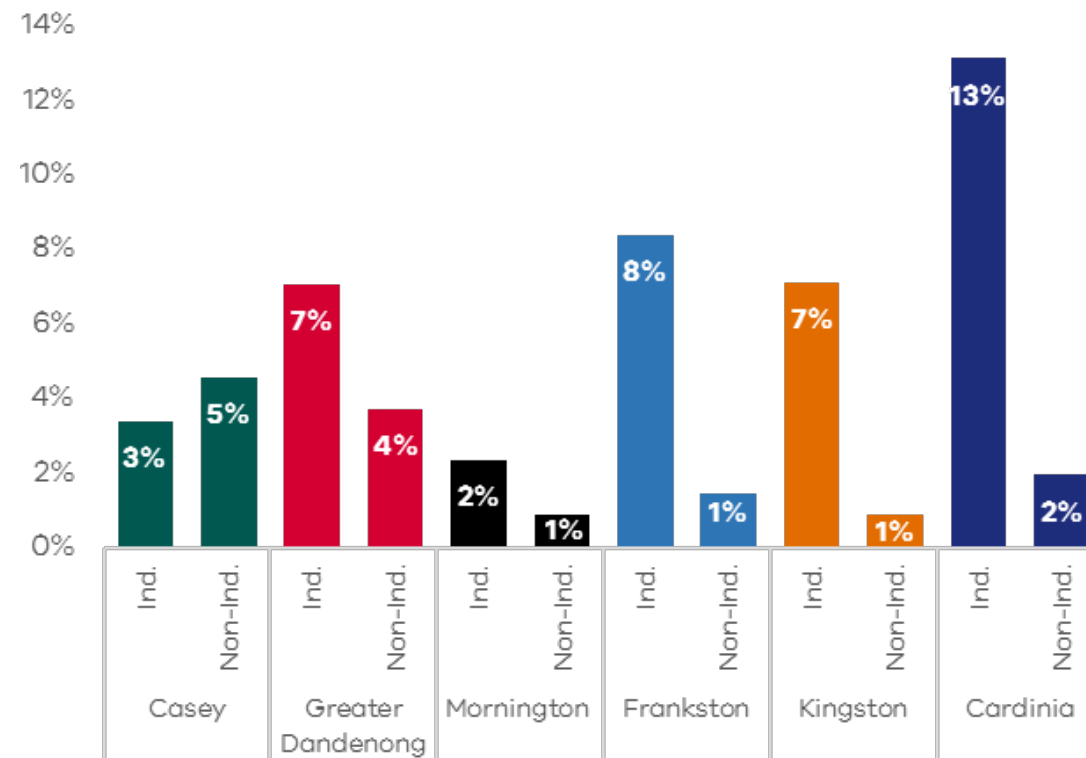


■ Did not go to school ■ Year 8 or below
 ■ Year 9 or equivalent ■ Year 10 or equivalent
 ■ Year 11 or equivalent ■ Year 12 or equivalent

Note: the data does not include individuals who 'did not state' their Indigenous status

Indigenous Australians are overrepresented amongst people experiencing homelessness

- With the exception of Casey, rates of homelessness in Indigenous Australians far exceed those of non-Indigenous Australians.
- Domestic and family violence was the most common reason that Indigenous people sought assistance from specialist homelessness services at 22%.
- Other barriers include low incomes, lack of identity documents, problematic housing histories, criminal histories and low tolerance for completing forms due to differing languages.



Source: Australian Bureau of Statistics (2021) – INGP Indigenous Status and Estimating Homelessness

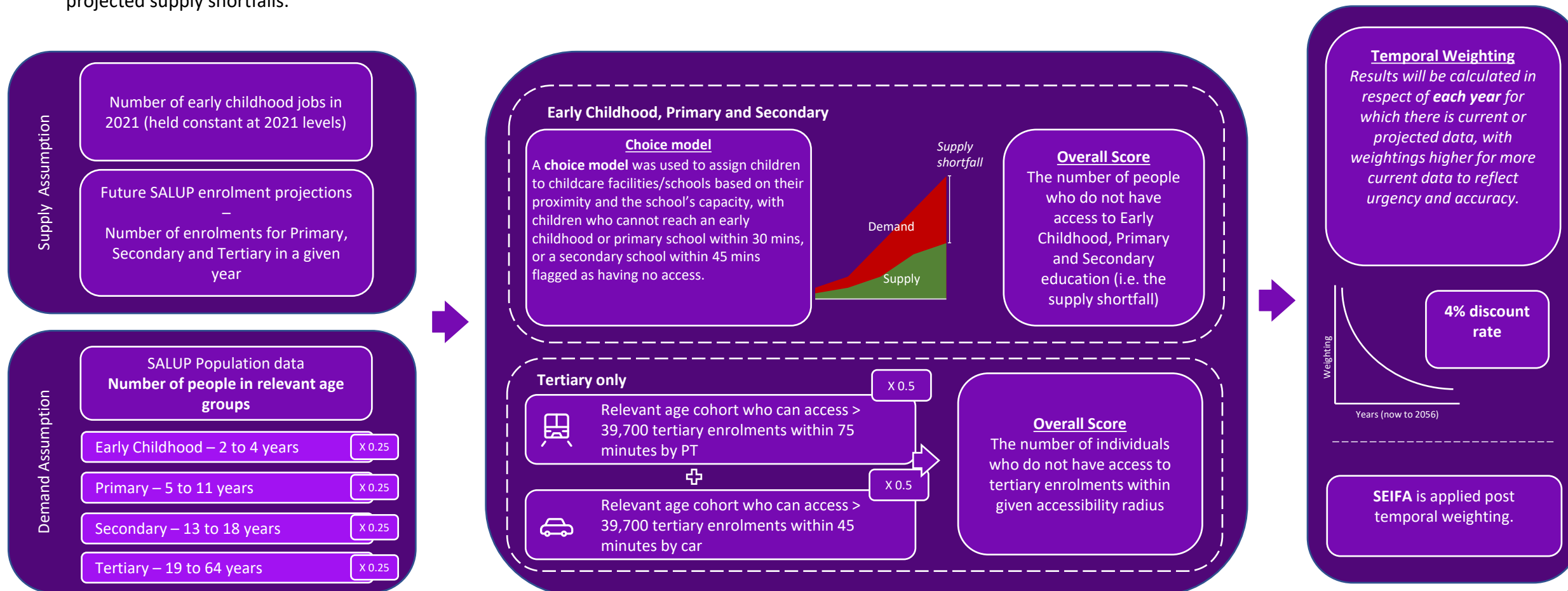
Note: the data does not include individuals who 'did not state' their Indigenous status

3.1. Education



Access to Education

A broad based assessment of educational need has been conducted, spanning early childhood through to primary, secondary and tertiary education. Demographic forecasts for the relevant population cohorts have been compared to the current level of service provision and its proximity to population centres to indicate the current and future projected supply shortfalls.





There are current and projected shortfalls in service provision across all levels of education

- Casey, Cardinia and Mornington Peninsula show the greatest need in the Southern Metropolitan Region.
- Casey shows the greatest need in Greater Melbourne alongside other peri-urban high growth LGAs such as Hume and Melton, which experience limited access to education across all levels.
- The results indicate that Greater Dandenong, Kingston and Frankston perform relatively better in terms of accessibility. However, there is limited access to tertiary education via PT. This represents the current lack of viable PT options to tertiary institutions.

Methodology Summary

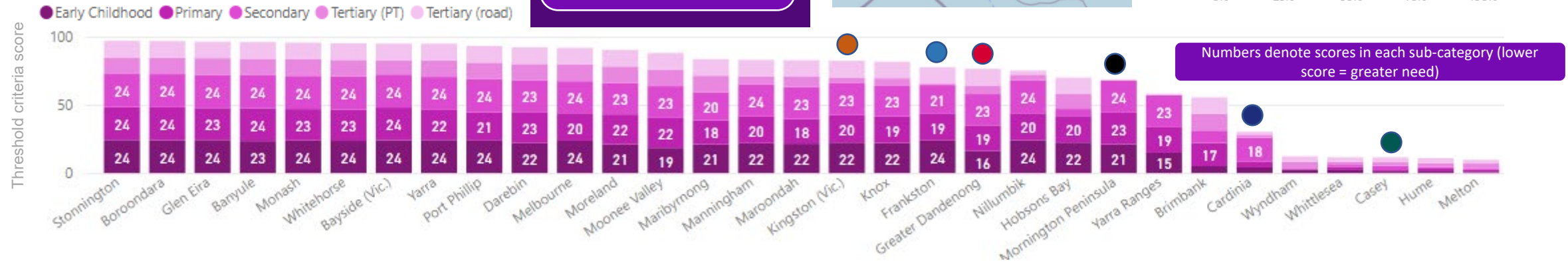
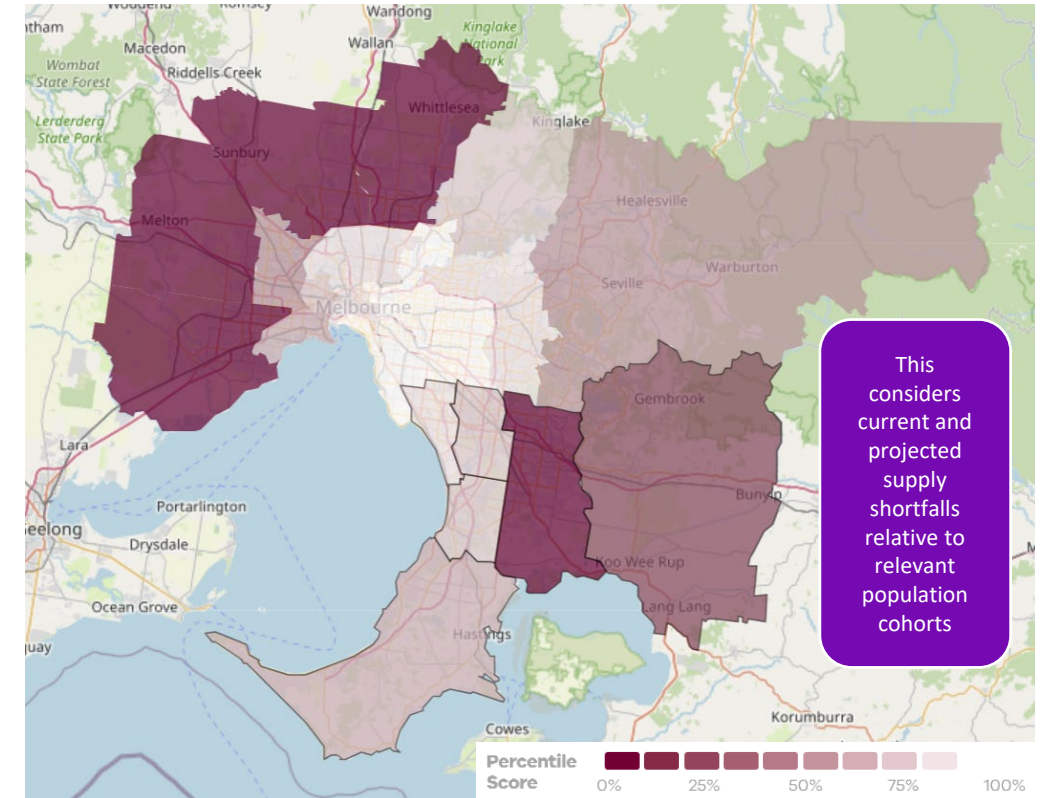
The number of people who do not have access to Early Childhood, Primary and Secondary education (i.e. the supply shortfall)



Relevant age cohort who can access > 39,700 tertiary enrolments within 75 minutes by PT

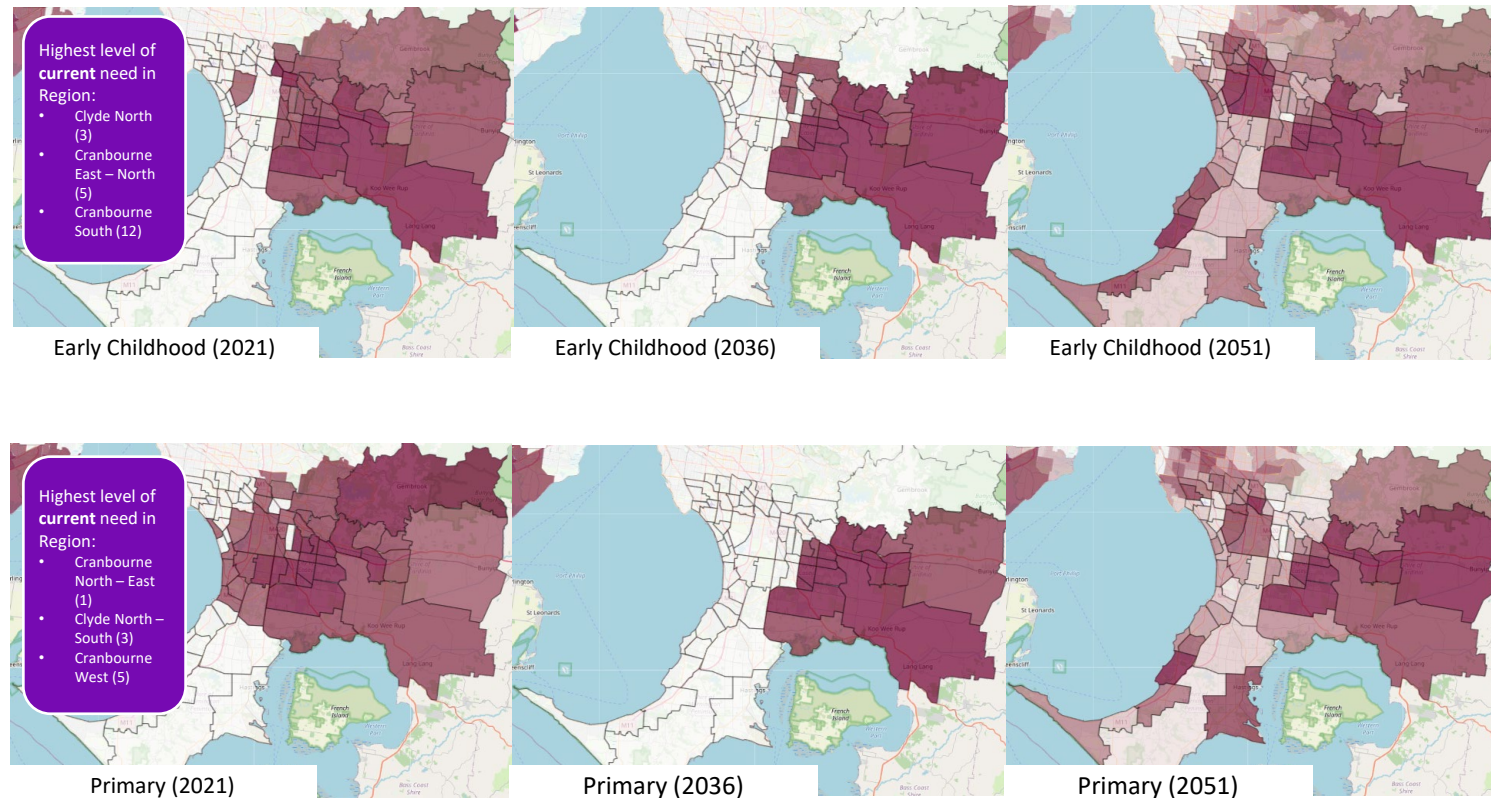


Relevant age cohort who can access > 39,700 tertiary enrolments within 45 minutes by car





Existing pressure on early childhood and primary services is projected to persist in Casey and Cardinia, as well as expand throughout the Region



- There is a particularly large shortfall in supply for both early childhood and primary school enrolments across Casey and Cardinia. By 2036, over 16,000 zero-to-four-year-olds will be living in Cardinia, representing a 190% increase from 2016.
- The supply-demand gap is projected to widen over the next decades. Several SA2s in Casey represent the greatest need in Greater Melbourne, including Clyde North (3rd for early childhood education in 2021) and Cranbourne North-East (1st for primary education in 2021). This trend is projected to continue into the 2050s, when the supply shortfall is also expected to become acute in Greater Dandenong.
- In Cardinia, it is evident there is a significant shortfall early childhood and primary school supply in Koo Wee Rup and Bunyip-Garfield, which are located in peri-urban communities. In terms of current needs, Pakenham South West, for example, ranks 15th across Greater Melbourne for primary education needs in 2021.



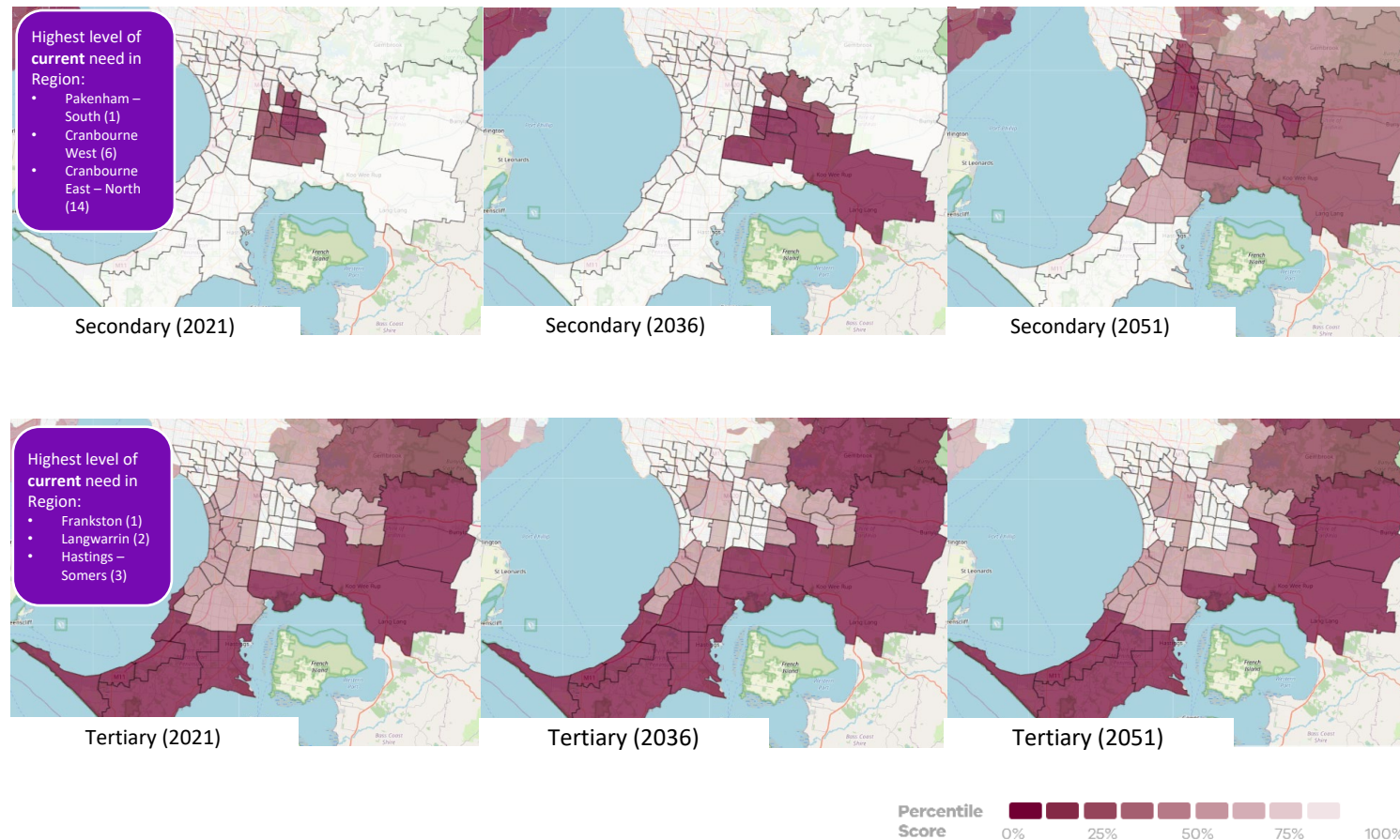
There are accessibility barriers to secondary and tertiary education options

Secondary education

- There will continue to be a shortage of secondary school capacity, particularly in Casey and Cardinia. This is expected to worsen into the 2030-40s as the cohort of 12 to 17-year-olds continues to grow, with significant shortfalls beginning to affect Greater Dandenong by 2051.
- Pakenham (in Cardinia) has the highest level of current need across **all** of Greater Melbourne in 2021.

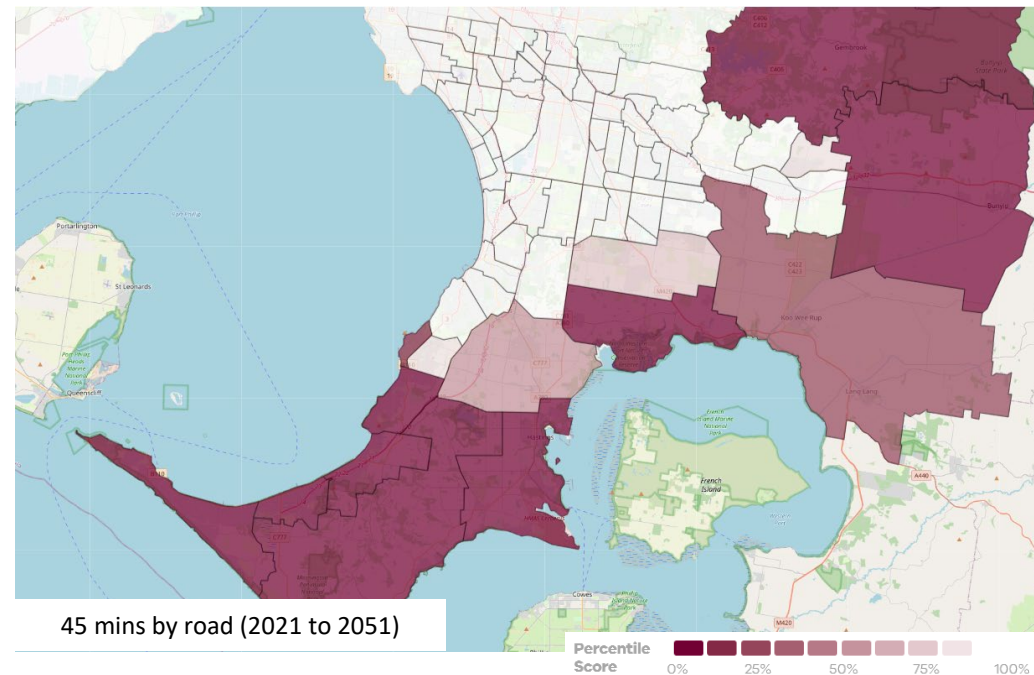
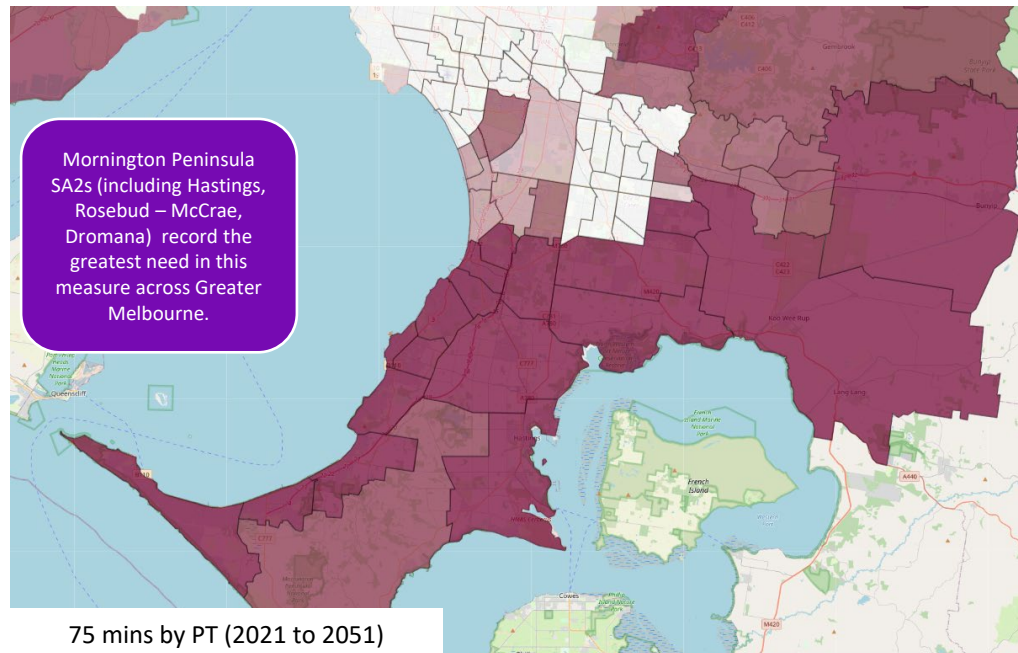
Tertiary education (combined accessibility by both road and PT)

- There will continue to be a relative accessibility deficit to tertiary education from Frankston, Mornington Peninsula, Cardinia and parts of Casey until the 2050s (largely due to geographic distance).
- Accessibility to tertiary institutions will improve in parts of Kingston, Greater Dandenong, and Casey due to the greater connectivity created by the Suburban Rail Loop (SRL) from 2036.
- Frankston and Mornington Peninsula currently demonstrate the greatest need for public transport investment to improve accessibility to tertiary education. This includes Frankston, Langwarrin, Hastings, Somerville, Frankston North, Rosebud and McCrae.





Lack of access to tertiary education could create barriers to higher education opportunities



- Kingston, Greater Dandenong and large parts of Casey are able to access greater than 39,700 tertiary education places within 45 minutes by road. However, the limited availability of viable public transport options significantly reduces accessibility by public transport.
- The disparity in access to tertiary education by public transport between well-served areas and outer urban areas would disproportionately affect those from low-income backgrounds, particularly any who live in the Mornington Peninsula, Cardinia and Casey. This risks perpetuating educational disadvantage by disincentivising higher education.
- While tertiary students may choose to move closer to their institutions, there are housing affordability challenges in those areas that limit the feasibility of doing so (e.g. increasing rents).

3.1.1: Education: case study

Case studies throughout the Results chapter will highlight examples of how results and key findings can be more broadly contextualised and/or demonstrate the interconnectedness between needs across the threshold criteria.

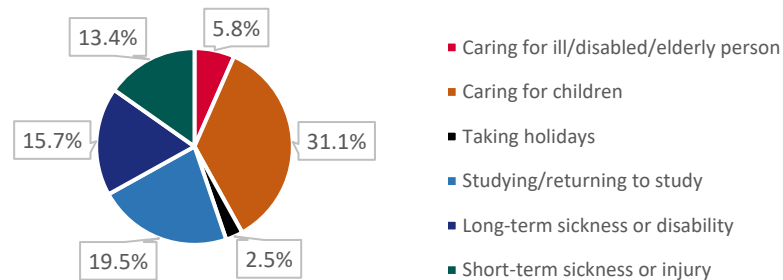
This case study considers the implications of unaddressed early childhood education needs on workforce participation, which bridges the categories of Education and Employment and Economy.

Education	Employment and economy	Environment	Healthcare	Housing	Recreation and culture	Transport
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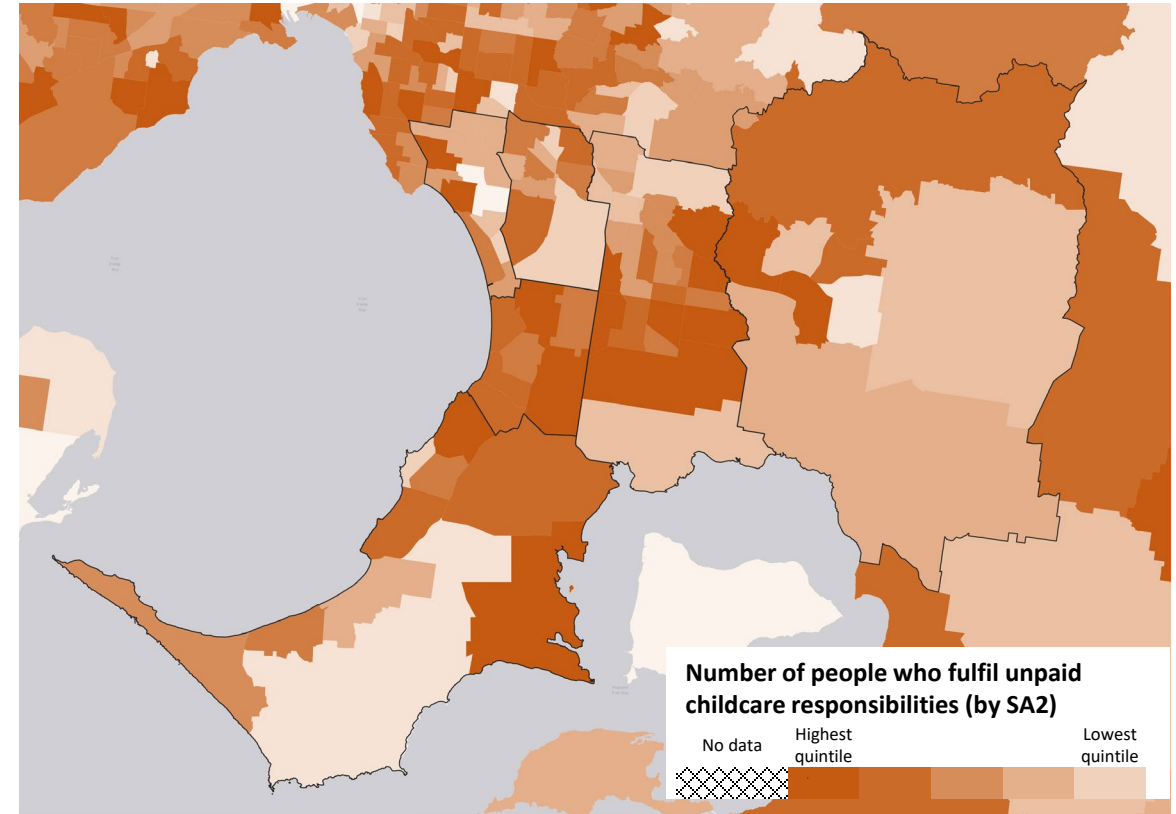


Early childhood education also plays a crucial role in improving workforce participation

- Some SA2s across the Region experience low workforce participation associated with parental needs to fulfil childcare responsibilities.
- The areas with the highest rates of unpaid childcare responsibilities align with the areas with the greatest need for early childhood services. This includes areas in Casey and Cardinia, which have some of the largest proportions of zero-to-five year old populations across Greater Melbourne.
- Shortfalls in early education services may contribute to decisions to forego paid employment, further affecting families' financial positions.
- This data also includes caring for grandchildren, particularly those in Mornington Peninsula where the proportion of people aged 65 and over (26.7%) is almost double the Greater Melbourne average (14.7%).



Source: Australian Bureau of Statistics (2021) – Reason of not returning to employment across Greater Melbourne



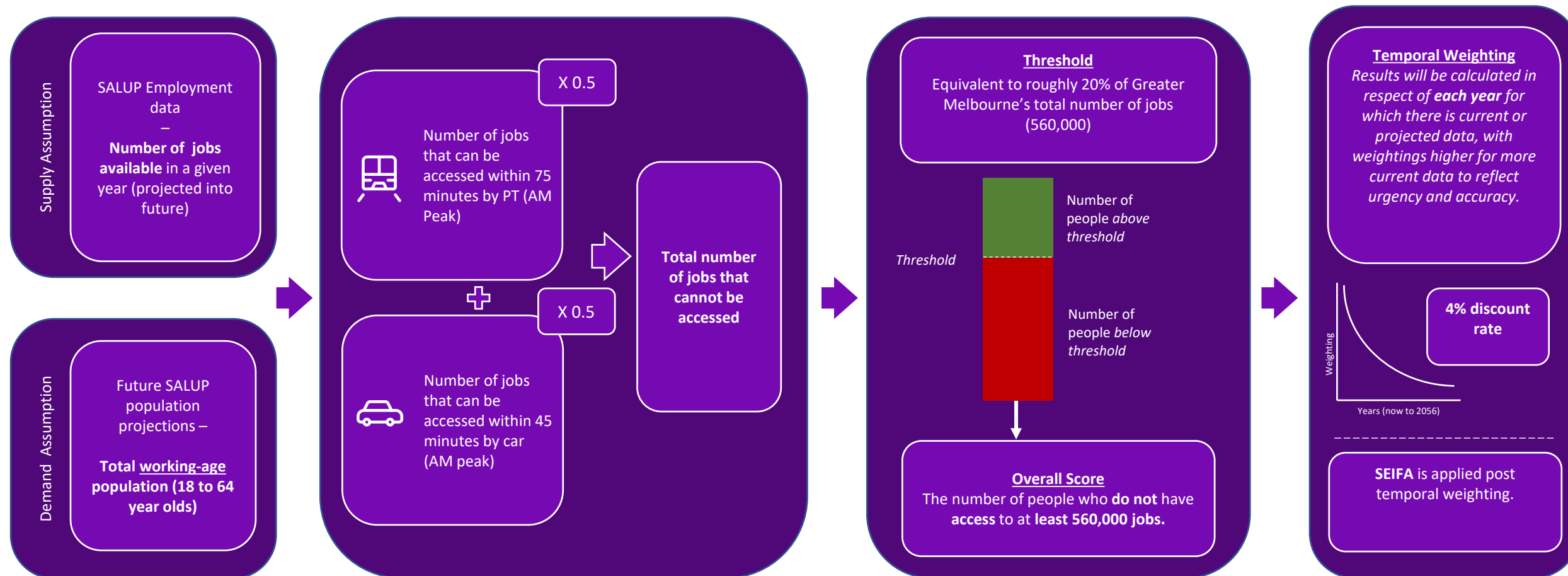
Source: Australian Bureau of Statistics (2021) - Barriers and Incentives to Labour Force Participation, Australia.

3.2. Employment and economy



Access to Employment

In order to measure access to employment opportunities, this metric models the number of jobs accessible by either road or public transport from each geographic zone in a given timeframe. Population and employment projections have been used to evaluate the future level of employment accessibility, along with future travel time estimates accounting for the impact of planned investments such as SRL.





There are current and projected accessibility challenges to employment

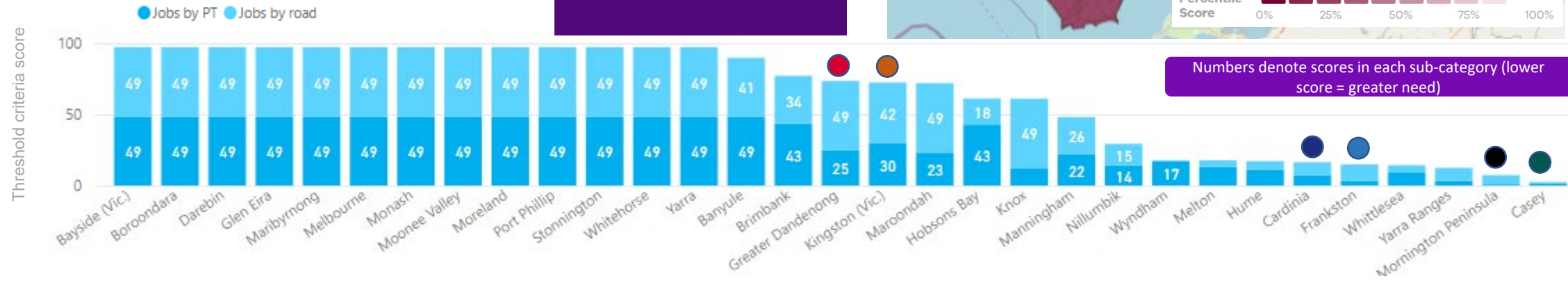
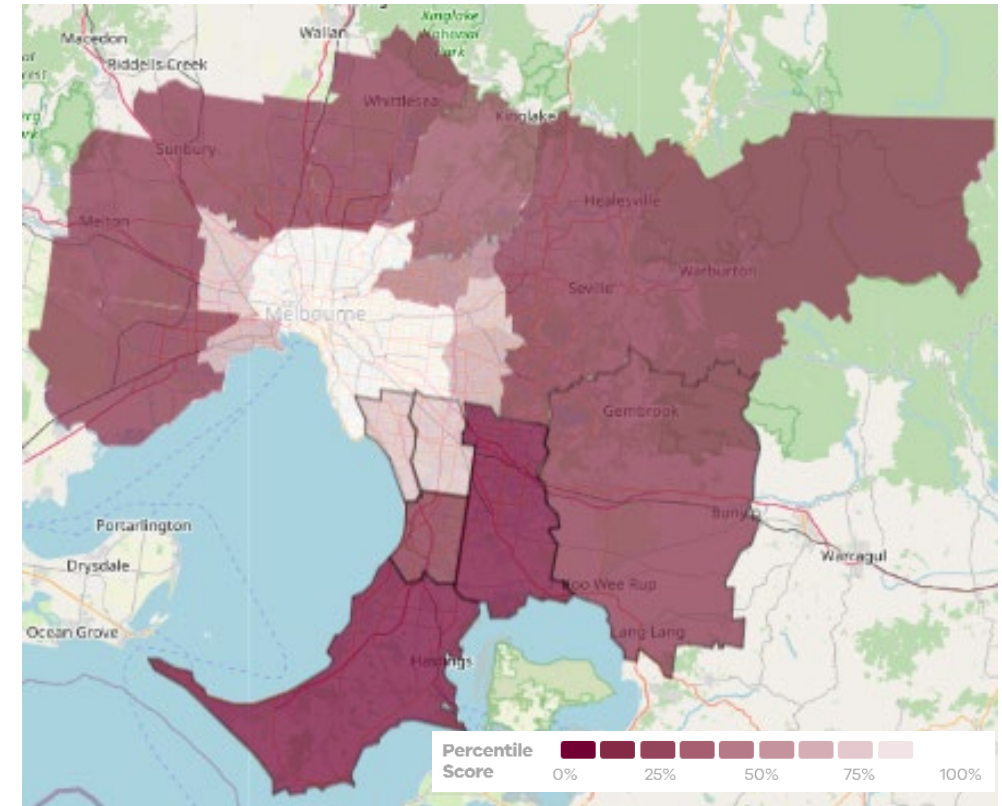
- Casey and Mornington Peninsula score the highest in terms of employment accessibility needs.
- Casey demonstrates the greatest need for investments to improve public transport and private vehicle accessibility to jobs.
- Some results indicate a divergence between accessibility to jobs via public transport and via private vehicles, such as in Greater Dandenong.
- The 560,000 threshold represents 20% of jobs across Greater Melbourne and is intended to capture diversity of industries to reflect a broad range of employment opportunities.

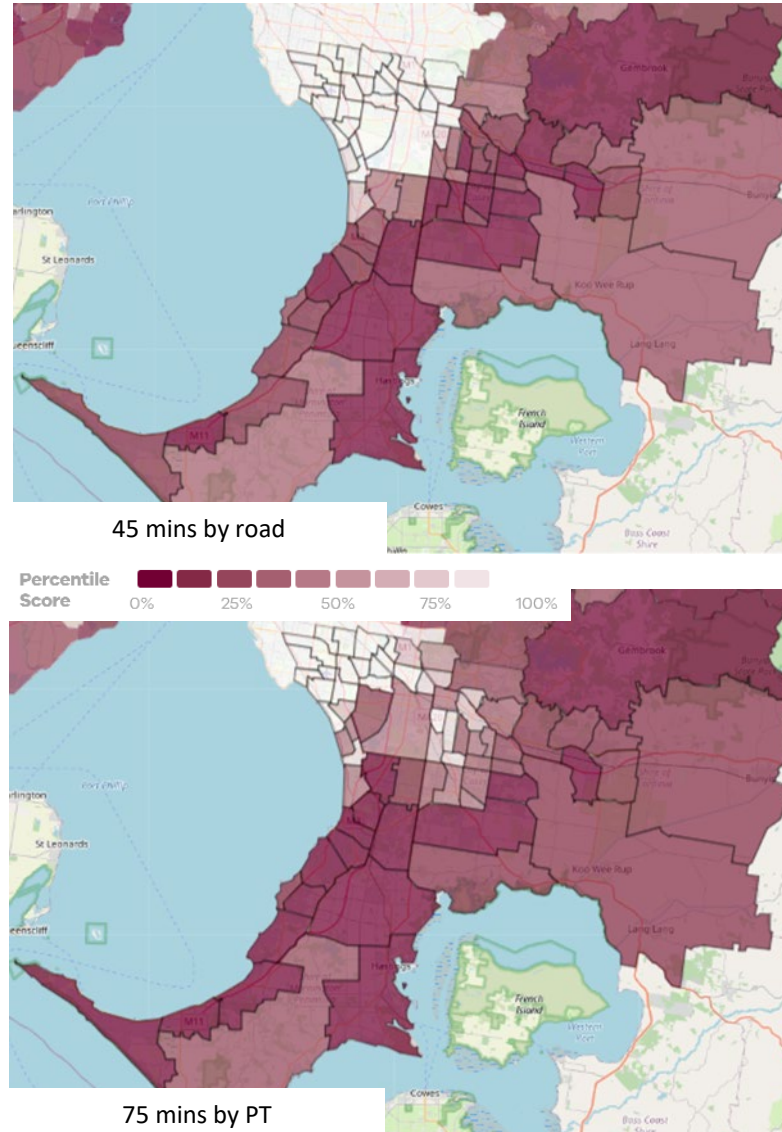


Number of people who cannot access jobs threshold within 75 minutes by PT



Number of people who cannot access jobs threshold within 45 minutes by car





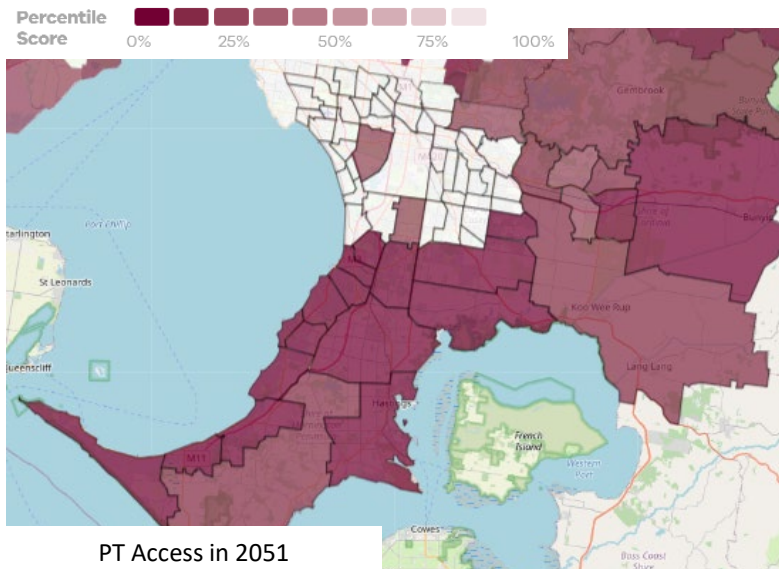
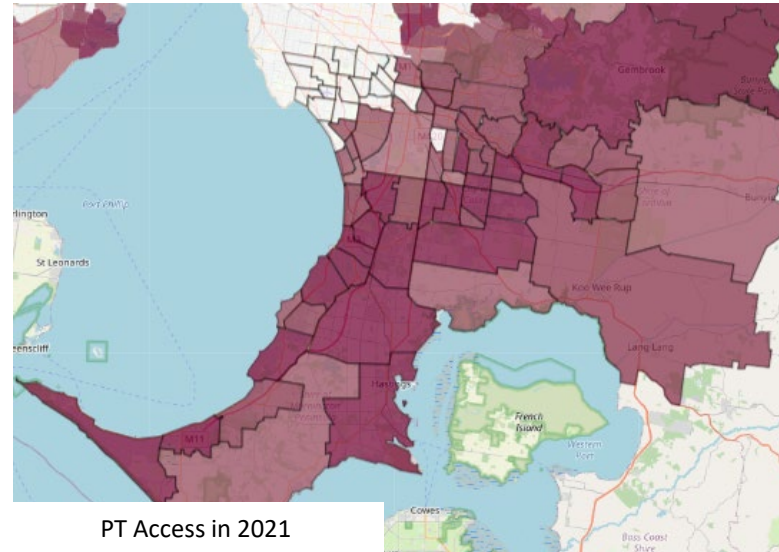
The Region has high job accessibility needs relative to Greater Melbourne

- The Monash National Employment and Innovation Cluster (NEIC) in Clayton, which is home to the largest concentration of jobs outside of the Melbourne CBD, is adjacent to the Kingston and Greater Dandenong LGAs. The Southern State Significant industrial Precinct (SSIP) located in Dandenong South is within the City of Greater Dandenong.
- It is often possible to reach 560,000 jobs in the Monash NEIC and Southern SSIP from Kingston and Greater Dandenong by road within 45 minutes. It is also possible to reach the large concentration of jobs located in the Melbourne CBD from large parts of these LGAs within 75 minutes.
- However, accessibility by both road and public transport is significantly reduced in Frankston, Mornington Peninsula and Cardinia, due to their geographic isolation. Some populations in these LGAs are able to drive to the Monash NEIC or the Southern SSIP within 45 minutes, but it is often impossible to reach the Melbourne CBD within 75 minutes by public transport.

The five SA2s with the lowest job accessibility scores (by public transport) are all in the Region

Highest levels of need: job accessibility by public transport (2021)

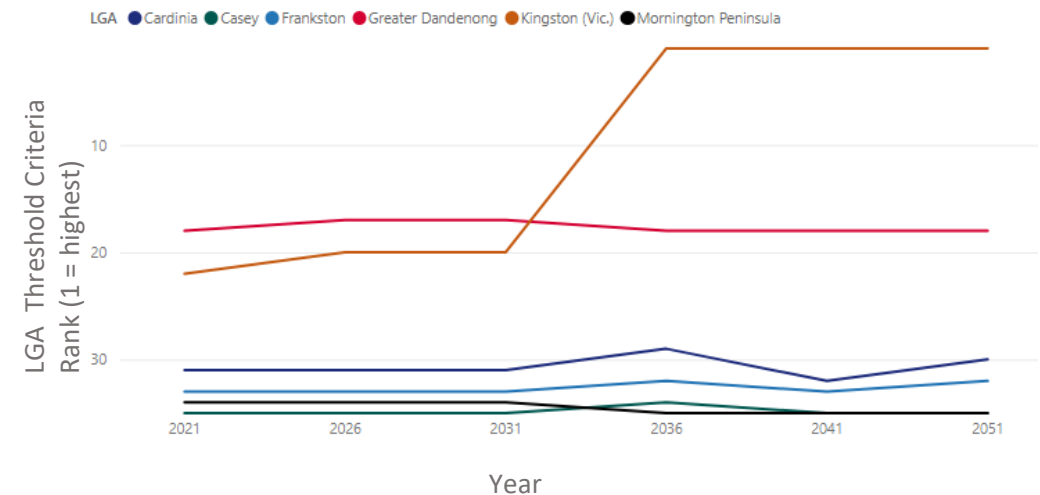
SA2	Greater Melbourne Rank
Carrum Downs	1
Pakenham – South West	2
Cranbourne West	3
Frankston	4
Langwarrin	5



Despite planned upgrades, access to employment will remain relatively low across most of the Region

- Accessibility across parts of the Region is expected to improve in the across the 2030s through to the 2050s.
- When expected to open by 2036, Suburban Rail Loop (SRL) will connect the Region to large concentrations of employment opportunities at the Monash NEIC and Box Hill Metropolitan Activity Centre (MAC). It will provide direct access from various SA2s in Kingston and Frankston to SRL through Cheltenham, and from parts of Greater Dandenong and Casey through Clayton.
- However, considerable parts of Mornington Peninsula, Frankston, Casey and Cardinia will continue to access a relatively low volume of jobs, indicating a relative lack of employment opportunities that is likely to render 80% of Greater Melbourne's jobs out of reach for many.

Casey and Mornington Peninsula are **Greater Melbourne's two lowest-scoring LGAs** for overall job accessibility in all years assessed.



3.2.1 Employment and economy – case study

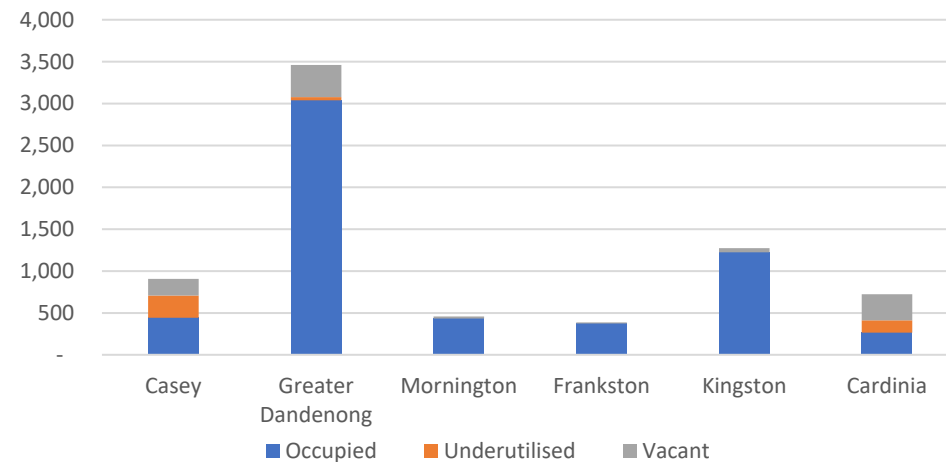
This case study considers the availability of industrial land across the Region, which is becoming increasingly scarce despite presenting significant opportunities to increase job provision – both through attracting industry and facilitating transitions to office parks.

Education	Employment and economy	Environment	Healthcare	Housing	Recreation and culture	Transport
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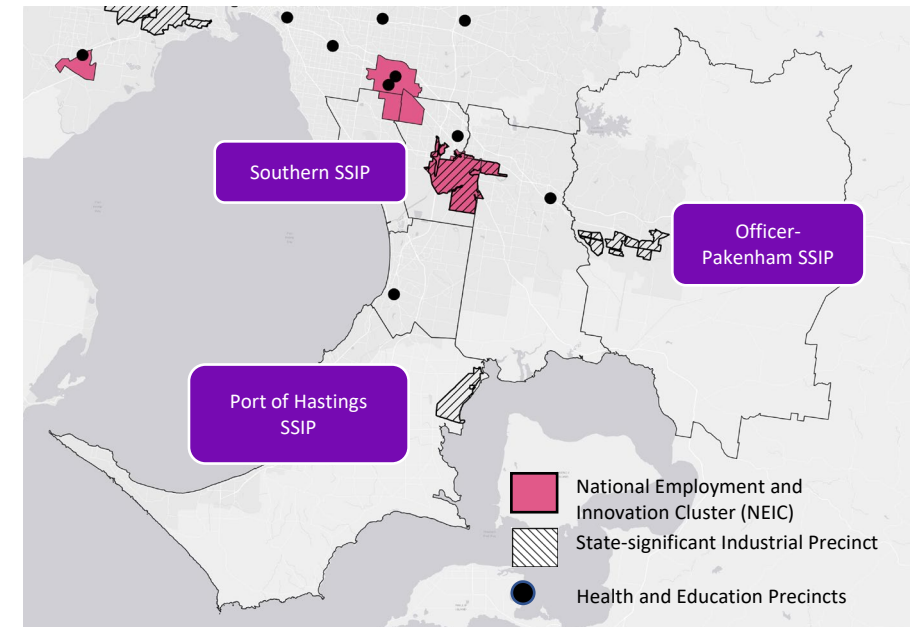
There is limited supply of available industrial land to improve job accessibility across the Region

Industrial zoned land, ha (2021)



Source: MICLUP, 2021

Key employment centres in the Region



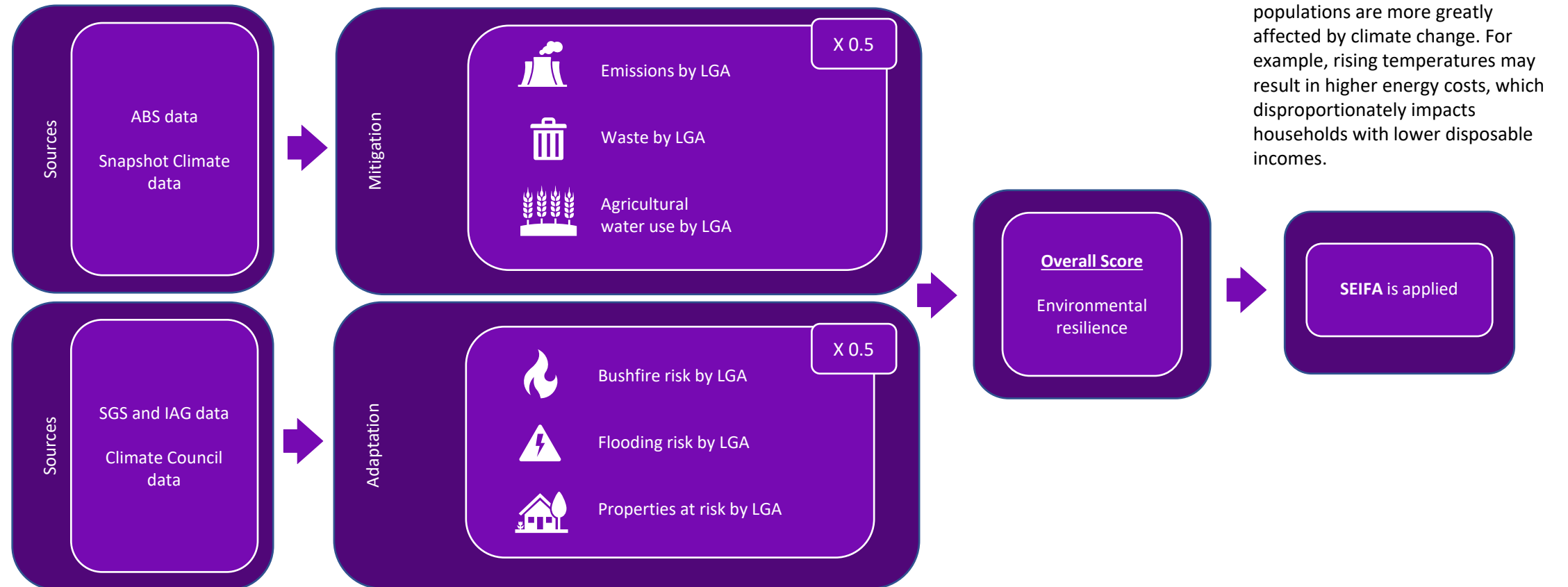
- Despite the need for additional job opportunities across the Region and the importance of attracting further industrial activity as a key driver to do so, there is limited scope for current land zoning to facilitate this.
- The ability for the Region's three State-significant Industrial Precincts to fulfil their potential as strategic hubs for major industrial development may be constrained by land unavailability. For the Port of Hastings SSIP, zoning is also a live issue which is limiting opportunities for expansion.
- Value-added development on existing industrial land (including converting industrial land to office parks) is a potential solution to unlock currently occupied capacity, but runs the risk of displacing local operators.
- Consideration must be given to the relationship between rezoning

3.3. Environment



Environmental Resilience

This metric captures potential scope to mitigate and adapt to the impacts of climate change. We have drawn on sources such as the ABS, Insurance Australia Group and several climate research organisations to quantify this.





There is significant scope to mitigate and adapt to climate risks in the Region to improve environmental resilience

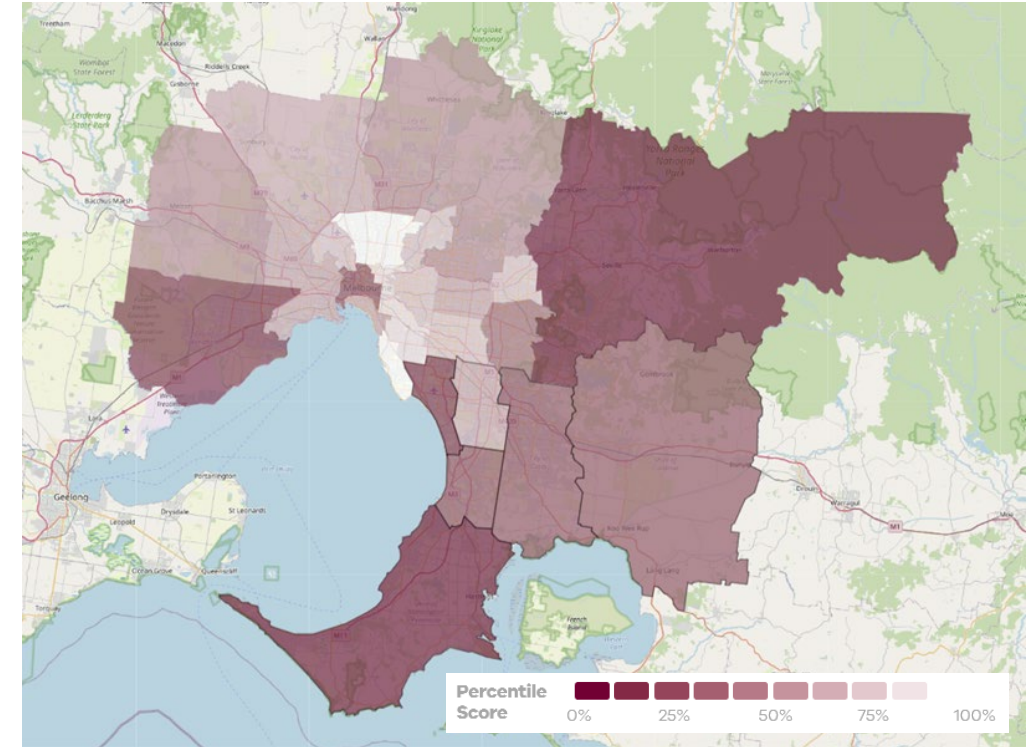
- This overall measure aggregates several factors contributing to environmental need, in terms of both scope to mitigate and scope to adapt.
- The following section explores specific sub-metric results in further detail.



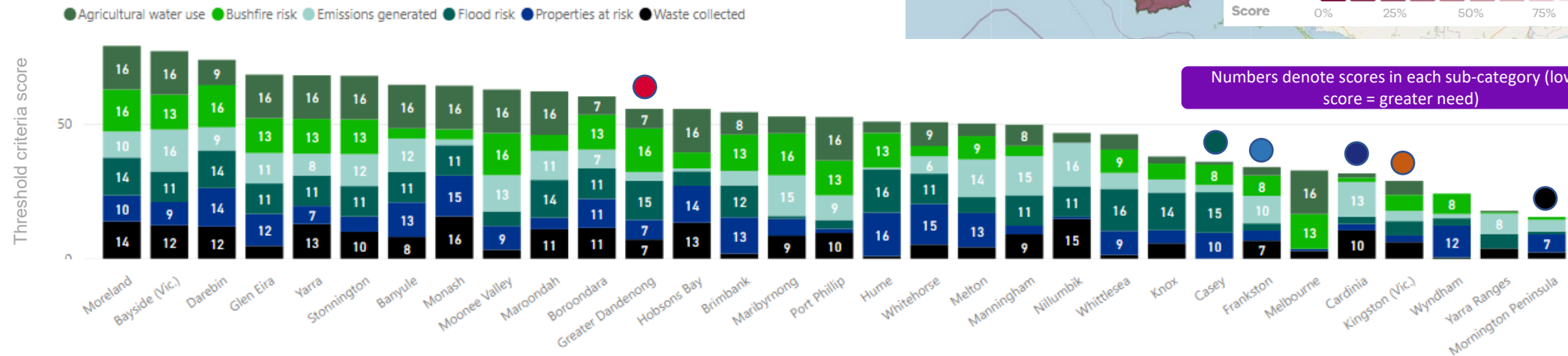
Mitigation: Emissions, agricultural water use and landfill by LGA



Adaptation: Bushfire risk, flood risk and properties at risk from climate change impacts



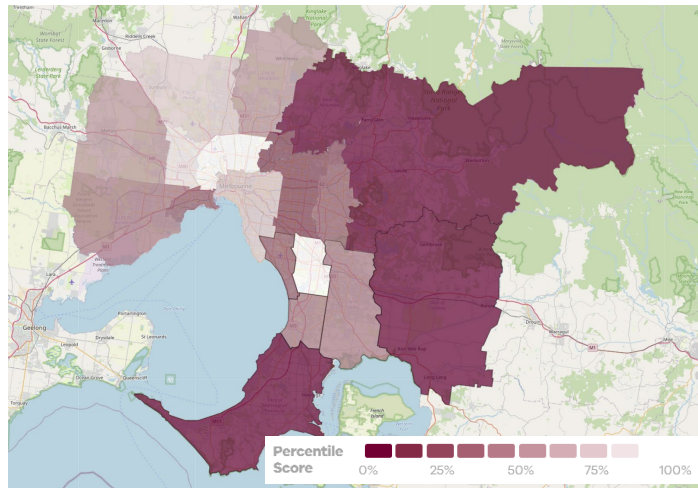
Numbers denote scores in each sub-category (lower score = greater need)





Parts of the Region are particularly vulnerable to the effects of climate change

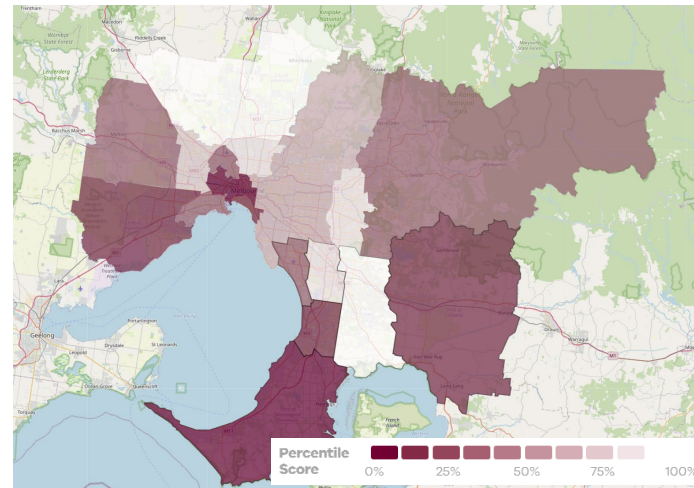
Bushfire risk



Cardinia and Mornington Peninsula are amongst the four Greater Melbourne LGAs with the highest bushfire risk ratings. Both have significant proportions of green wedge land, increasing vulnerability.

Source: SGS and Insurance Australia Group (2016)

Flood risk

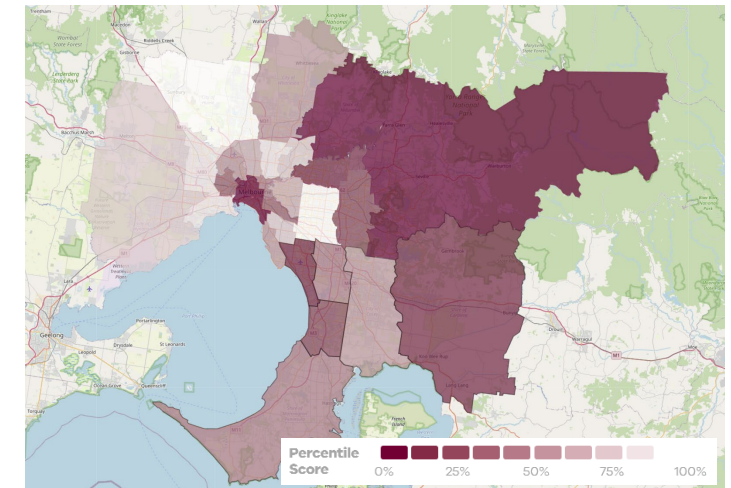


Outside the Melbourne CBD (which has the highest flood risk), Cardinia, Frankston and Mornington Peninsula (all with coastal frontage) are amongst only five LGAs with the next highest flood risk rating ('Medium'). Greater Dandenong and Kingston are also flagged

Half of Greater Melbourne LGAs do not have a material flood risk rating ('No Exposure') due to relatively lower risks.

Source: SGS and Insurance Australia Group (2016)

Properties at risk



Cardinia and Kingston have the highest proportion of properties at risk from climate change within the Region, with 20% and 18% of properties in the respective LGAs projected to incur annual damage costs exceeding 1% of replacement costs by 2050.

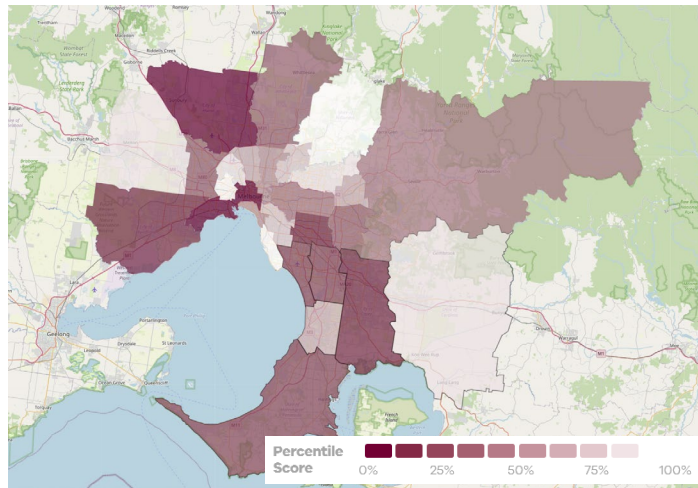
Source: Climate Council (2022)





Curbing emissions, water use and landfill should be of focus for the Region

Total greenhouse gas emissions

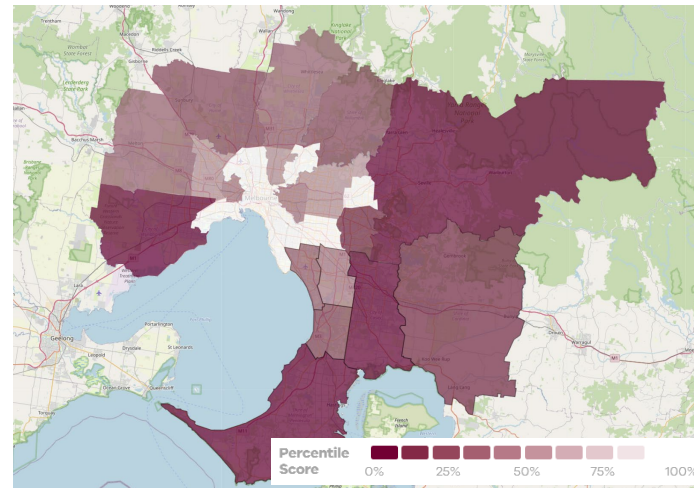


Industrial use is a significant contributor to greenhouse gas emissions across Greater Melbourne.

Greater Dandenong records the highest level of total municipal greenhouse gas emissions across the Region and the second-highest across Greater Melbourne. Kingston records the second-highest level of emissions across the Region and the fourth-highest level of emissions across Greater Melbourne.

Source: Snapshot Climate (2021)

Agricultural water use

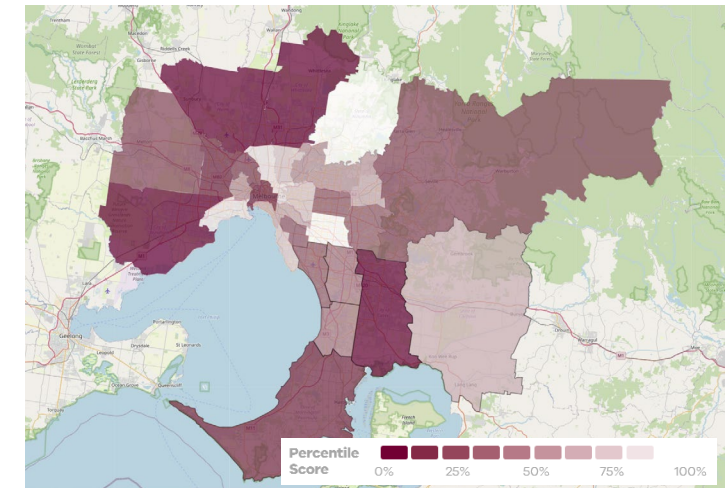


The agriculture industry is the key driver of distributed water use in Victoria. It consumed 1,992 GL of water in 2020-21, which constituted almost five times the volume of household use (418 GL) and almost 30 times the volume of manufacturing industry use (66 GL).

Mornington Peninsula, Casey and Cardinia are three of the top five users of agricultural water across Greater Melbourne. Mornington Peninsula's agriculture industry, for example, is worth approximately \$1.3 billion.

Source: Australian Bureau of Statistics (2021), Mornington Peninsula Shire (2022)

Waste collected



In 2020-21, Casey recorded the largest volume of total waste collected across all Greater Melbourne LGAs. While this is attributable to its population, which is the largest amongst Greater Melbourne LGAs, this also indicates a significant scope to pilot innovative solutions around landfill reduction.

Source: Australian Bureau of Statistics (2021)



3.3.1. Environment: case study

This case study considers the significance of agricultural water use – the key driver of distributed water use in Victoria – across the Region.

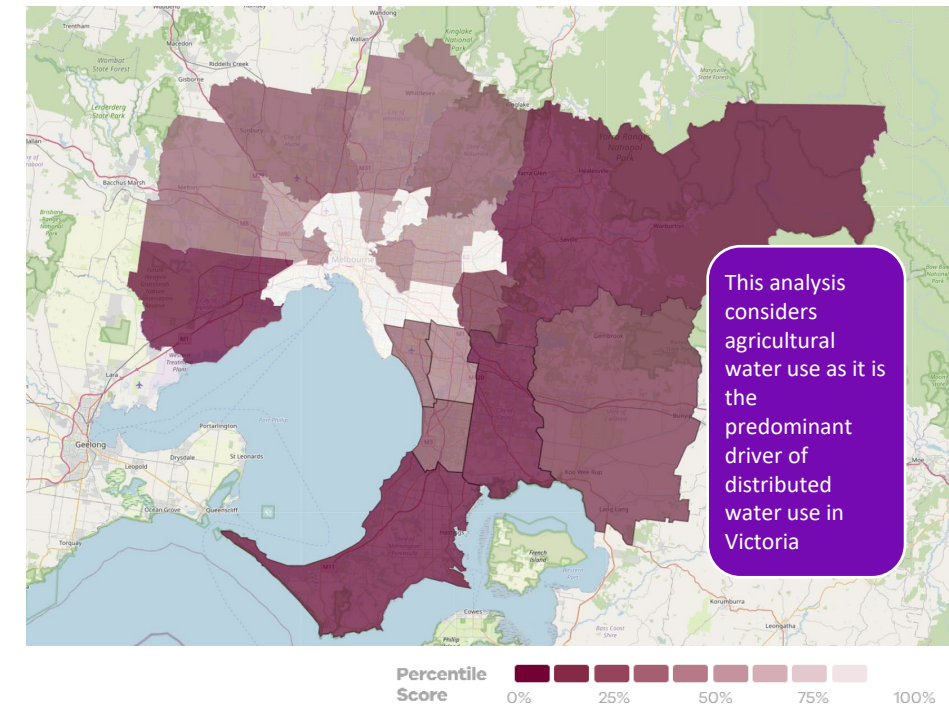
Education	Employment and economy	Environment	Healthcare	Housing	Recreation and culture	Transport
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Areas with high levels of agricultural water use indicate opportunities for reducing potable consumption

- The agriculture industry is the key driver of distributed water use in Victoria. It consumed 1,992 GL of water in 2020-21, equivalent to almost five times the volume of household use (418 GL) and almost 30 times the volume of manufacturing industry use (66 GL).
- A 2021 Victorian Auditor-General report ('Supplying and Using Recycled Water') identified that of the 511 GL of Victorian wastewater produced in 2019-20, 84% was discharged to oceans and waterways. Only 16% was recycled, with recycled wastewater trending downward relative to overall wastewater produced.
- The volume of recycled water use is lower in Melbourne than in other parts of Victoria due to weather conditions, more limited land availability and relatively lower access to agricultural recycled water (Department of Energy, Environment and Climate Action).
- Given the extent of agricultural activity in the Southern Metropolitan Region and its role in driving overall water consumption, there is significant scope to reduce reliance on potable water sources through facilitating increased recycled water consumption.
- There are three classes (A, B and C) of recycled water based on the EPA's water recycling guidelines, with Class A recycled water requiring the highest level of treatment to allow direct human contact, Class B recycled water subject to restricted uses to minimise direct human contact, and Class C recycled water prohibiting direct human contact altogether.
 - Agricultural uses are possible for all three classes. Class A recycled water can be used to irrigate food crops that are sold in an uncooked state, Class B recycled water can be used for dairy cattle grazing and Class C recycled water can be used for irrigating processed human food crops / as grazing for livestock.

Agricultural water use

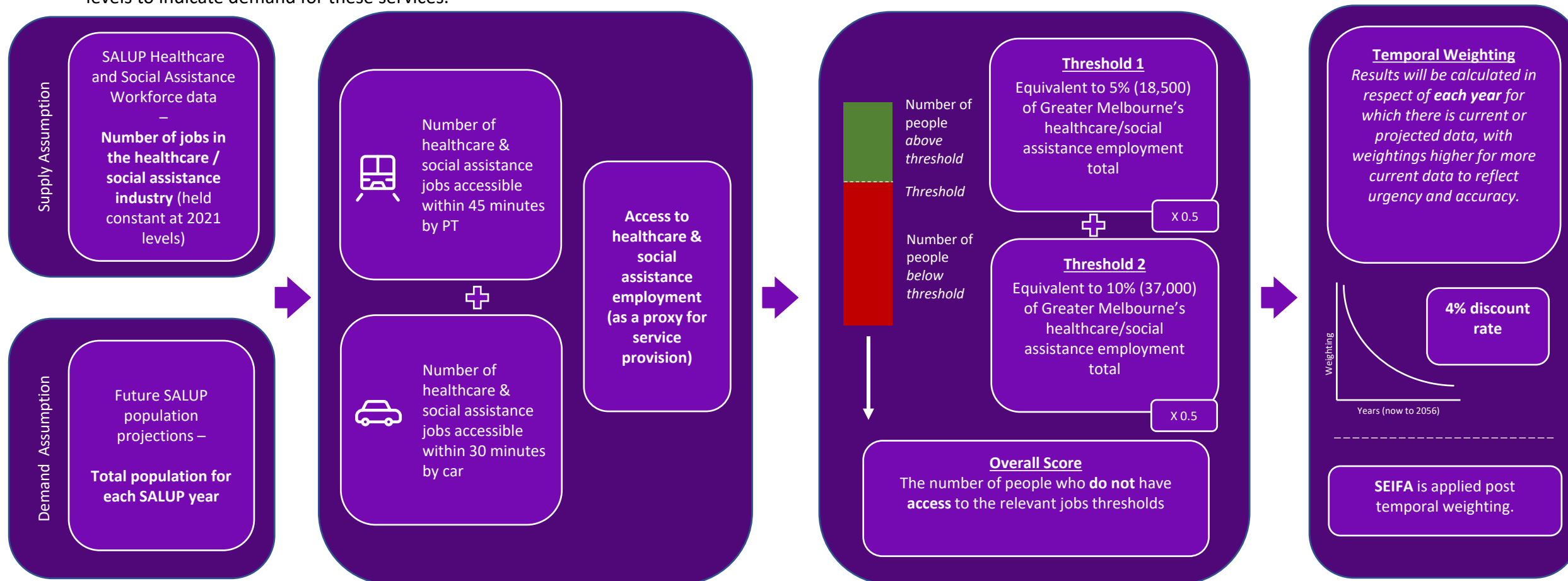


3.4. Health



Access to Healthcare

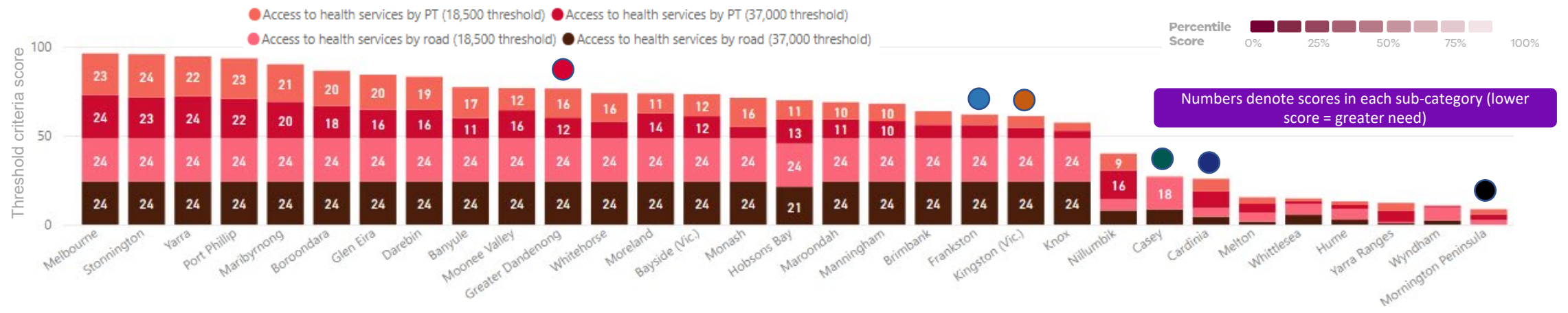
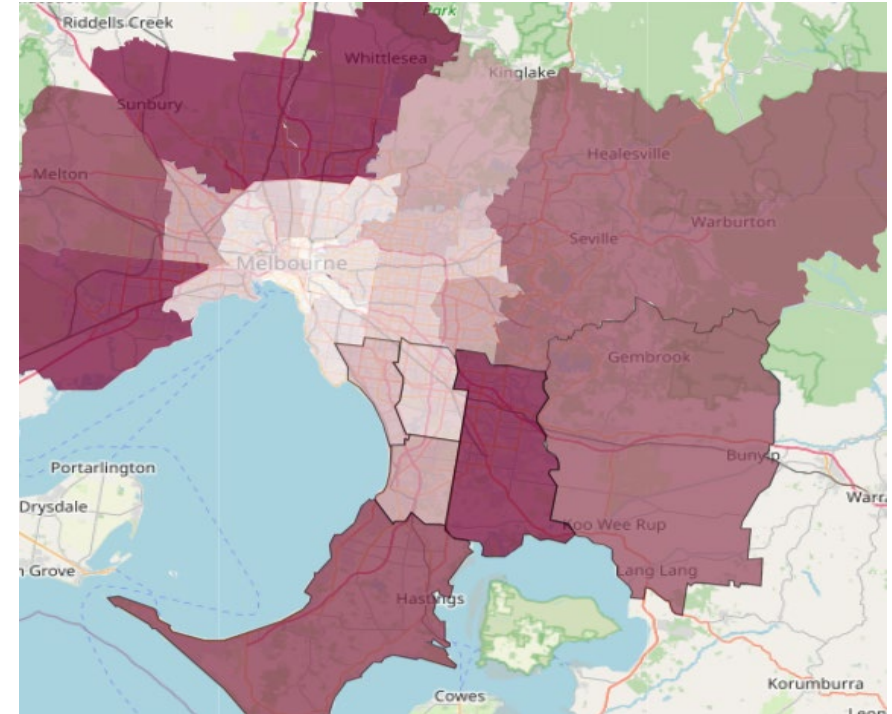
This metric considers access to a base level and an increased level of healthcare services from different areas of Greater Melbourne (by both car and public transport). The current number of jobs in the Healthcare and Social Assistance industry classification has been used as proxy of level of health service, and compared to the current and future population levels to indicate demand for these services.





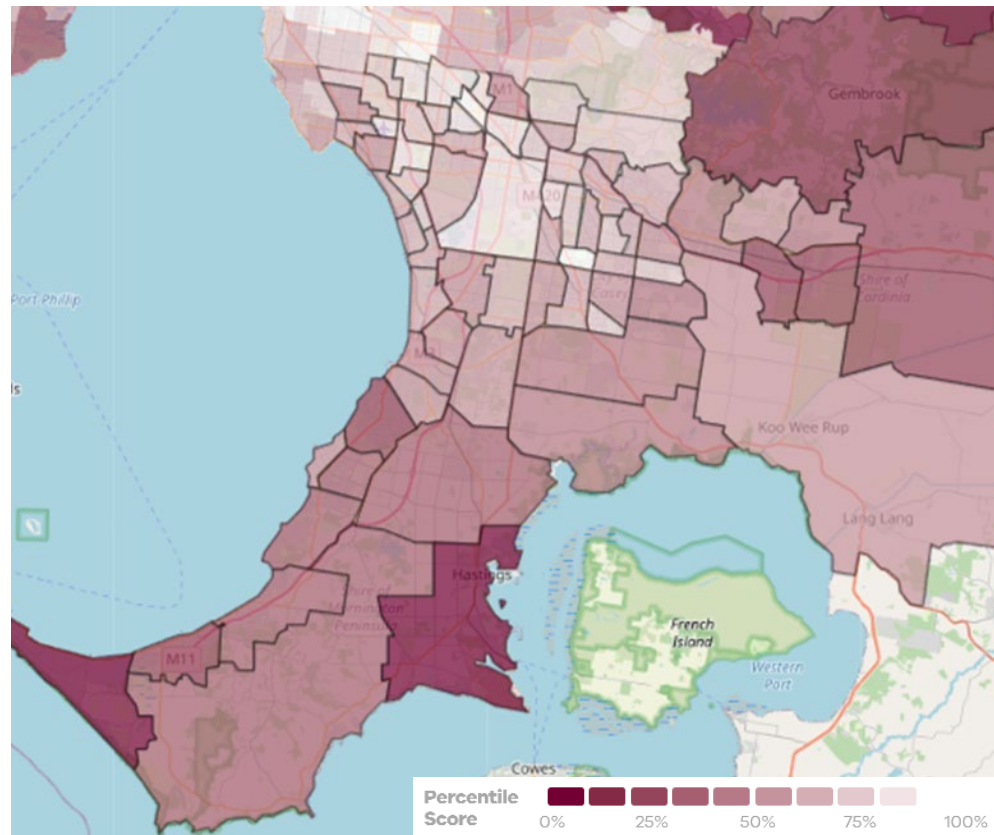
There are current and projected shortfalls in healthcare infrastructure to service the Region's population

- Casey, Mornington Peninsula and Cardinia show the greatest need in the Southern Metropolitan Region, which represent some the highest levels of need in Greater Melbourne.
- The only public hospitals in Casey is the Casey Hospital in Berwick is the only hospital within Casey. However, this is a smaller hospital (approx. 273 beds) and is not adequate to serve Casey's growing population. There are no significant hospitals in Cardinia, putting pressure on neighbouring Casey Hospital and hospitals in Greater Dandenong.
- All hospitals on the Mornington Peninsula are along the Port Phillip Bay coast in Rosebud and Mornington. These are relatively inaccessible by populations in Hastings and Flinders, especially by public transport. The mix of limited hospitals on the Peninsula include both public and private hospitals (e.g., Beleura Private Hospital) which may affect accessibility.
- Greater Dandenong shows the lowest need with the Dandenong Hospital and several private hospitals in its borders, and the Monash Medical Centre and Victorian Heart Hospital in neighbouring Monash.
- Frankston and Kingston also show relatively lower levels of need given a number of public and private hospitals within its borders.





The Region's health accessibility challenges are also evident at a SA2 level



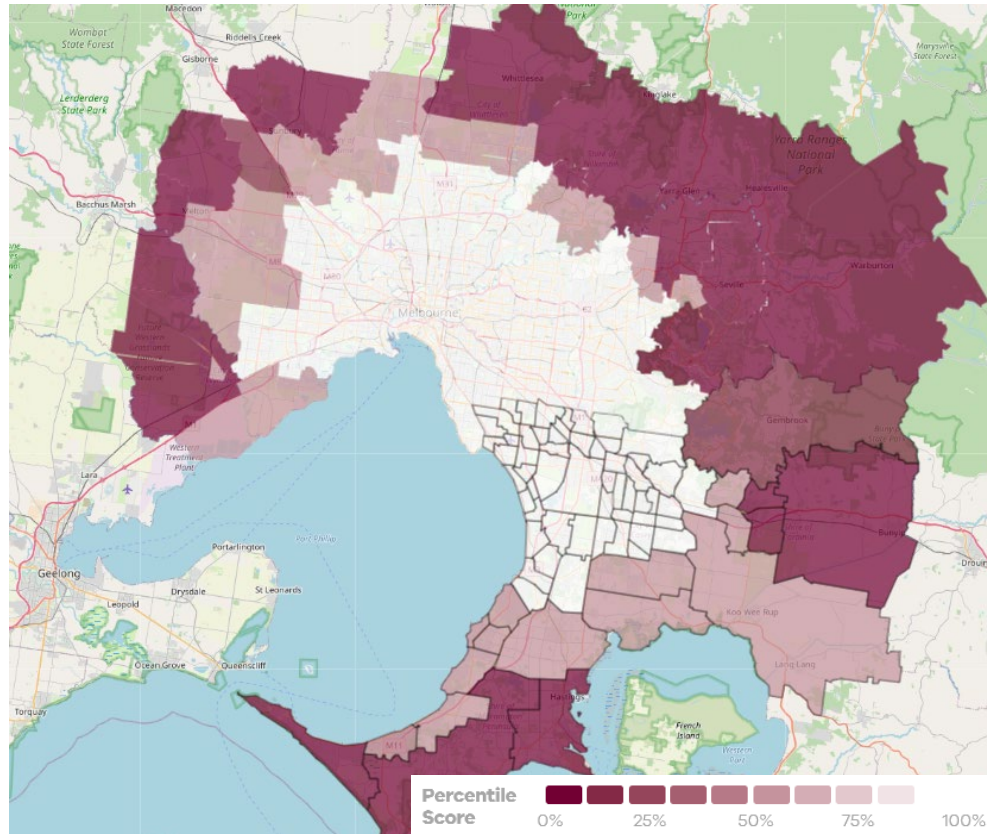
- Accessibility challenges are prevalent across the Region. There are 6 SA2s within the top 20 SA2s showing the greatest level of need in **all of** Greater Melbourne within the Region. These are mainly peri-urban communities that have limited health services in close proximity, meaning health services are generally inaccessible both by public transport and by car.
- **Hastings-Somers** demonstrates the highest level of need across **all of** Greater Melbourne. This is due to health services mainly being located further away on the Port Phillip Bay coast in Mornington and Rosebud. Hastings-Somers has limited public transport options, showing the greatest level of need on the Mornington Peninsula, with the closest hospital located in Mornington more than 20km by road from Hastings. This is a similar issue for **Point Nepean** and **Rosebud - McCrae**.
- **Emerald-Cockatoo** faces a similar issue to Hastings-Somers, being geographically isolated from many health services. The closest cluster of health services is located in Belgrave, over 10km away from Emerald, in the Shire of Yarra Ranges. The closest hospital is the Casey Hospital in Berwick, located over 20km away from Emerald. There are also poor public transport options in this area with an infrequent bus connecting Emerald with Belgrave.
- There are limited public transport options to a limited number of healthcare services within Cardinia, which is exacerbated by the growing population in these SA2s and leads to **Pakenham-South East** and **Pakenham-South West** demonstrating high levels of need within the Region.

Highest levels of need: overall access (public transport and road)

SA2	Greater Melbourne Rank	SA2	Greater Melbourne Rank
Hastings - Somers	1	Pakenham – South East	13
Point Nepean	5	Rosebud - McCrae	14
Emerald – Cockatoo	7	Pakenham – South West	19



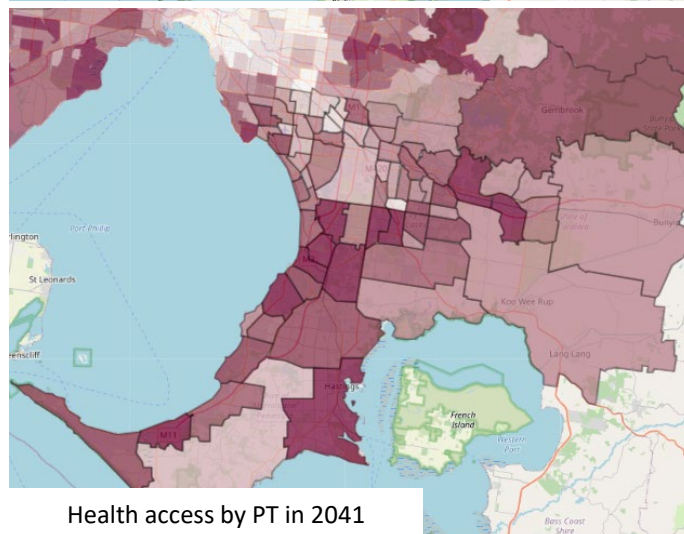
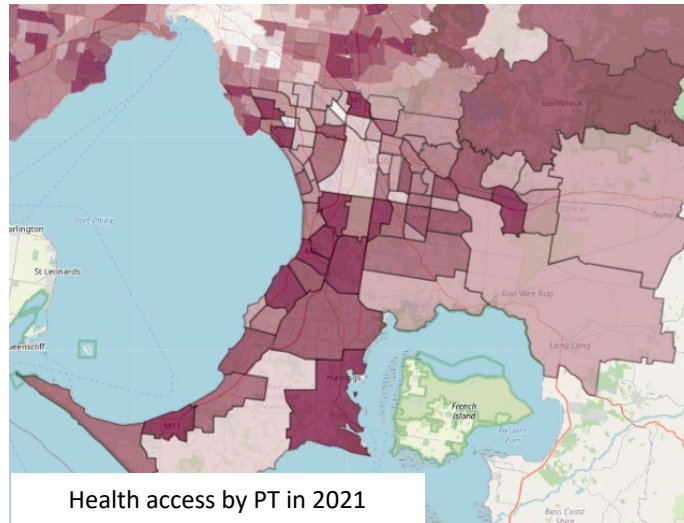
Accessibility by road disproportionately affects peri-urban communities



- The Region's peri-urban communities experience the greatest accessibility challenges to essential healthcare services by road, with 6 SA2s within the top 20 SA2s showing the greatest level of need in **all of** Greater Melbourne within the Region, outlined in the table below. Increased investments in health services in these communities are required to put them on parity with urbanised communities in Kingston, Greater Dandenong and parts of Casey and Frankston, which have access to a higher number of health services by road.
- The top two SA2s that show the greatest need in **all of** Greater Melbourne are both located in the Mornington Peninsula, being Hastings-Somers and Point Nepean. This is due to major health services all being located on the populated Port Phillip Bay coast, with most health services concentrated in more heavily populated Rosebud and Mornington. Furthermore, the closest Emergency Departments are located in Frankston at the Frankston Hospital and Peninsula Private Hospital, located more than 50km away by road from Point Nepean. With both limited public transport and car accessibility in these areas of the Mornington Peninsula, more investments are required to bring health services to Point Nepean and the Western Port coast.
- Cardinia also demonstrates considerable need with three contiguous SA2s in Pakenham and Bunyip within the top 20 SA2s experiencing the highest levels of need across **all of** Greater Melbourne. This is due to limited hospitals and major health services located within Cardinia, with the closest hospital being the Casey Hospital in Berwick located more than 17km away from Pakenham. The level of need is exacerbated by the showing populations within these SA2s.

Highest levels of need: overall car access

SA2	Greater Melbourne Rank	SA2	Greater Melbourne Rank
Hastings - Somers	1	Pakenham – South East	18
Point Nepean	2	Pakenham – North East	19
Bunyip - Garfield	10	Flinders	20



Planned public transport network updates do not improve health accessibility for the entire Region

- Accessibility challenges by public transport are prevalent across the Region from 2021 to 2041, even with improvements to the transport network. Of the 10 SA2s experiencing the highest levels of need across **all of** Greater Melbourne in both 2021 and 2041, four are within the Region and are outlined in the table below.
- With SRL coming online in 2036, in 2041, large parts of Kingston and Greater Dandenong benefit from the connection to the Monash health precinct. Accessibility is also improved in areas of Casey along the Pakenham corridor, especially in Hallam and Narre Warren. However, many other parts of Region do not materially benefit from this new transport connection. This proves the need for local investments that are accessible to communities within the Region.
- The SA2s with the highest level of need remain the same between 2021 and 2041, with the exception of Highett (East) – Cheltenham due to improved accessibility via the SRL. This highlights the need for investment in essential health services in the peri-urban communities of Casey, Cardinia and Mornington Peninsula, which are not well serviced by public transport.

Highest levels of need: overall public transport access in 2021

2021		2041	
SA2	Greater Melbourne Rank	SA2	Greater Melbourne Rank
Pakenham – South West	2	Pakenham – South West	2
Hastings - Somers	4	Hastings - Somers	4
Cranbourne West	5	Cranbourne West	5
Highett (East) – Cheltenham	6	Carrum Downs	7

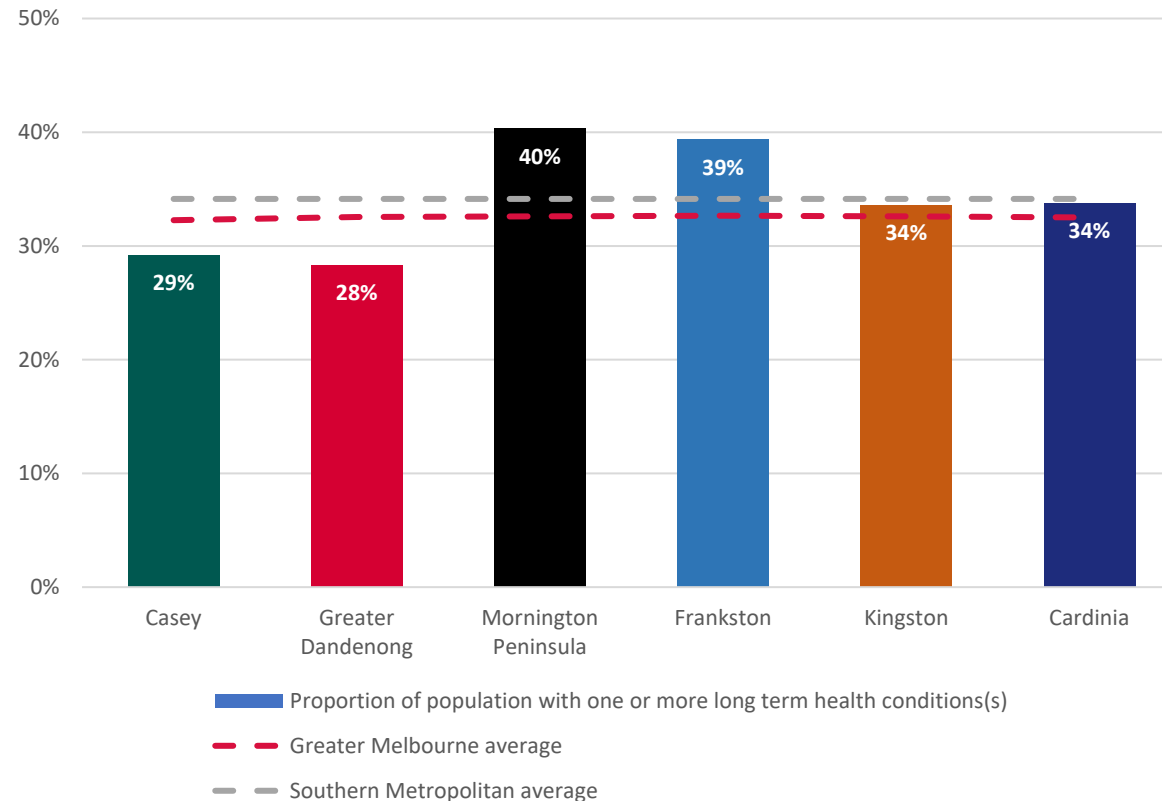
3.4.1. Health: case studies

This case study considers examples of specific health needs in the Region, including the prevalence of people with one or more long-term health conditions.

Education	Employment and economy	Environment	Healthcare	Housing	Recreation and culture	Transport
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Many in the Region live with one or more long-term health conditions



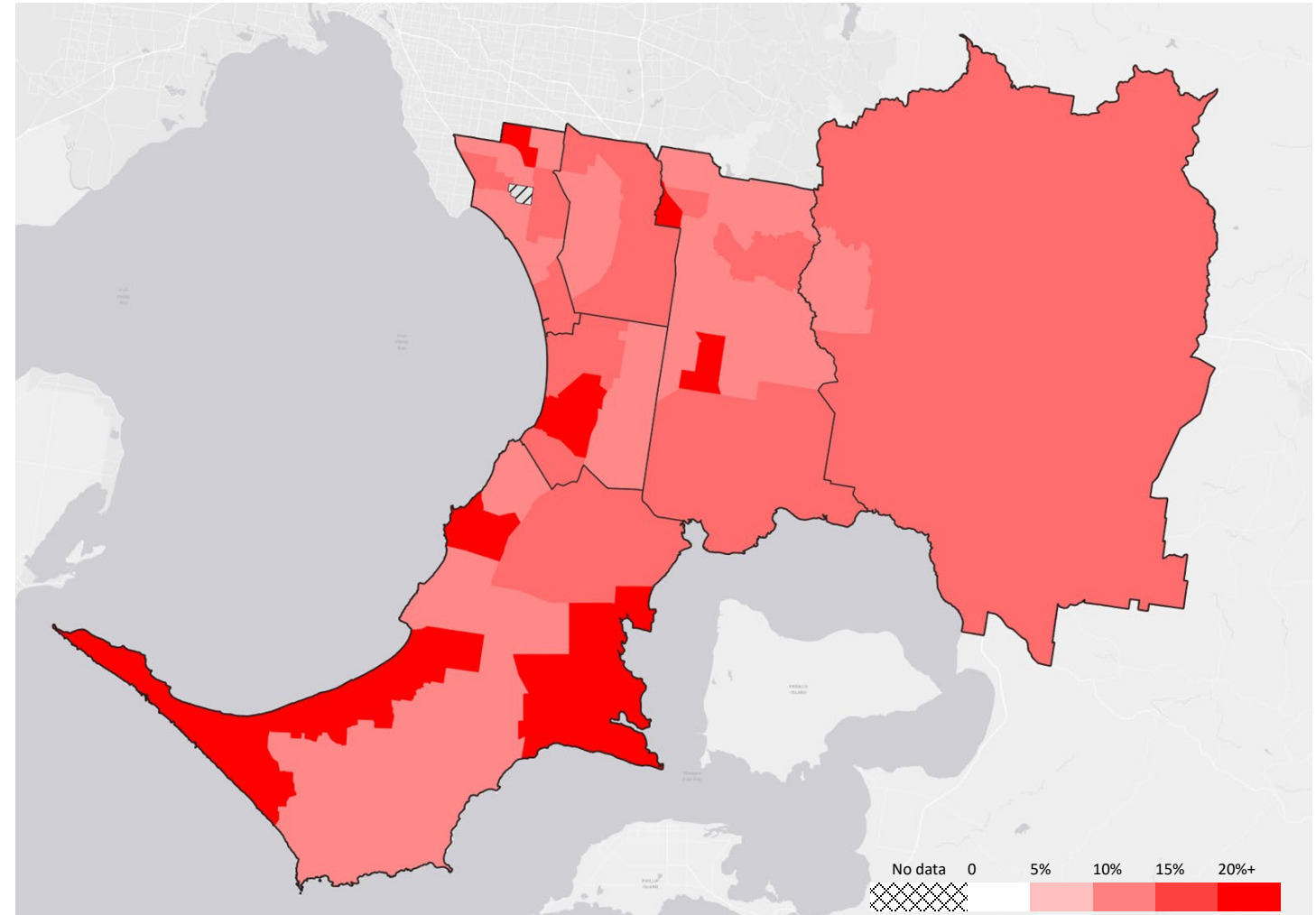
- The chart shows that the average proportion of population with one or more long term health conditions in the Region is higher than the Greater Melbourne average. With the exception of Casey and Greater Dandenong, all other councils within the Region have an average higher than the Greater Melbourne average.
- Mornington Peninsula has the highest proportion of people living with one or more long-term health condition. This is due to its older population with 34% over the age of 60, compared to the Greater Melbourne average of 20%. Frankston shows the second highest level of need in the Region. Approximately 20% of Frankston residents live with some form of mild or severe disability..
- Cardinia residents have the highest rate of disability in the Region. 16% of residents live with some form of disability, with 5% of residents living with a profound or severe disability where assistance with everyday tasks are required.
- Casey's relatively younger population may be associated with its relatively lower proportion of people living with one or more long-term health conditions.

Source: Australian Bureau of Statistics (2021)



There are areas of the Region with a high proportion of people living with disabilities

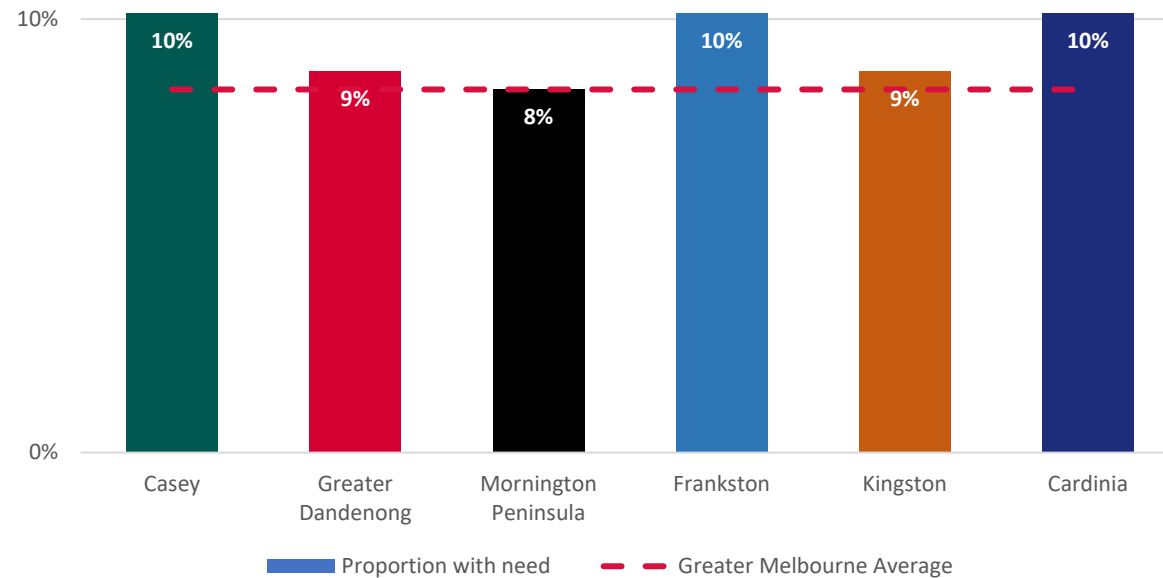
- Some areas within the Region contain populations where more than 20 per cent are living with a disability.
- Many of these areas are located in Mornington Peninsula, including Point Nepean, Dromana and Hastings – Somers. However, Mornington Peninsula shows high levels of health needs due to limited health infrastructure. Many residents in these SA2s have to travel far distances to hospitals in Mornington, or in Frankston.
- Frankston has a proportion of 24.5% of residents living with a disability. However, this is in close proximity to the Frankston Hospital and other health services, although public transport accessibility still remains a challenge in Frankston.
- In Casey, Cranbourne has a high proportion of residents living with a disability (21.1%). However, Cranbourne and surrounding suburbs continue to face accessibility challenges to health service both by road and public transport.
- There are high proportions of residents living with disabilities in Doveton (Casey) and Moorabbin-Heatherton (Kingston). However, these areas generally have better access to health services.
- There are lower levels of proportions of residents living with disabilities in Casey.



Source: Australian Bureau of Statistics (2021)



The Region has significant populations living with mental health conditions



Source: Australian Bureau of Statistics (2021)

- Casey, Frankston and Cardinia all have proportions of their populations with mental health conditions significantly greater than the Greater Melbourne average. Greater Dandenong and Kingston are also moderately above the Greater Melbourne average.
- Mental health can be influenced by a number of neighbourhood physical and social environmental characteristics.
- Studies show that longer commute times to access education, employment and other economic opportunities contribute to worsened mental health outcomes. [1] The areas with higher mental health needs correlate to areas which have limited accessibility and connectivity to essential amenities.
- Studies also show that green public space accessibility also contributes to improved mental health conditions. Although Cardinia records high levels of public open spaces (16% of the LGA), most of these areas are located away from populated areas of the Shire.
- There is also scope to improve mental health outcomes by improving accessibility to sports and recreation. Studies show that increased physical activity can lead to improved mental health outcomes. [2]

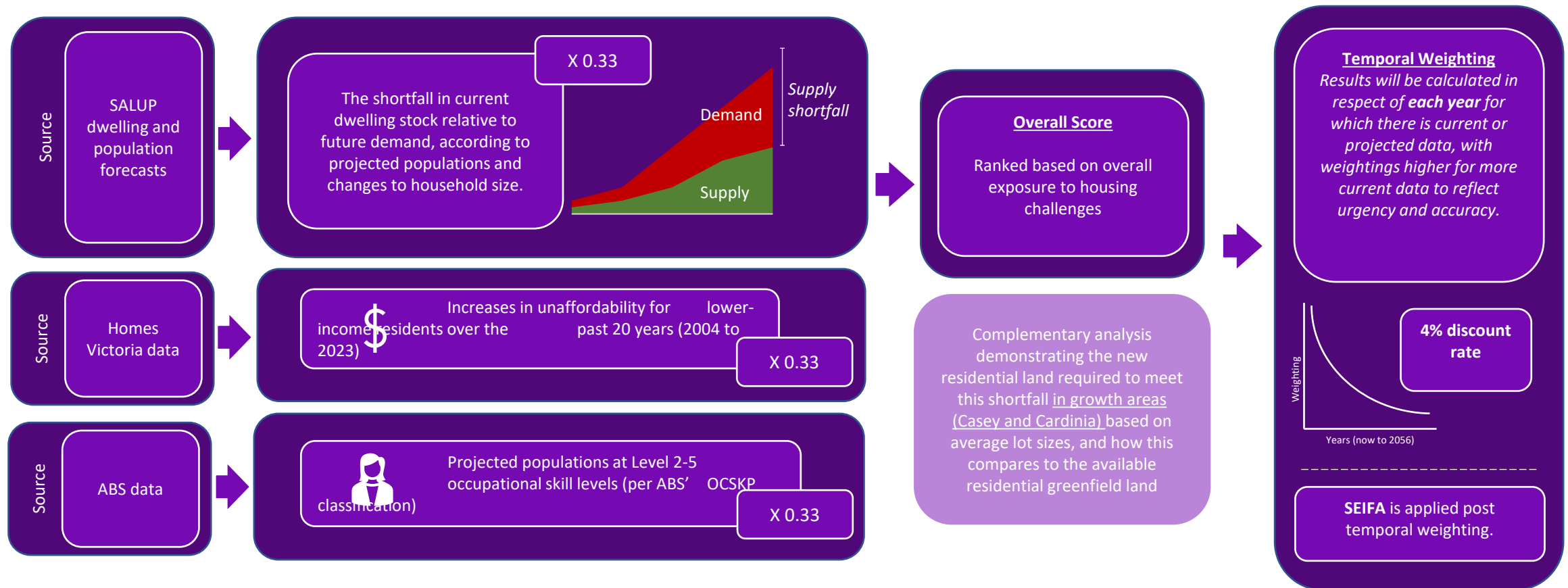
1. [Constraints to travel outside the local area: Effect on social participation and self-rated health – ScienceDirect](#)
2. [Mental Health and Physical Activity – ScienceDirect.](#)

3.5. Housing



Access to Housing

This metric draws on several measures to quantify the level of housing need across Greater Melbourne. These include the projected shortfall in dwelling stock based on forecast population projections, the increase in unaffordability observed over the past 20 years, and the current and projected population in skill levels 2-5 of ABS' OCSKP classification, i.e. those in the greatest need of affordable housing.

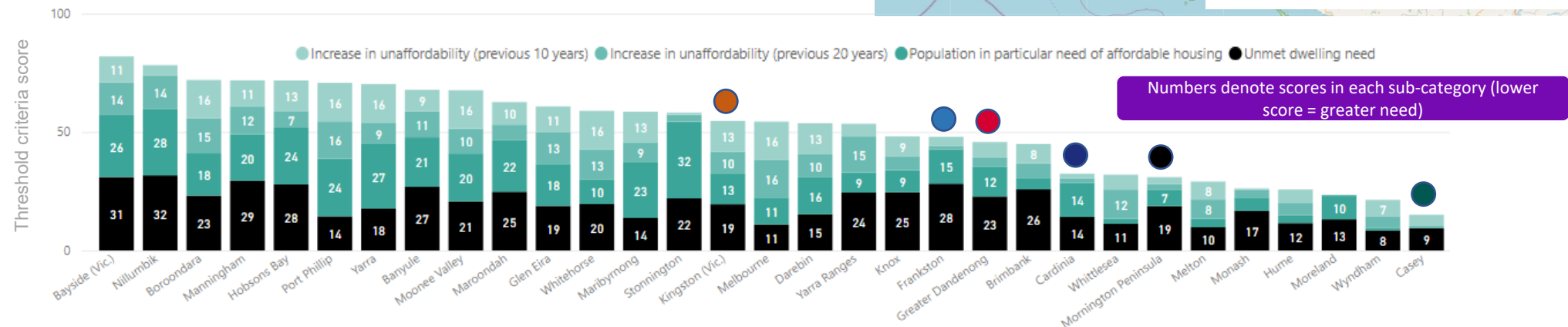
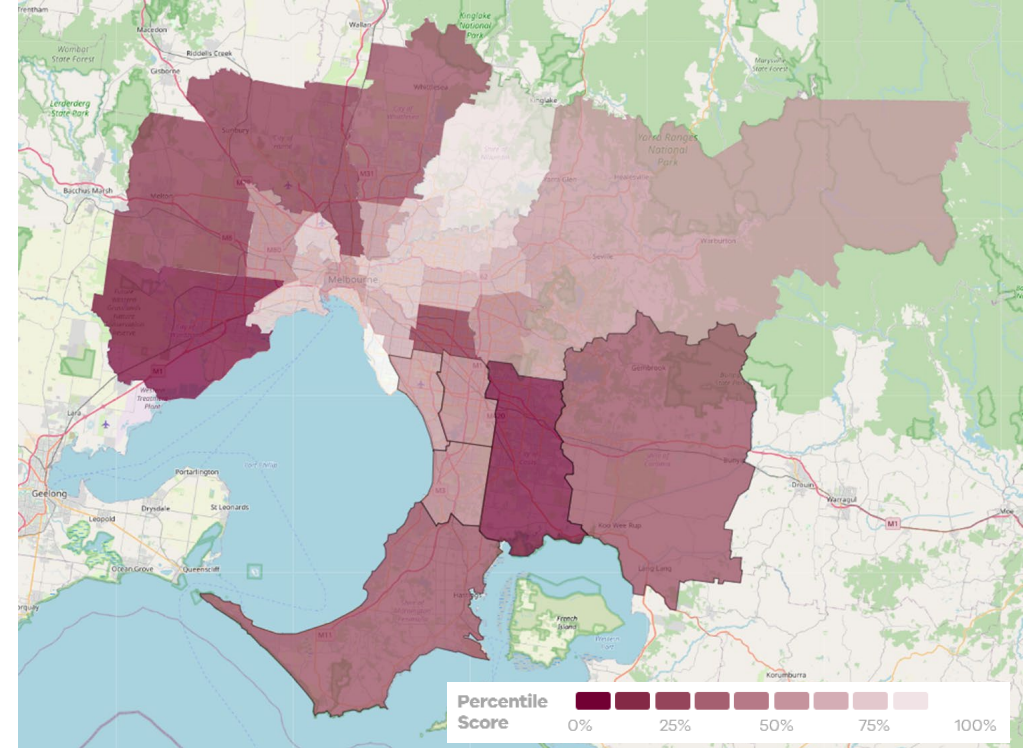




The Region is facing significant housing affordability challenges

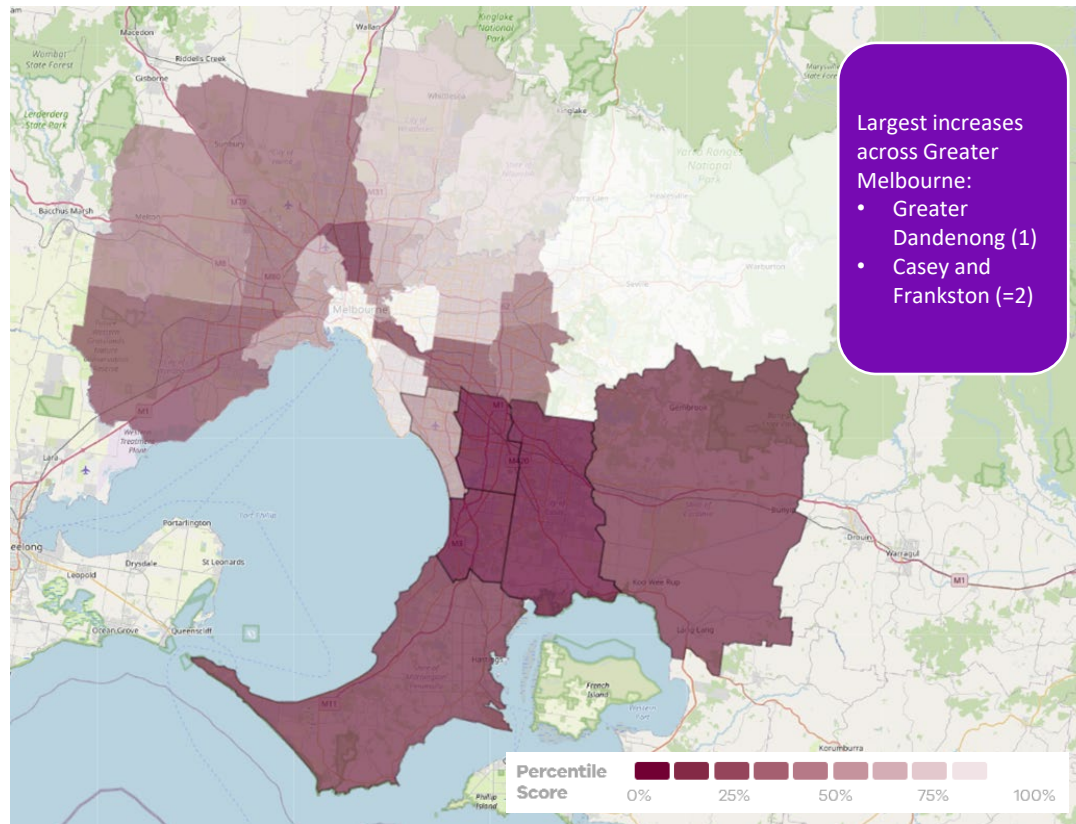
- There is a current and projected shortfall in housing supply against growing demand.
- There has also been a dramatic decrease in affordability over the past 20 years, creating financial hardship for renters and potential new residents.
- All LGAs in the Region rank in the top half of Greater Melbourne LGAs in terms of overall housing needs.
- Casey has the highest level of overall housing needs across Greater Melbourne.
- The following section will explore the individual metrics and breakdowns in further detail.

- Population engaged in occupations requiring Level 2-5 skill levels (per ABS' OCSKP classification)
- Unmet dwelling needs based on current supply and projected population growth
- Increase in unaffordability (20 years)
- Increase in unaffordability (10 years)





Many lower-income residents in the Region are facing rental stress and have been increasingly priced out of the rental market

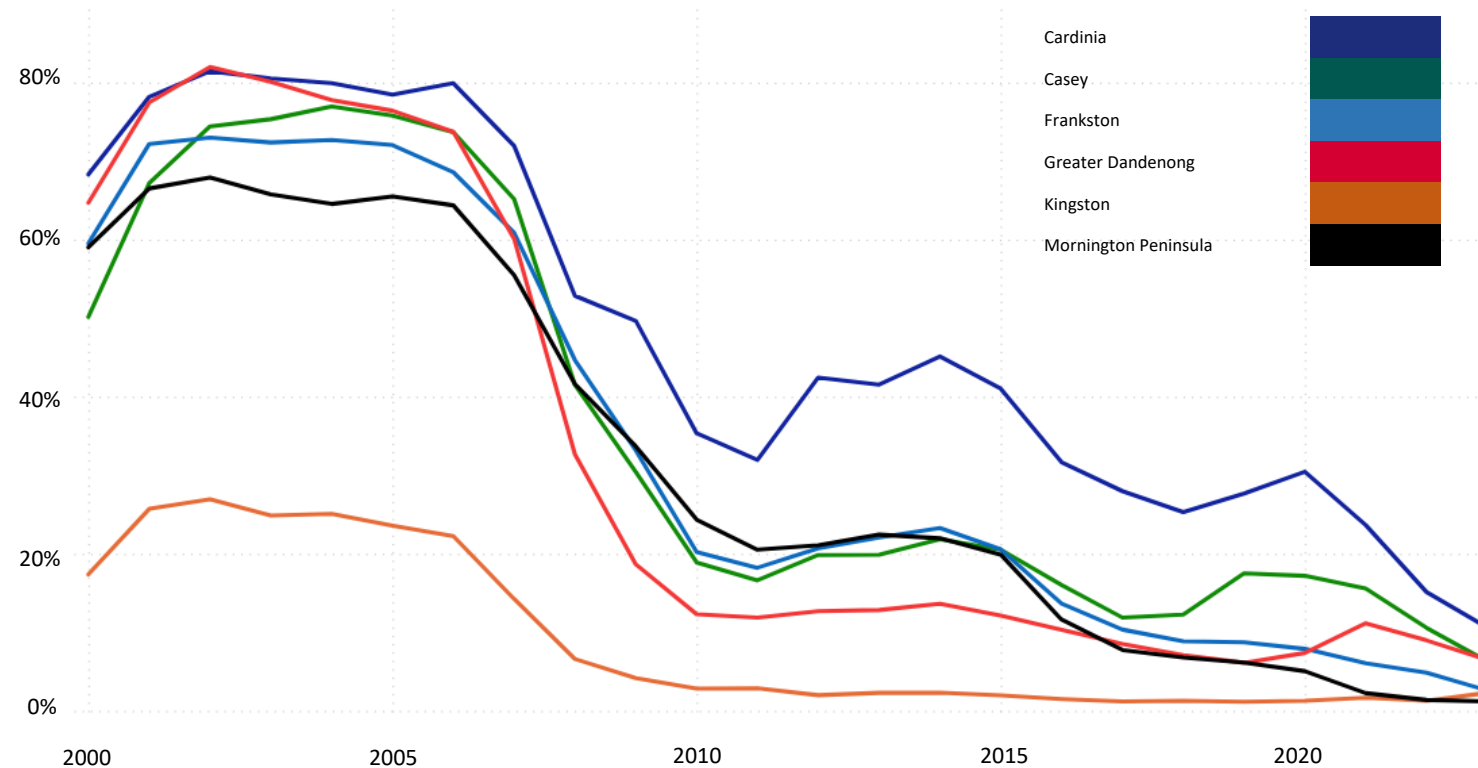


- Over the past 20 years, parts of the Southern Metropolitan Region have experienced the greatest increases in rental unaffordability across Greater Melbourne. Casey, Frankston and Greater Dandenong have recorded the equal-highest increase across all Greater Melbourne LGAs during this period.
- In Mornington Peninsula, the rental market is significantly skewed by short-term accommodation options capitalising on the strong tourism sector. This is adding to existing affordability pressures and may not be fully captured in the Homes Victoria dataset given it operates in a separate market.
- Affordability challenges make it increasingly difficult for households to access accommodation within communities in which they are established. This potentially forces them to endure lesser living conditions to remain in a particular area or prices them out of those areas completely.
- Displacing lower-income residents from areas that were previously relatively affordable would have a disruptive effect on accessible employment, education and health opportunities, particularly if it requires relocation further away from the CBD and outside of Greater Melbourne.



Rental affordability in the Region has plummeted over the past 20 years

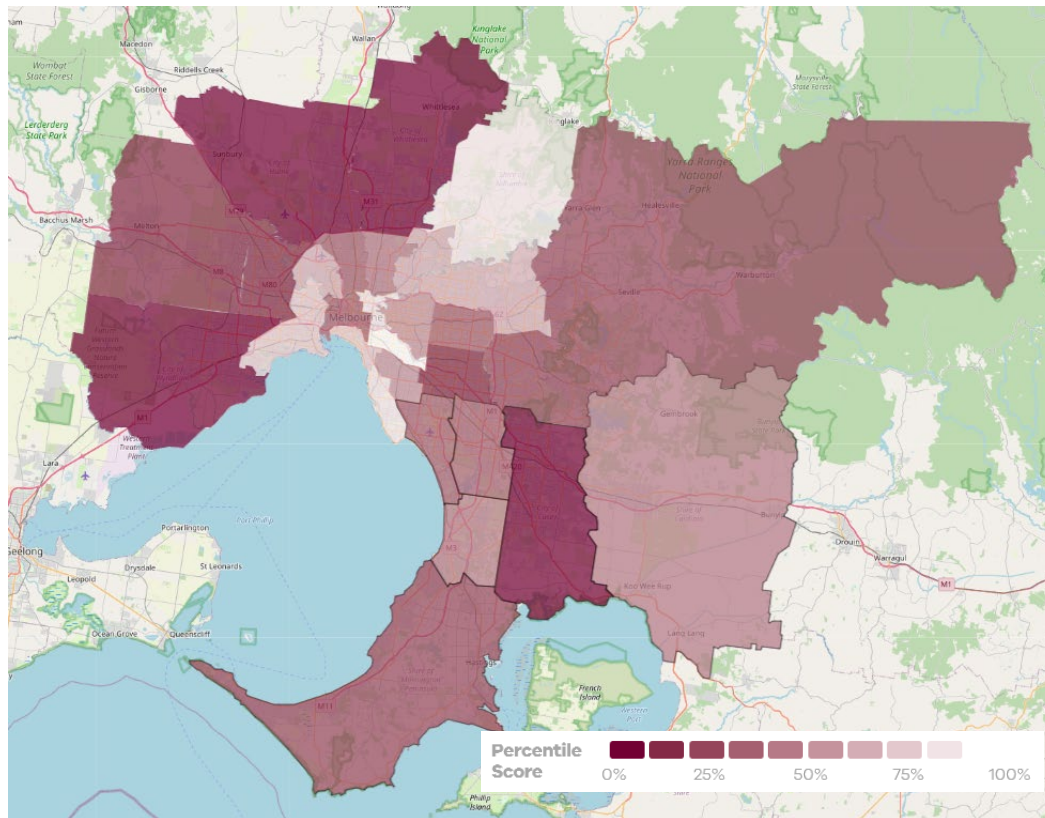
Percentage of affordable lettings on the rental market



- Greater Dandenong has recorded the equal-highest increase in rental unaffordability across all Greater Melbourne LGAs over the past 20 years.
- Over the 20 years, relative to 2004 affordability has declined markedly:
 - In 2004, 22% of new lettings in Greater Dandenong were unaffordable for 'low-income' households (i.e. amongst those receiving Centrelink incomes, 22% of new lettings exceeded 30 per cent of gross income). This **compares to 92% at present**.
 - 23% of new lettings in Casey were unaffordable for 'low-income' households in 2004. This has **increased to a current figure of 91%**.
 - 28% of new lettings in Frankston were unaffordable for 'low-income' households in 2004. This has **increased to a current figure of 96%**.



The Region is home to many essential workers with unique housing needs

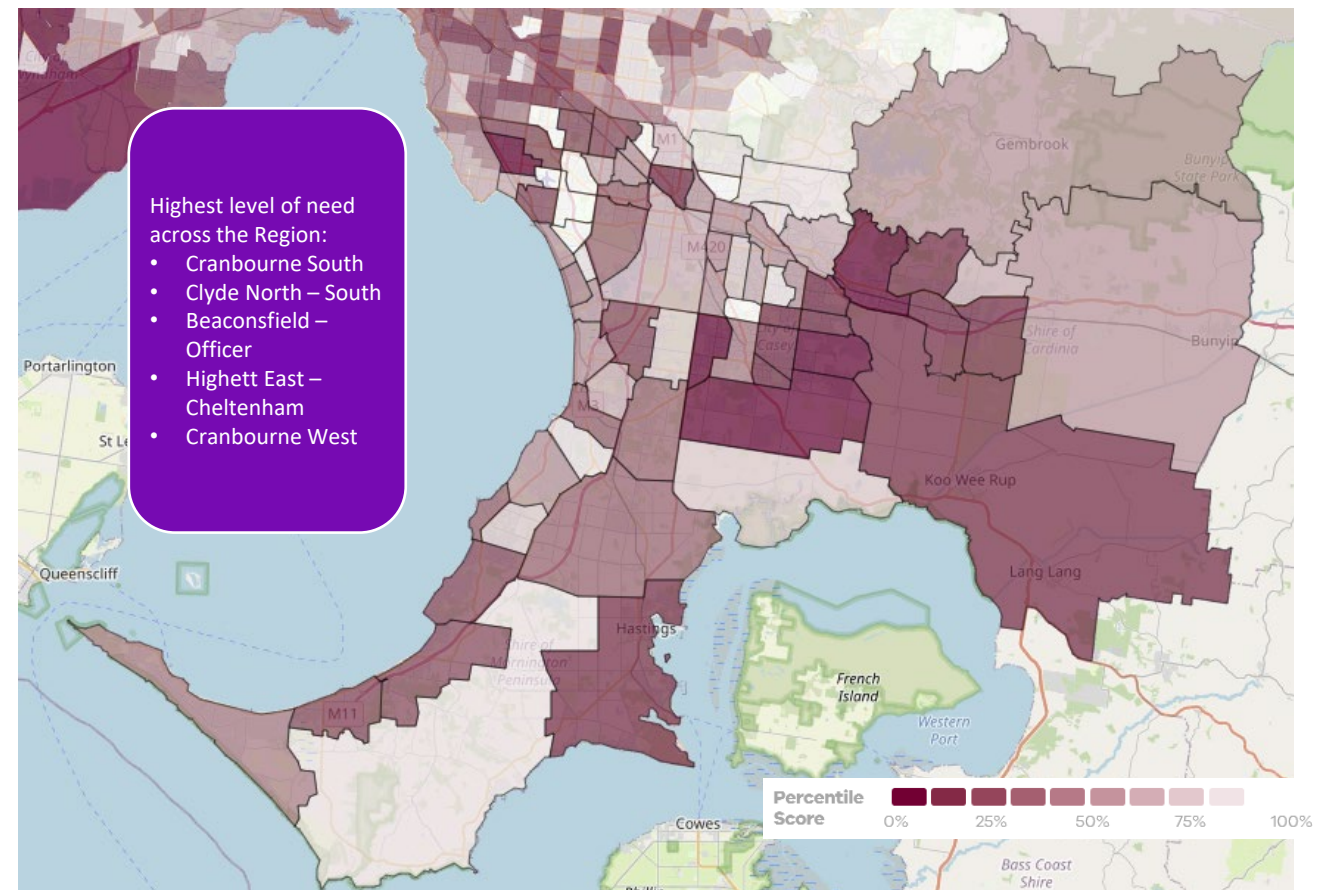


- This sub-metric disregards those working in highest-skilled occupations (per ABS classifications) to enable a focus on lower-skilled workers' housing needs. For example, a hospital doctor who is relatively more resilient to market changes than a hospital chef would likely be less affected by increasing rents around their shared place of work.
- Many essential service workers (such as those working in child care, aged care, food retail and emergency services) do not have satisfactory access to affordable housing close to their work, despite the nature of their work responsibilities rendering work-from-home arrangements less feasible.
- It is therefore crucial that there are plentiful opportunities for essential workers to live and work in close proximity, unlocking time and money spent on commuting.
- It applied 2021 proportions across the occupational skill levels against population projections from SALUP to determine where these needs may be concentrated.



Unmet dwelling needs demonstrate the need for rezoning and/or density increases

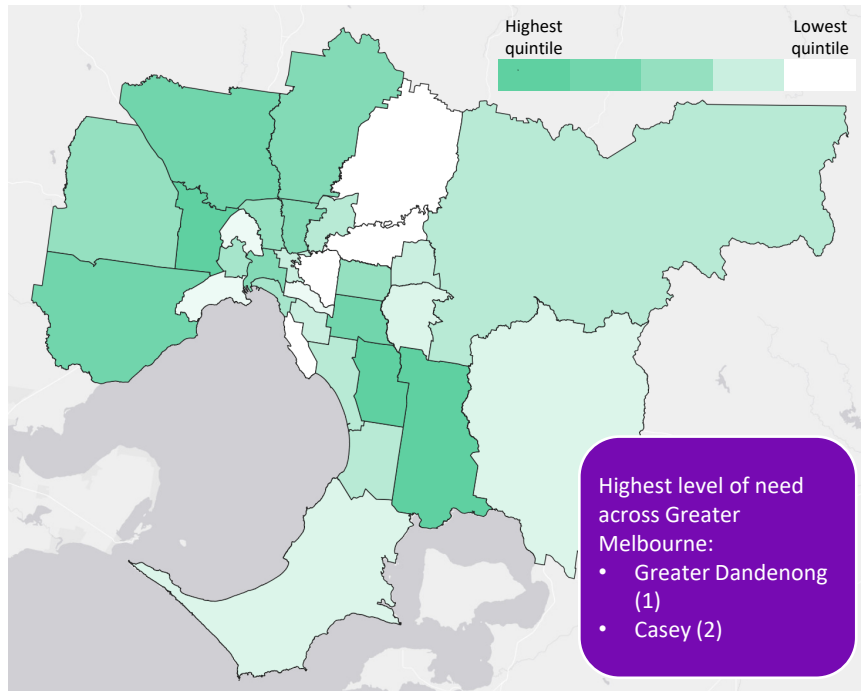
- This calculates additional dwellings needed to accommodate projected populations in each area of Greater Melbourne, according to their specific household ratios calculated.
- It therefore represents the extent to which to existing housing shortfalls will potentially be exacerbated over the next decades, which also indicates the potential for additional pressure on housing prices.
- For example, it suggests areas in need of particular attention regarding rezoning potential, particularly for infill opportunities in established areas (e.g. in Highett East – Cheltenham).
- There is no significant change in this trend over the time period examined (2021 to 2051), with the greatest levels of unmet dwelling need predominantly found in outer-suburban growth corridors.
- Housing supply in the peri-urban communities such as Cranbourne South and Clyde are often subject to the supply of greenfield residential land (as well as other factors including construction costs), which is explored on page 66.



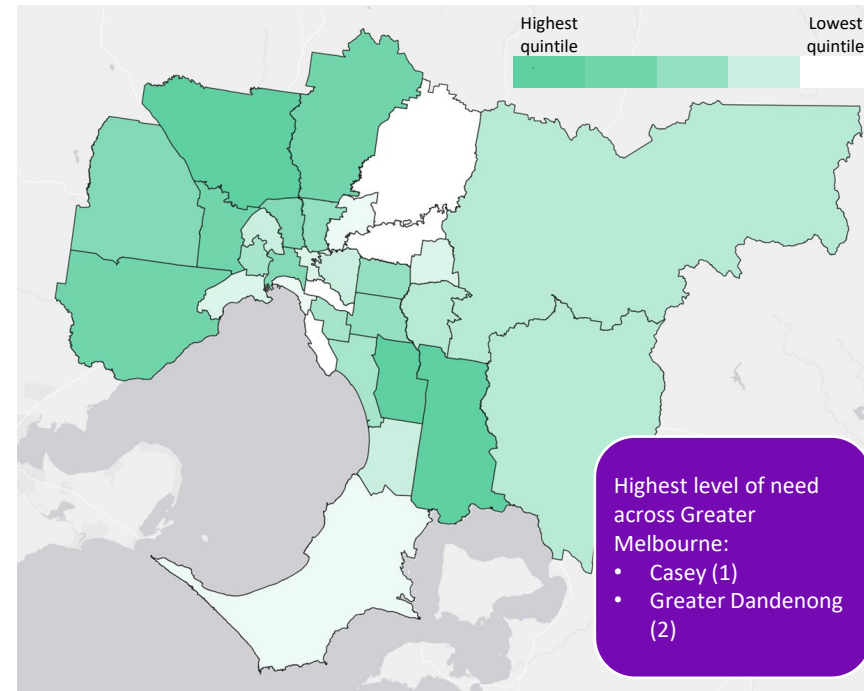


Homelessness and housing overutilisation are already significant problems across parts of the Region

People experiencing homelessness



Overutilised dwellings



Greater Dandenong and Casey already record the highest proportion of homelessness **across all Victorian LGAs (and therefore Greater Melbourne)**.

- The rate of homelessness in Greater Dandenong (2.9%) is more than three times the Greater Melbourne average (0.8%)

Casey and Greater Dandenong also record the highest levels of overutilised dwellings **across all Victorian LGAs (and therefore Greater Melbourne)**.

The apparent correlation between the two measures demonstrates that even if one does not meet the definition of 'homelessness', they are likely to be subject to compromised living conditions (such as overcrowding).

Source: Australian Bureau of Statistics (2021)

3.5.1. Housing: case study

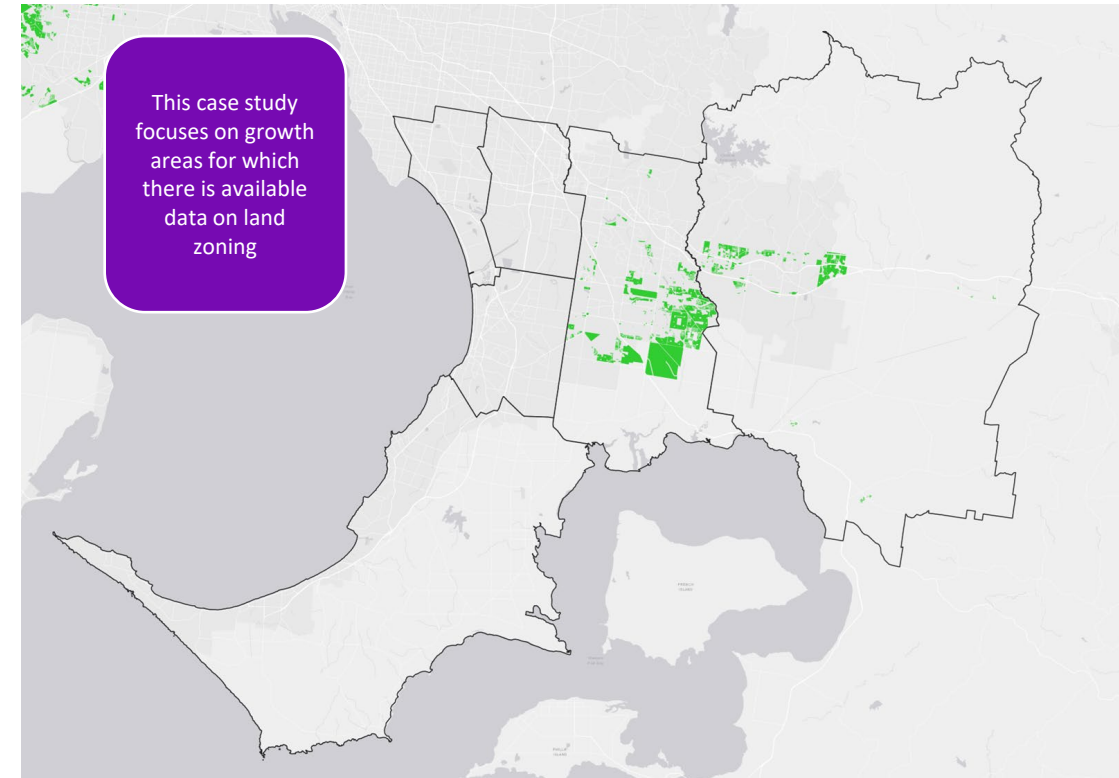
This case study considers the extent of land required to accommodate projected population growth assuming continued preferences for greenfield housing developments in growth areas. In addition to housing lots themselves, this increases the demand for surrounding land to develop essential infrastructure across all domains.

Education	Employment and economy	Environment	Healthcare	Housing	Recreation and culture	Transport
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A greater pipeline of greenfield land supply and/or densification is required to satisfy housing demand in growth areas

- This map demonstrates the extent of former rural land being developed for housing in Melbourne's designated growth areas, with those falling within the Southern Metropolitan Region located in Cardinia and Casey.
- Despite a relative lack of remaining greenfield land in other areas, there is also limited greenfield land supply in these designated growth areas to keep up with current and projected demand for new housing across the Southern Metropolitan Region.
- By 2051, Cardinia and Casey are estimated to require around 35,000 and 88,000 new dwellings respectively to accommodate estimated population growth (accounting for their respective household ratios).
- Based on the current 429m² average lot size for new subdivisions in Melbourne (Australian Bureau of Statistics, 2021), this will require 1502 hectares (Cardinia) and 3775 hectares (Casey) of land to accommodate lot sizes alone.
- Given current levels of land approved or proposed for greenfield housing, there is an estimated shortfall of 1318 hectares (Cardinia) and 3383 hectares (Casey), notwithstanding significant amounts of further land that would be required for essential infrastructure.
- For illustrative purposes and given the relative lack of medium to high-density development in the outer suburbs, this calculation assumes that all new housing stock is on standalone blocks. It is nevertheless indicative of the significant need for rezoning to accommodate new housing stock.



Growth area LGA	Land approved or proposed for		
	Land required for lot sizes (ha)	greenfield housing (ha)	Shortfall (ha)
Cardinia	1502	184	1318
Casey	3775	392	3383

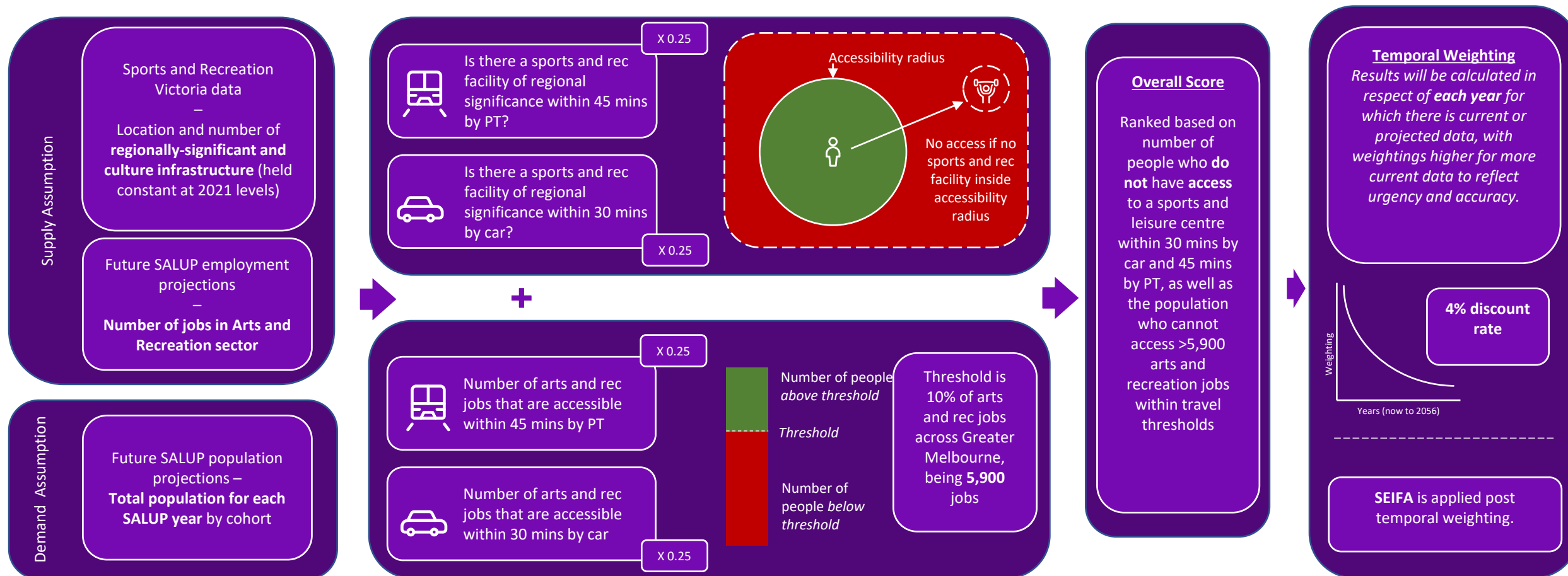
Source: Department of Transport and Planning (2021)

3.6. Recreation and culture



Access to Recreation and Culture

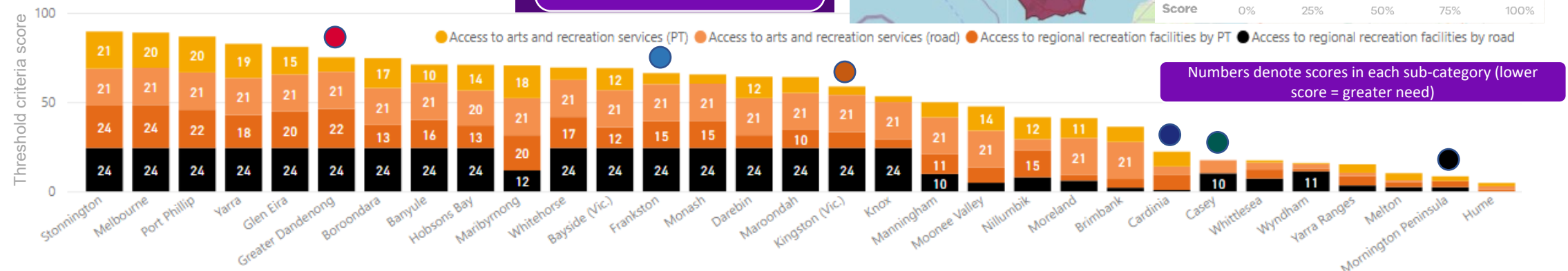
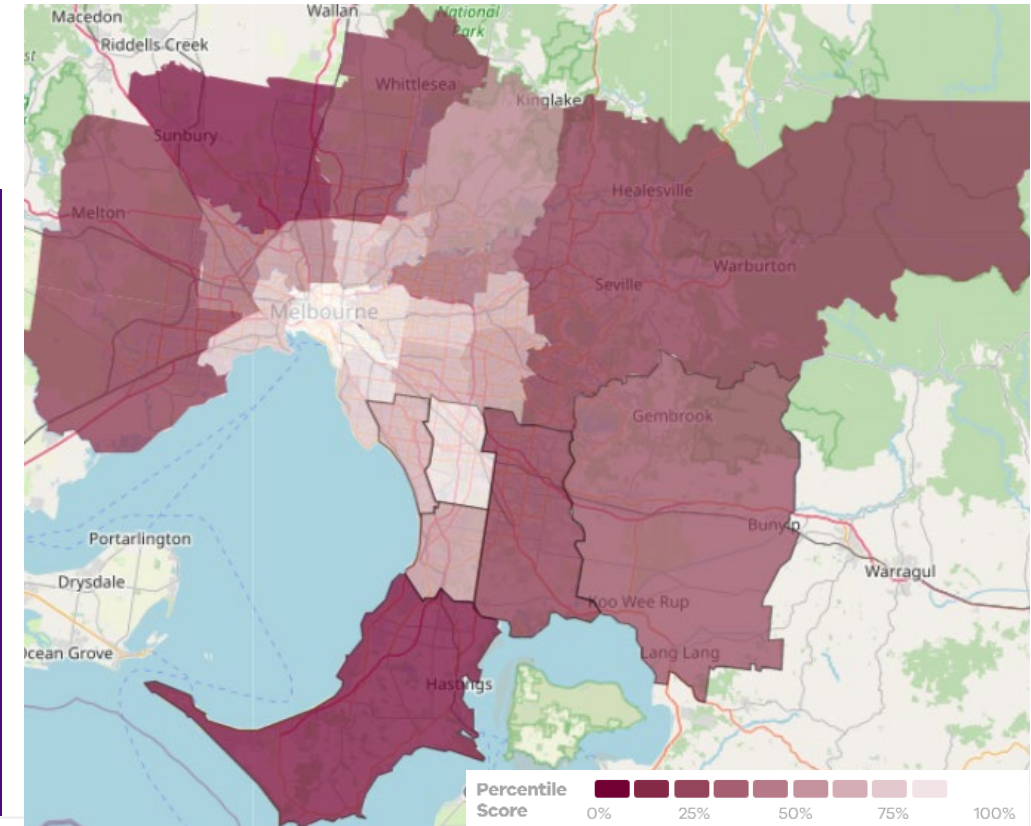
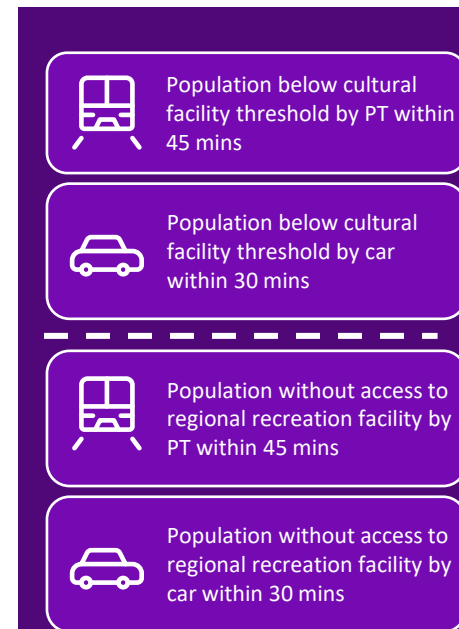
This metric quantifies the level of need for Recreation and Culture services across the Region by measuring access to regionally significant Sports and Recreation facilities, as well as the ability to access a minimum level of Arts and Recreation jobs (as a proxy for related services).

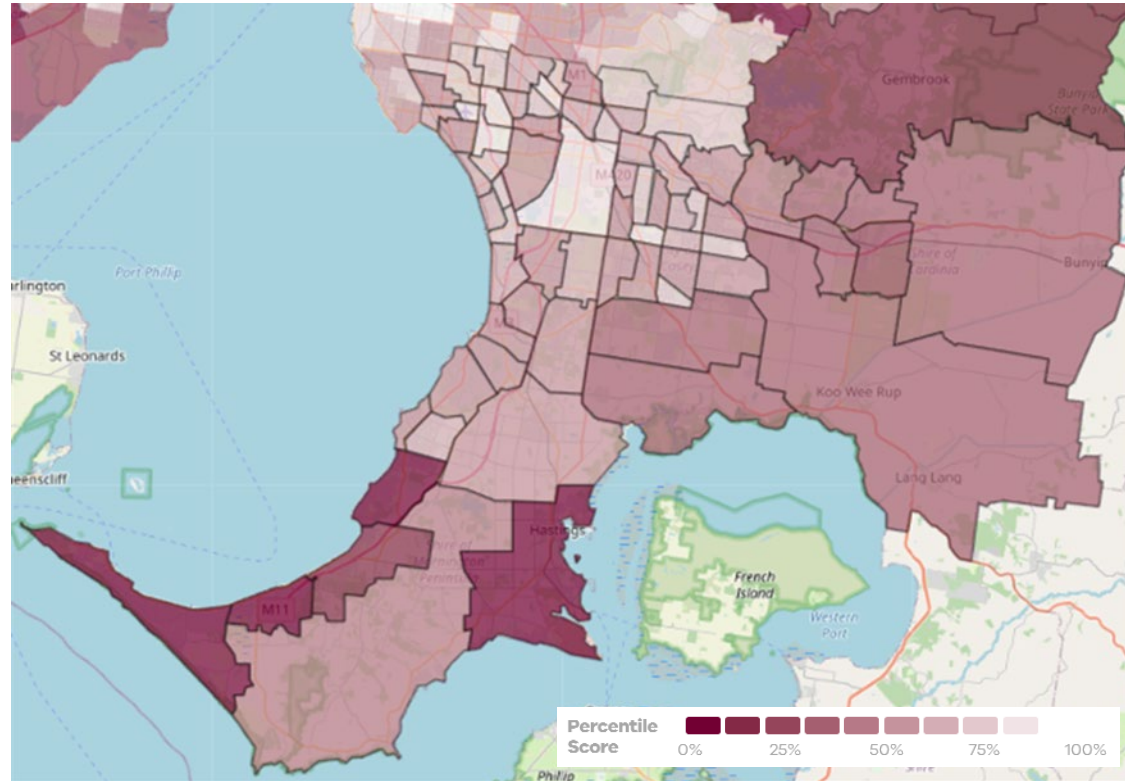




There are current and projected shortfalls in the recreational and cultural infrastructure in the Region

- Mornington Peninsula, Casey and Cardinia show the greatest level of need within the Region, alongside other peri-urban councils. Many areas within these LGAs also have limited public transport options, lowering accessibility to recreation needs.
- Greater Dandenong is on par with councils that show a relatively lower of need in Greater Melbourne. This is due to Greater Dandenong containing a relatively higher concentration of sports and recreational facilities of regional significance, as well as arts, recreational and cultural service.
- Kingston and Frankston also show a relatively lower level of need within the Region.



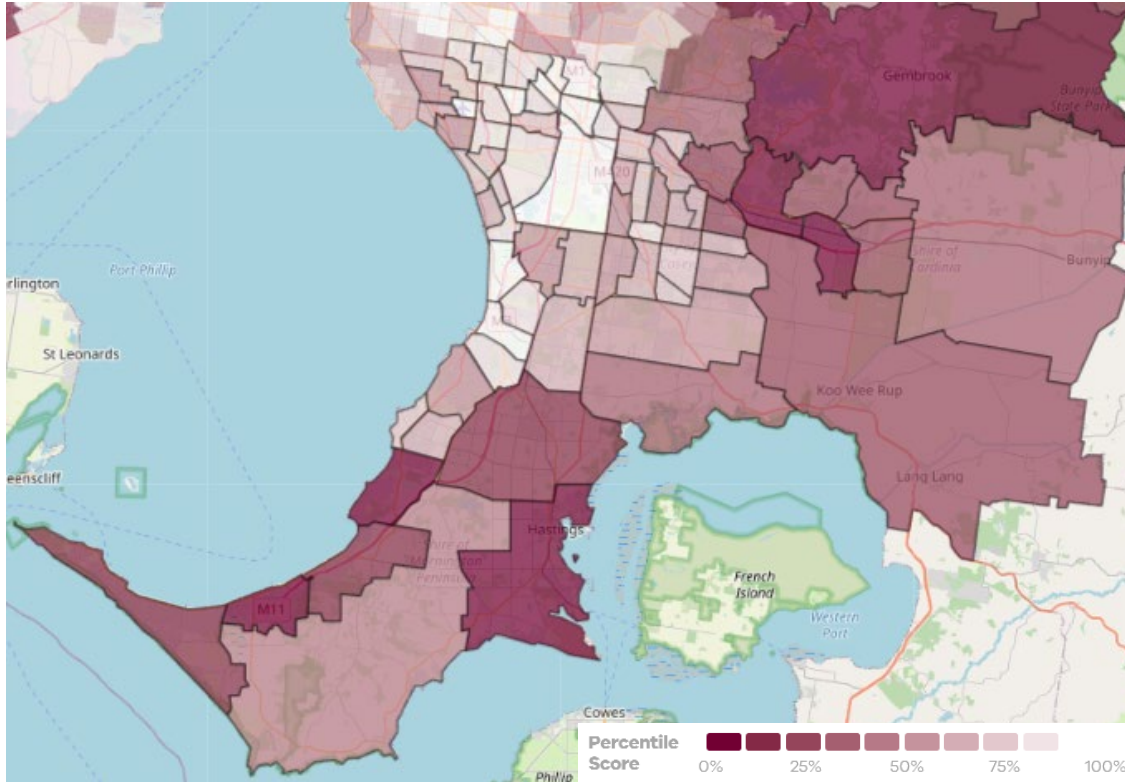


Access to arts and recreation facilities vary across the Region and affect areas of low public transport coverage

- Mornington Peninsula shows the highest level of need in the Region. Of the 20 SA2s experiencing the highest levels of need across **all of** Greater Melbourne from 2021 to 2051, five are located on the Mornington Peninsula. This is due to its lower levels of arts and recreation self-sufficiency, and its relative geographic isolation from areas with higher concentration of services. Mornington Peninsula also has limited access to public transport, meaning residents are required to drive long distances in order to access arts and recreation services in nearby Frankston.
- Cardinia shows a higher level of need relative to other LGAs within the Region. This is due to its geographic isolation and limited arts and recreation self-sufficiency. This means residents are required to travel outside of its borders in order to access services in Casey. Emerald-Cockatoo shows a high-level of need due to its geographic isolation.
- Kingston and Greater Dandenong show low levels of need. This is due to a large collection of arts and recreation facilities such as the many golf courses located in Moorabbin – Heatherton, as well as many other major arts and recreation services in neighbouring Monash and Bayside.
- SA2s in Kingston and Greater Dandenong also have better public transport infrastructure, increasing accessibility to many arts and recreation services located in the CBD and its surrounds. It is apparent SA2s with more limited access to public transport (such as Dandenong North) show higher levels of need.
- Casey also demonstrates a relatively lower level of need. This is due to large arts and recreation facilities such as Bunjil Place in Narre Warren. However, it is clear that areas with limited access to public transport such as Cranbourne South show a higher level of need.
- However, it is noted that there will still be needs for specific types of arts and recreation facilities within the Region that are below the resolution of this Regional Needs Assessment.

Highest levels of need (access to arts and recreation facilities)

SA2	Greater Melbourne Rank	SA2	Greater Melbourne Rank
Hastings – Somers	2	Emerald – Cockatoo	13
Rosebud - McCrae	3	Dromana	16
Mount Martha	6	Pakenham – South East	33
Point Nepean	11	Koo Wee Rup	37



Sports and recreational facilities of regional significance are generally inaccessible from peri-urban communities within the Region

- Many SA2s across the Region faces accessibility challenges to cultural facilities by public transport. Of the 20 SA2s experiencing the highest levels of need across **all of** Greater Melbourne from 2021 to 2051, seven are within the Region and are outlined in the table below.
- There are currently no facilities of regional significance on the Mornington Peninsula. The closest facilities are located in Frankston. This means it generally takes more than 30 minutes to access these facilities by car and 45 minutes by public transport from many parts of the Peninsula, such as Hastings – Somers. This is problematic given Mornington Peninsula has the highest rate of sports participation in the Region.
- Cardinia also does not contain any facilities of regional significance. Cardinia has a strong demand for participation in sports and recreation, with a higher proportion of its residents meeting the sufficient physical activity threshold than the Greater Melbourne average. However, the closest facilities are located in Casey and Greater Dandenong, meaning it is generally not possible to access these facilities by car within 30 minutes and public transport within 45 minutes, such as in Pakenham, Beaconsfield and Officer.
- Casey only contains one facility of regional significance (Casey Fields). Many urbanised areas of Casey are able to access this facility as well as other facilities in Greater Dandenong and Frankston. However, public transport accessibility continues to remain a challenge large growing communities in Cranbourne and Clyde.
- Kingston, Greater Dandenong and parts of Frankston do not face the same accessibility challenges given a significant number of sports and recreational facilities located within its borders, and better road infrastructure. Parts of these councils continue to face accessibility challenges by public transport.

Highest levels of need (access to sports and recreational facilities of regional significance)

SA2	Greater Melbourne Rank	SA2	Greater Melbourne Rank
Pakenham – South West	1	Emerald – Cockatoo	15
Hastings – Somers	2	Mount Martha	17
Beaconsfield – Officer	3	Point Nepean	19
Rosebud - McCrae	6	Dromana	24

3.6.1. Recreation and culture: case study

This case study considers the availability of open space across the Region, which is essential for ensuring residents can readily access recreational opportunities regardless of income as well as remain acquainted with the natural environment.

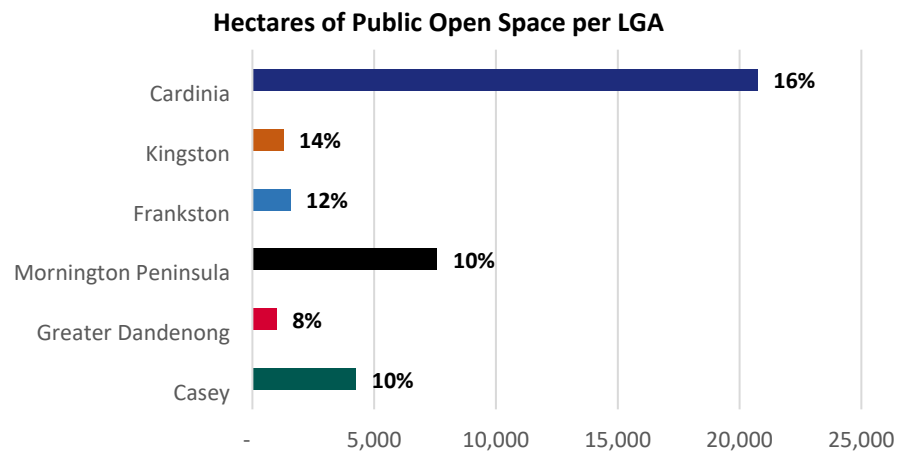
Education	Employment and economy	Environment	Healthcare	Housing	Recreation and culture	Transport
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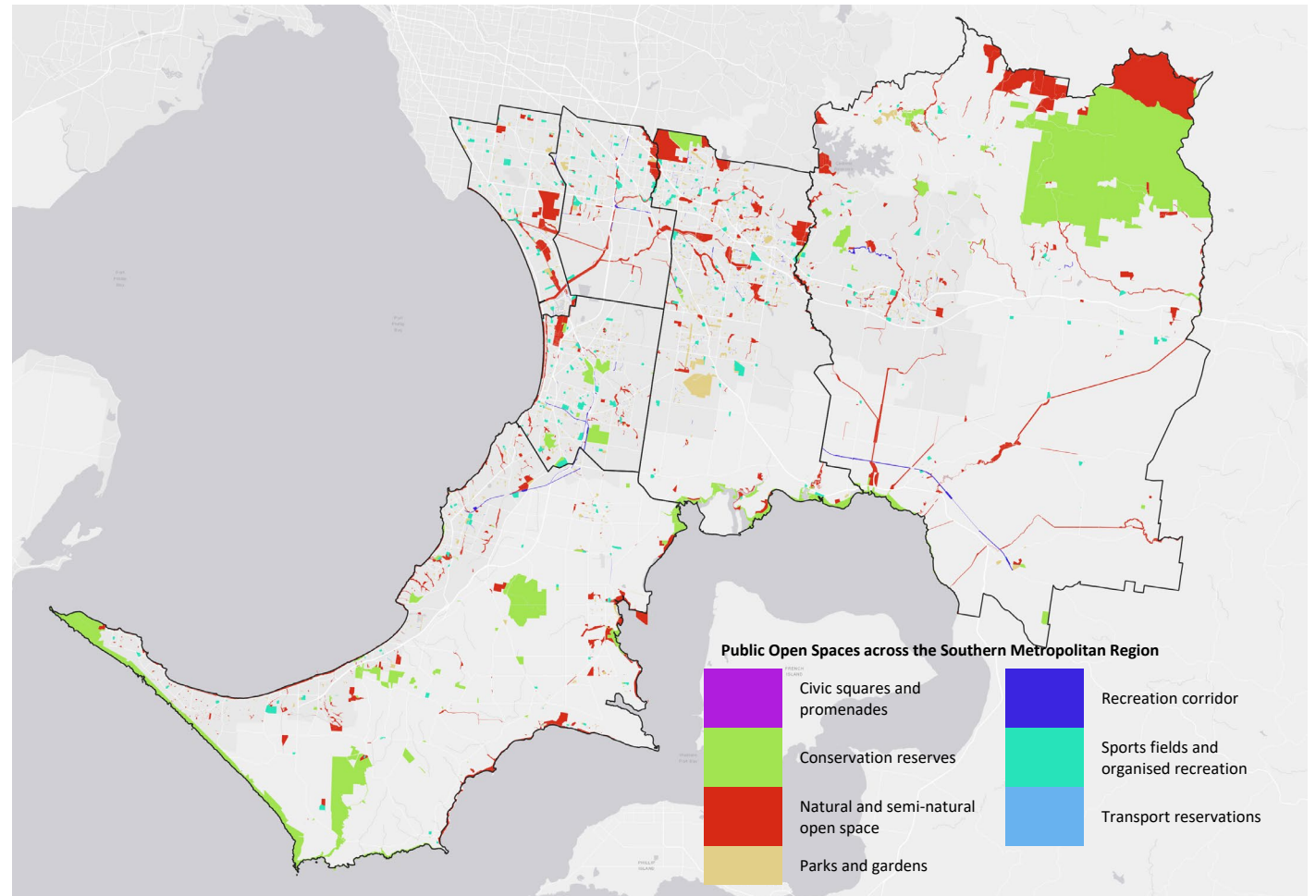
The availability of public open space varies across the Region

In addition to formal recreational facilities that accommodate structured programs (such as organised sport), public open spaces also play a critical role in enabling informal recreational opportunities. Communities are typically able to enjoy them free of charge, making them particularly important from an equity perspective.

Greater Dandenong has both the lowest amount and proportion of public open space in the Region.



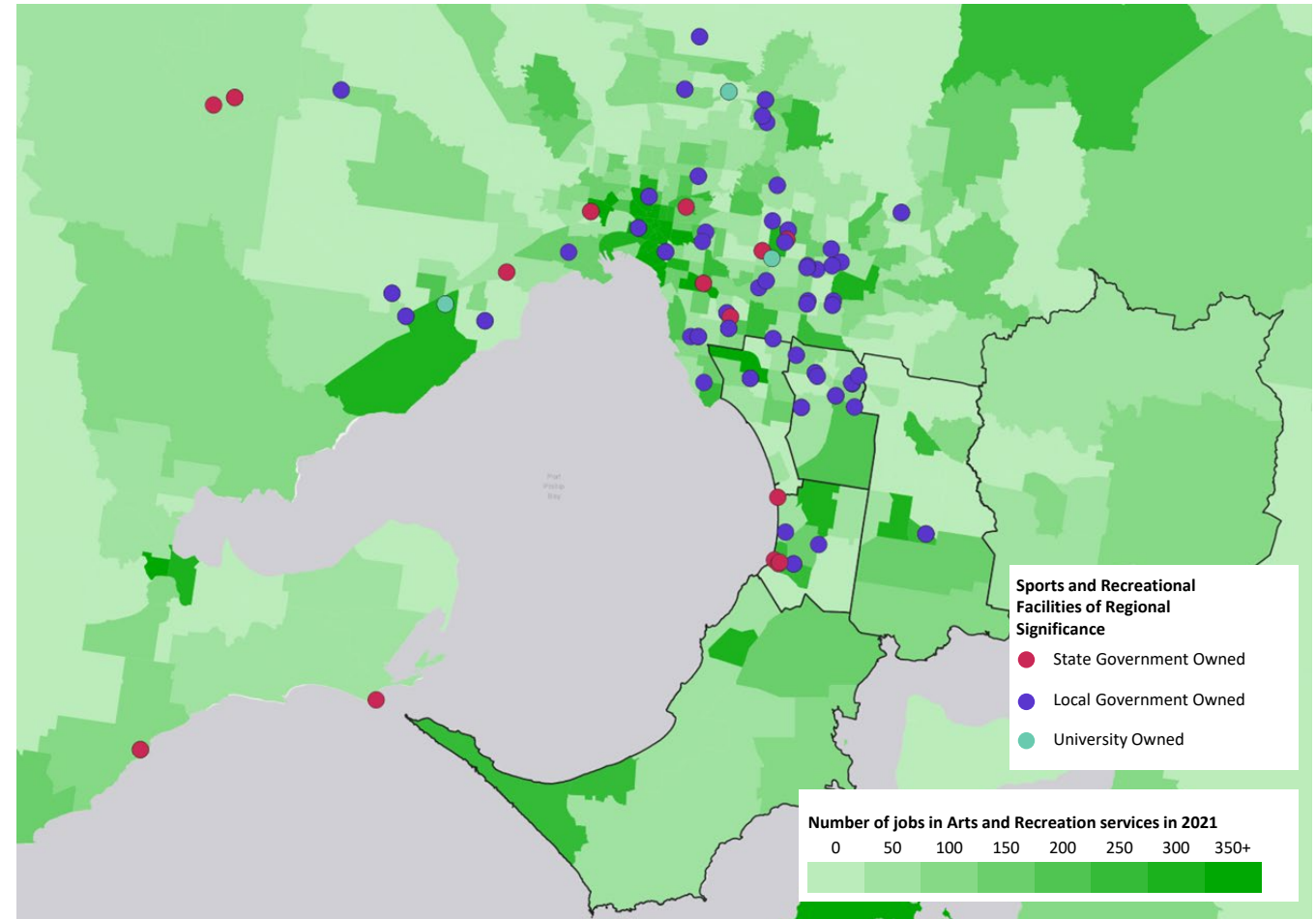
Source: Victorian Planning Authority (2023)





Areas of the Region face a shortfall in sports and recreational facilities of regional significance, as well as arts and recreation services

- Most sports and recreational facilities of regional significance are located in closer proximity to the CBD, and a vast majority of arts and recreational jobs located within the CBD and its surrounds. This raises significant accessibility challenges for many of the Region's residents both by road and public transport.
- There are several sports and recreational facilities in Greater Dandenong, Kingston and Frankston. This is matched by relatively higher number of arts and recreational services compared to other parts of the Region.
- There are currently no sports and recreational facilities of regional significance in Cardinia and Mornington Peninsula, and limited arts and recreation services. Residents are required to travel long distances out of the Shires' borders to access sports, recreational and cultural facilities.
- Casey is home to only one sports and recreational facility of regional significance, Casey Fields, and Bunjil Place, a large purpose-built arts and civic precinct in Narre Warren. However, the supply is not sufficient for its growing population. This means residents usually have to travel long distances outside of the LGA to access other facilities.



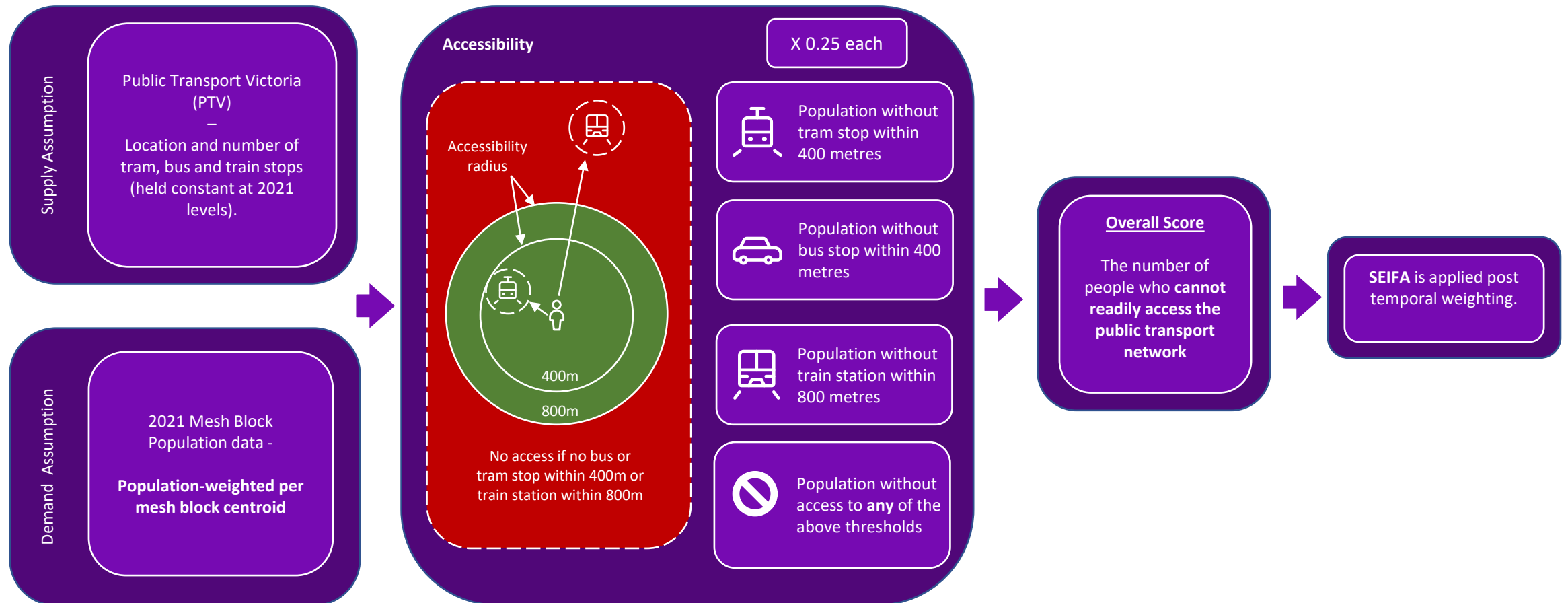
Source: Sports and Recreation Victoria (2021) & SALUP (2021)

3.7. Transport



Access to Transport

The level of need for improved transport services has been quantified in terms of the accessibility (or lack thereof) to public transport. PTV's data on stops and stations has been paired with a walking radius based on industry standards to calculate the number of people who cannot access the network across the Region relative to all other areas of Greater Melbourne.





There is current and projected shortfalls in public transport connectivity

- Casey records the greatest current need for public transport investment across Greater Melbourne. This is largely driven by large population centres located away from viable PT options, which is compounded by its large population.
- Mornington Peninsula and Cardinia also face accessibility issues due to their geographic isolation and limited access to the metropolitan rail network.
- Overall, Frankston, Greater Dandenong and Kingston have relatively smaller populations unable to access to PT within the defined thresholds, although they contain pockets with relatively lower levels of access (e.g. Langwarrin).



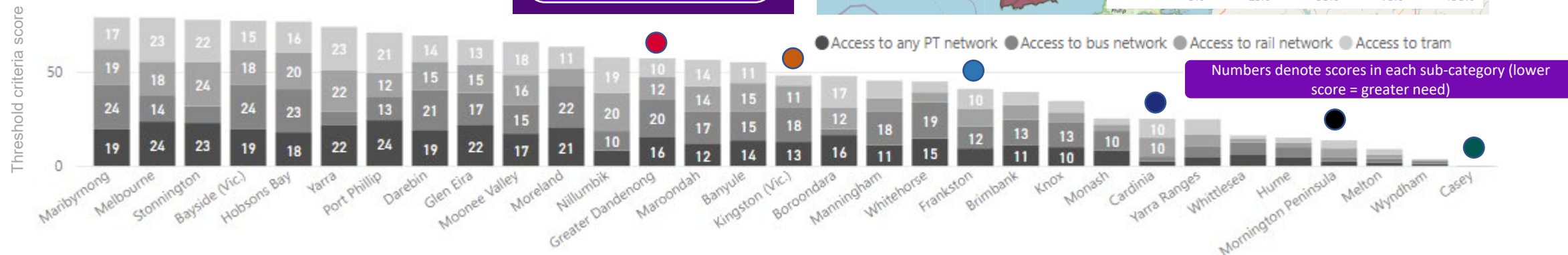
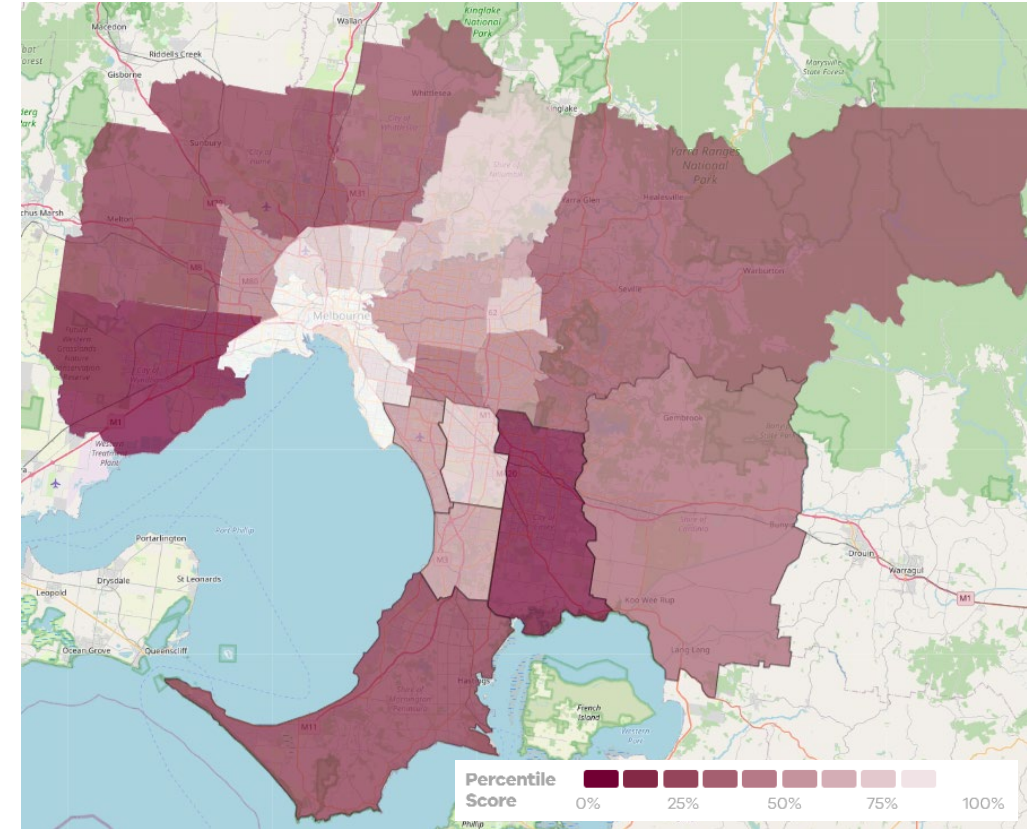
Is there a tram stop within 400 metres?



Is there a bus stop within 400 metres?

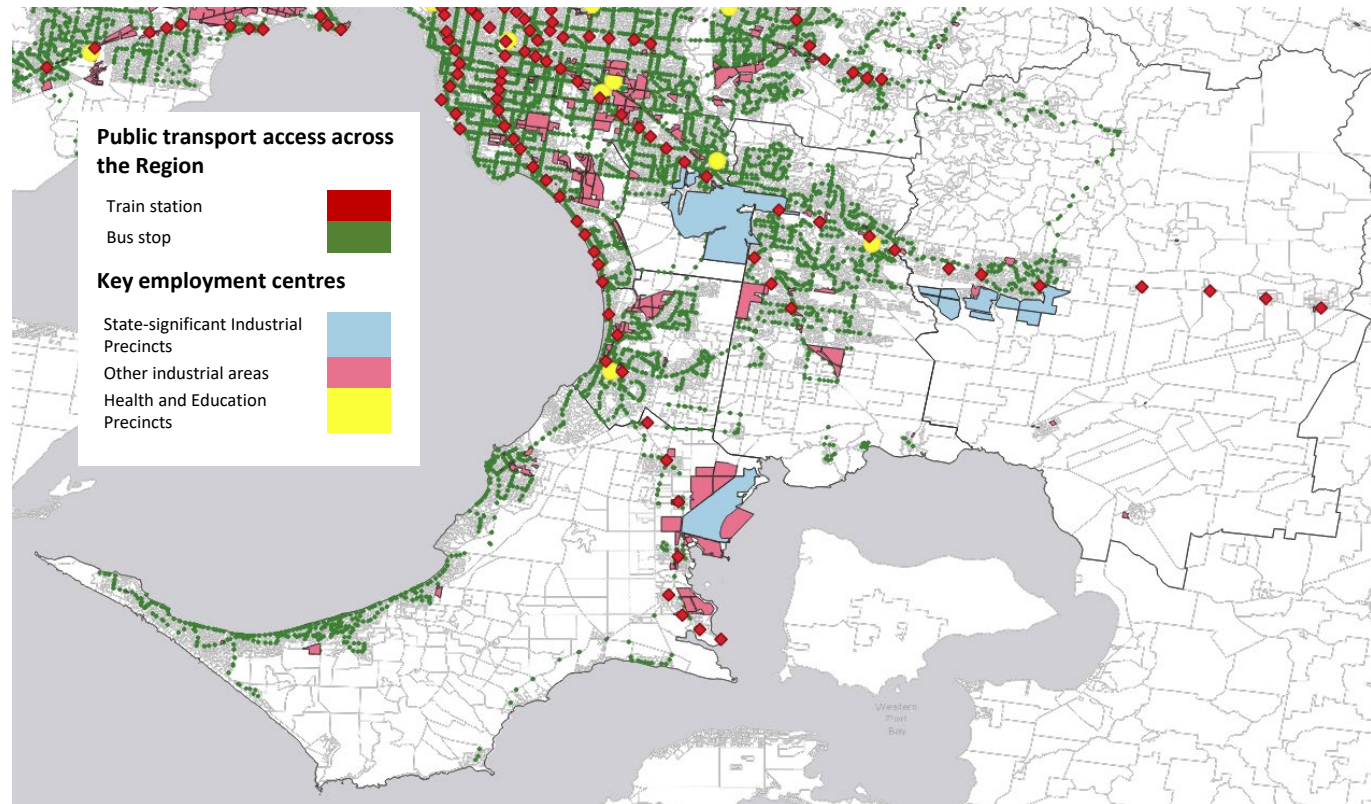


Is there a train station within 800 metres?





Overview of public transport infrastructure across the Region



- To calculate a population-weighted measure of access to train stations, the population of each Mesh Block has been determined. Mesh Blocks are the smallest geographic areas defined by the ABS and typically contain 30 to 60 dwellings, ensuring that population and proximity analysis is conducted at a detailed level.

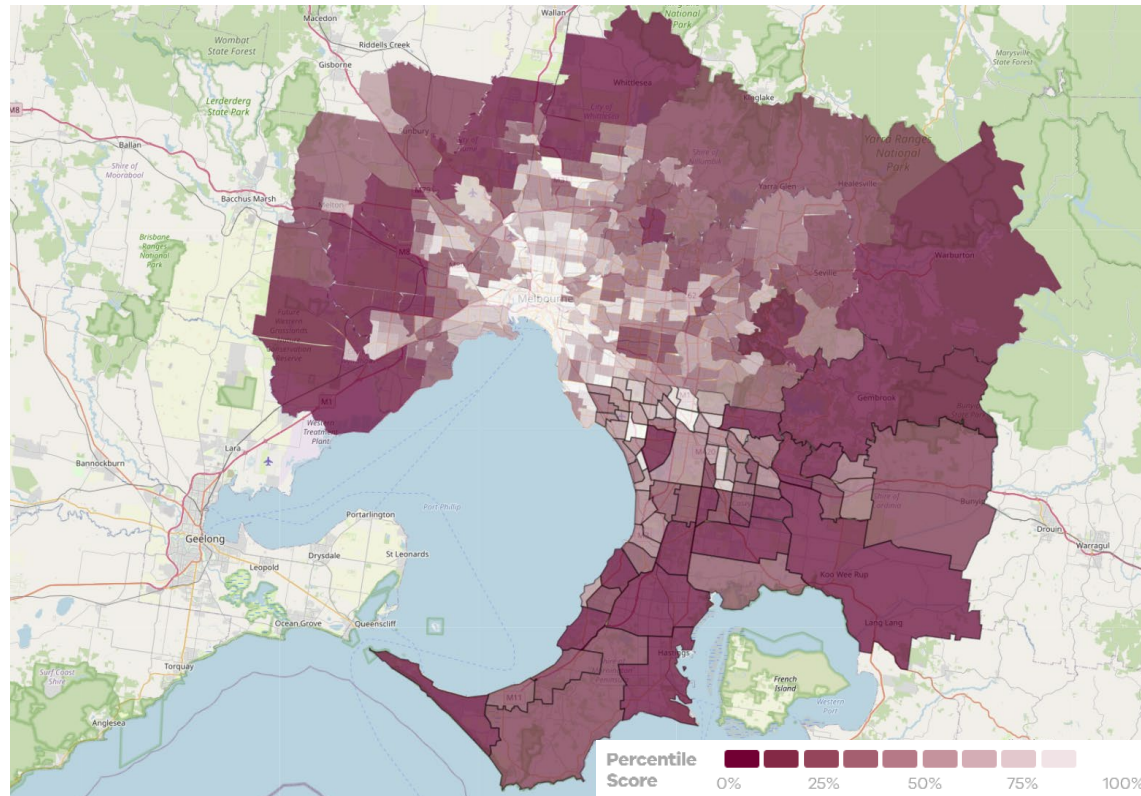


Note: this illustration does not include tram stops as it focuses on the Region, however the transport accessibility metrics do account for proximity to tram stops.

Source: Department of Transport and Planning (2023)



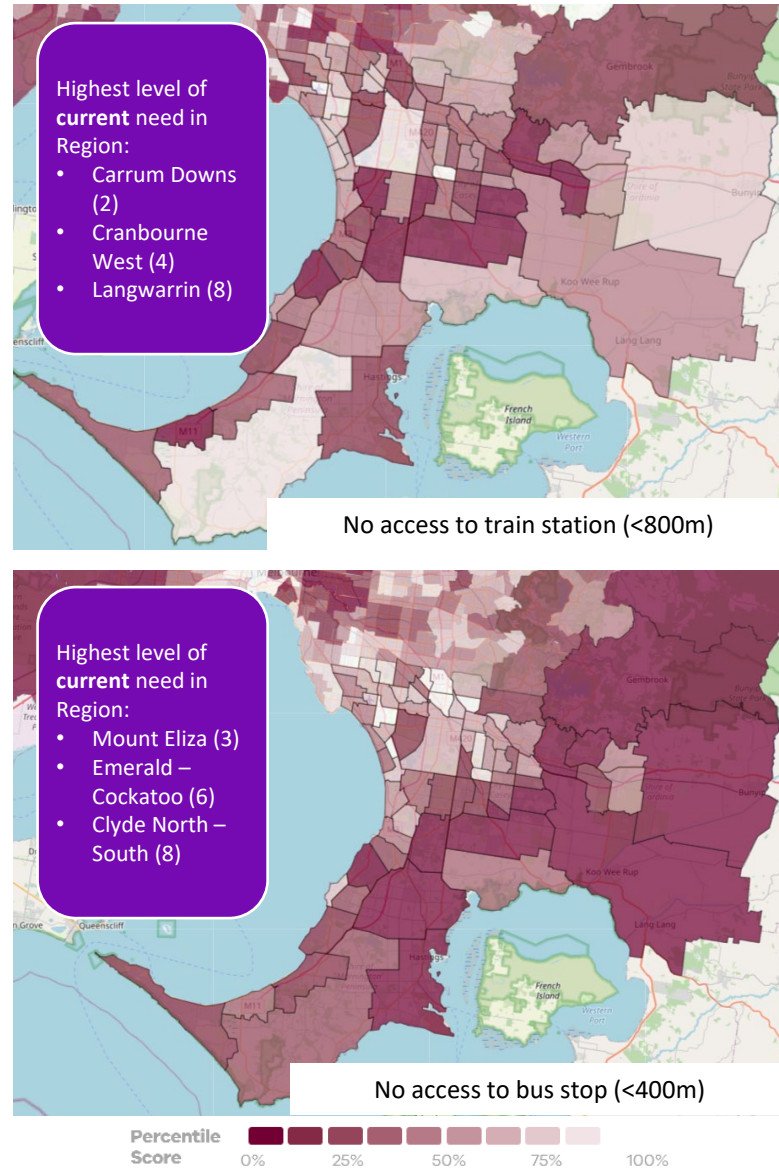
The Region's transport accessibility challenges are also evident at SA2 level



- The Region experiences public transport accessibility challenges, which compels residents to drive and increasing the cost of transport for many low-income households.
- Accessibility challenges are prevalent across the Region. Of the 20 SA2s experiencing the highest levels of need across **all of** Greater Melbourne, for example, eight are within the Region (covering Mornington Peninsula, Cardinia, Casey and Frankston) and are outlined in the below table. The map demonstrates that many other areas are in the highest decile of public transport access needs.

Highest levels of need: overall public transport access

SA2	Greater Melbourne Rank
Mount Eliza	3
Emerald - Cockatoo	4
Clyde North-South	6
Beaconsfield - Officer	8
Koo Wee Rup	13
Hastings - Somers	15
Pakenham - North West	17
Langwarrin	20



Many parts of the Region cannot rely on the public transport network due to access difficulties

- Failing to meet these thresholds for accessing the public transport network presents barriers to social and economic participation as well as access to essential day-to-day services.
- In many cases, it contributes to a heavy reliance on private vehicles and vulnerability to significant running costs beyond vehicle purchase prices (including registration, petrol, insurance and parking charges).
- Mornington Peninsula is an example of where improvements are required to both rail and bus services. While the Stony Point Line remains in operation, it does so at significantly lower frequency than metropolitan lines and is yet to be electrified. It is also distanced from Mornington Peninsula's more populous areas along the coast. There is a high degree of need for additional bus services, both in terms of geographical coverage and service frequency.
- Access to public transport is extremely limited in key growth areas in Casey, particularly in Cranbourne East and Clyde North, with no access to the train network and limited access to the bus network.
- When considering the train station access threshold in isolation, the Carrum Downs (Frankston) and Cranbourne West (Casey) SA2s are ranked 2nd and 5th respectively across all of Greater Melbourne in terms of population without access to a train station within 800m.

3.7.1. Transport: case study

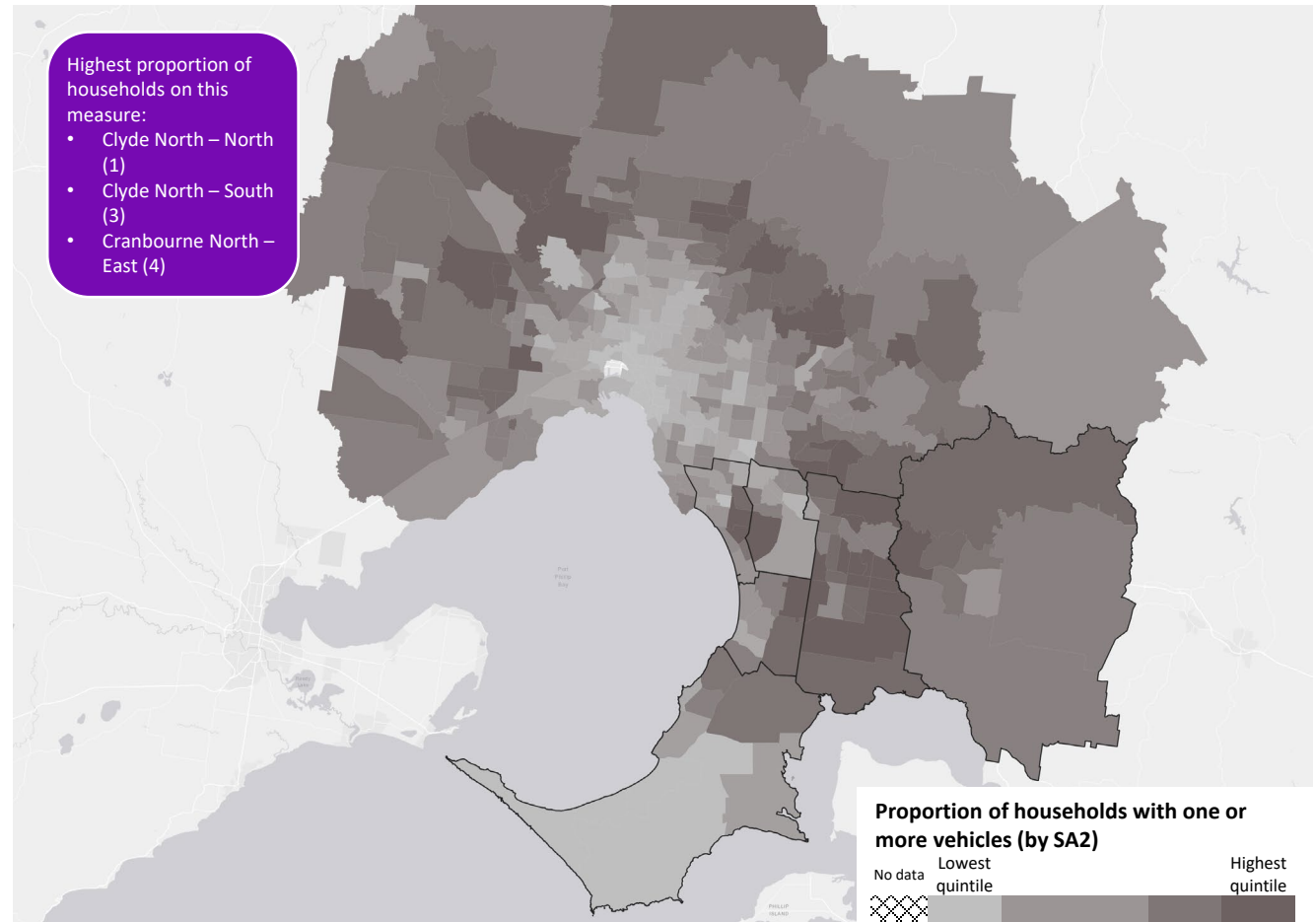
This case study considers how high public transport accessibility needs can translate to increased vehicle dependency. It also discusses how residents of particular areas may not have the means to afford vehicle purchase and running costs, leaving them reliant upon public transport networks with inconsistent coverage.

Education	Employment and economy	Environment	Healthcare	Housing	Recreation and culture	Transport
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There is generally a high level of vehicle dependency across the Region

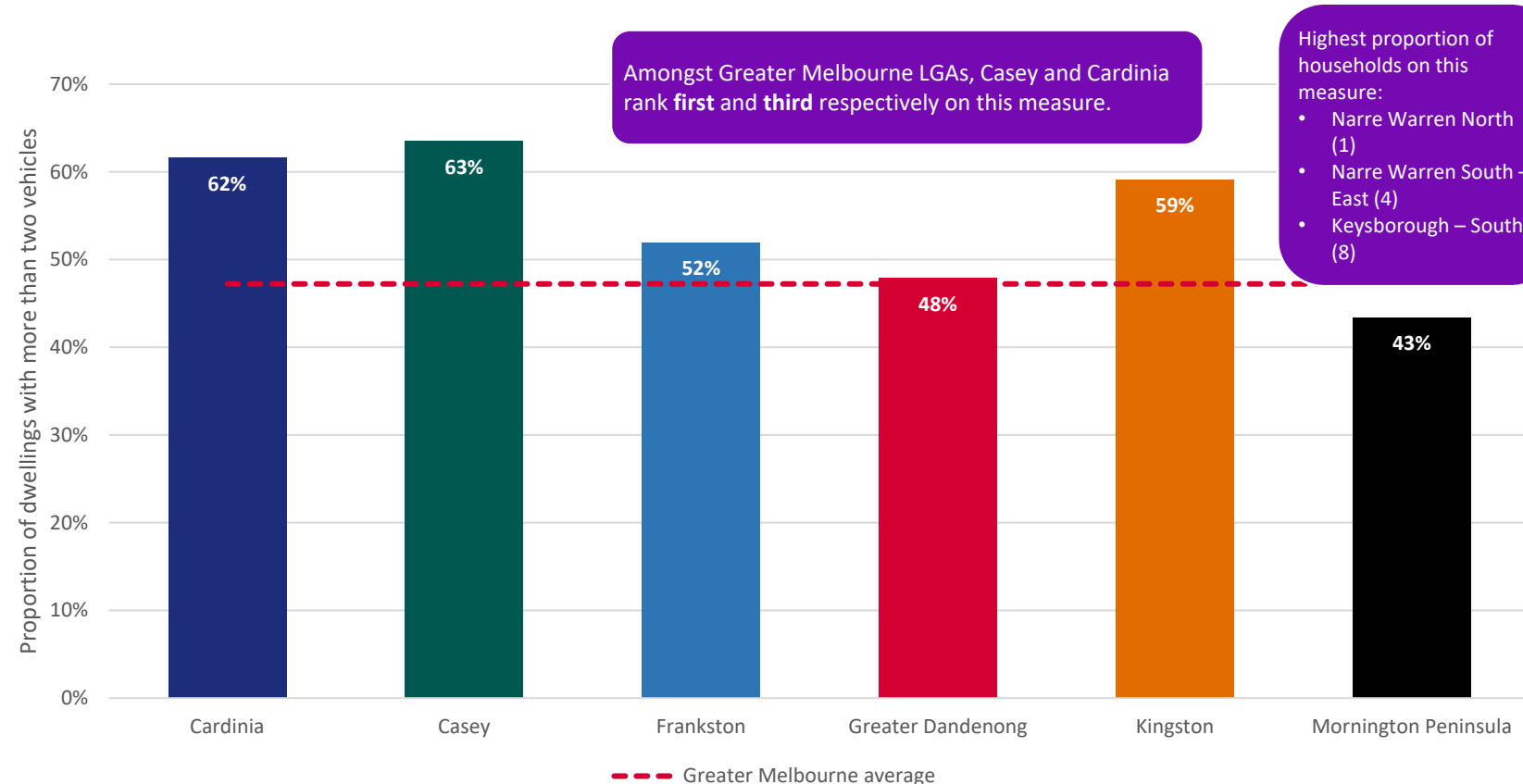
- The Region is home to the highest rates of vehicle dependency in Greater Melbourne.
- However, there are also pockets facing both lower levels of vehicle ownership and poor public transport access.
- Dandenong - North SA2 (Greater Dandenong) presents a current need for improved accessibility to rail services relative to Greater Melbourne, and has extremely low vehicle ownership levels on par with inner suburbs well-served by public transport, including Albert Park, Armadale and Northcote.
- In areas like these, it may not be feasible for private vehicle use to overcome barriers to accessing transport and opportunities for social and economic participation.



Source: Australian Bureau of Statistics (2021), Motor Vehicle Census



Many households in the Region have more than two vehicles

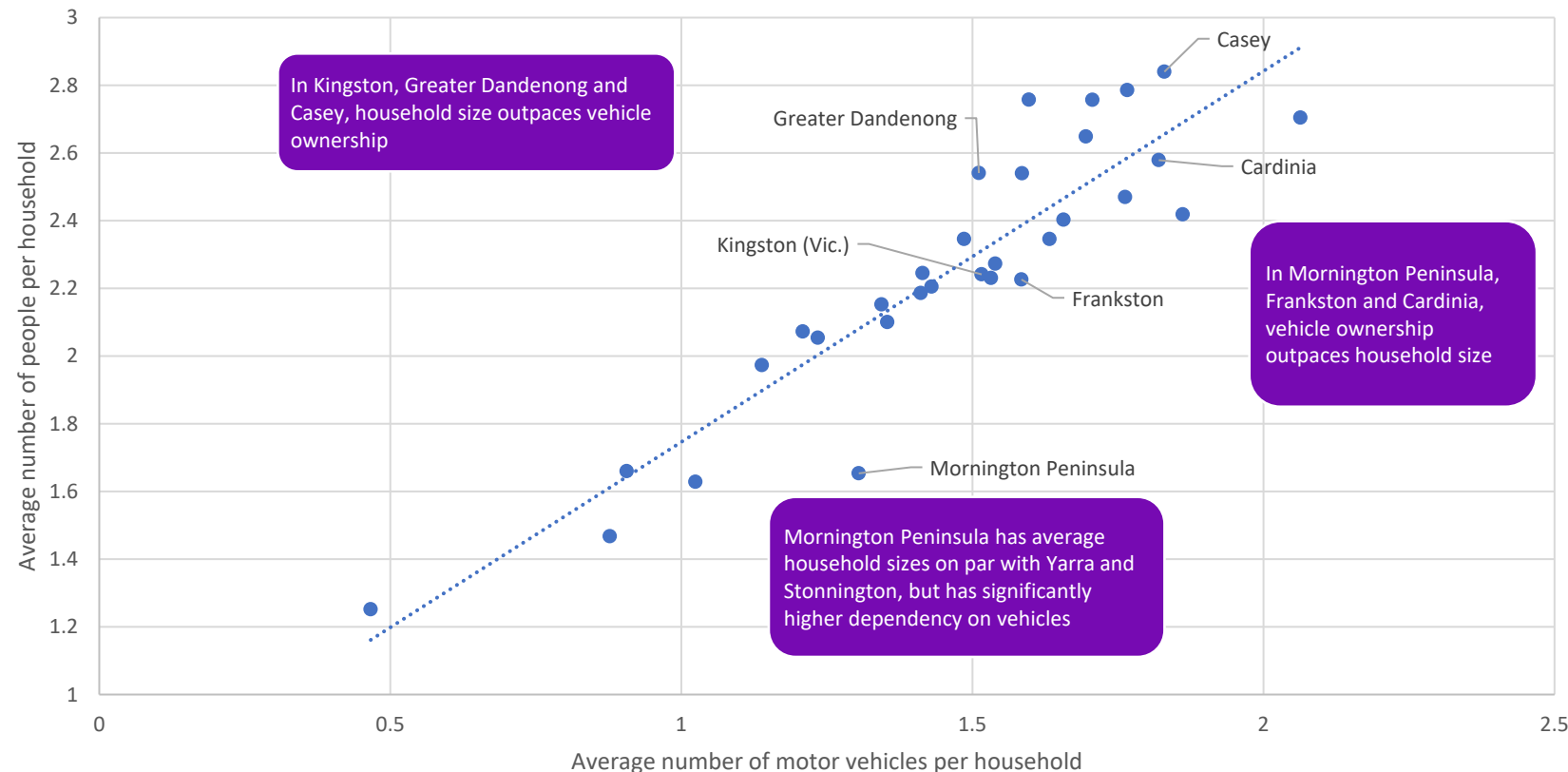


- Cardinia and Casey have the largest percentages of dwellings owning more than two vehicles in the Region, with both LGAs exceeding 60% in this measure.
- Casey (Narre Warren North, 1st) and Greater Dandenong (Keysborough – South, 8th) record some of the highest household proportions on this measure.
- Many are required to rely on private vehicles if not able to reliably access the public transport system, which imposes additional household expenses (if households are able to afford this in the first place).
- Other elements may also contribute to these results, including household size, disposable income and lifestyle factors.

Source: Australian Bureau of Statistics (2021)



Vehicle ownership outpacing household size may indicate challenges with accessing public transport



- While there is inevitably a positive correlation between household size and number of vehicles owned across Greater Melbourne, this graph indicates where household size outpaces vehicle ownership and vice versa.
- Household size may outpace vehicle ownership due to factors including affordability considerations or a greater ability to rely on public transport.
- Vehicle ownership may outpace household size due to factors including an inability to rely on public transport.

Source: Australian Bureau of Statistics (2021)

Part 4: Summary and next steps

Summary of results

This summarises three areas of significant need for each council, based on the findings of the analysis and feedback from council CEOs and the Project Working Group. While this is not an exhaustive summary of need across the six Councils and seven threshold criteria, it shows there are strong interdependencies between each metric – for example, poor accessibility may be a symptom of geographic isolation and poor transport connectivity.

Cardinia



Cardinia experiences high levels of bushfire risk, with a high number of properties at risk. It also has high agricultural water use.

27/31



Cardinia demonstrates accessibility challenges to key employment centres, with a relatively low level of employment self-sufficiency.

26/31



Areas of Cardinia demonstrate the highest level of need for secondary education in all of Melbourne. It also has relatively high tertiary education needs.

26/31

Casey



Casey has the highest level of housing need in Melbourne, showing significant shortfalls in peri-urban areas such as Cranbourne and Clyde.

31/31



Casey demonstrates accessibility challenges to key employment centres and shows a relative lack of employment self-sufficiency.

31/31



Casey demonstrates key transport accessibility challenges, particularly in peri-urban communities such as Clyde and Tooradin.

31/31

Frankston



Frankston has accessibility challenges to key employment centres, coupled with a relative lack of transport access in parts of the LGA.

27/31



Frankston demonstrates moderate flood risk along the bay. It also has moderate usage of water for agricultural purposes.

25/31



Frankston demonstrates the greatest increase in rental affordability across Melbourne, equal with Casey and Greater Dandenong.

20/31

Greater Dandenong



Greater Dandenong faces significant housing challenges, including the largest proportion of people experiencing homelessness in the State.

21/31



Access to tertiary education by public transport is in need of improvement, but is expected to improve following the Suburban Rail Loop.

20/31



Greater Dandenong has high levels of industrial jobs, however, it is insufficient for the local population. Diversification of jobs is required.

16/31

Kingston



Kingston has relatively high emissions due its industrial centres and ranks highly in terms of properties at risk from climate change.

28/31



Some areas of Kingston currently have poor access to health care services, especially by PT. However, this is expected to improve with SRL.

21/31



There are opportunities for local employment growth and increased job accessibility, including converting industrial land to office parks.

16/31

Mornington Peninsula



Mornington Peninsula does not have any significant health service hubs. Many residents travel long distances to access health care.

31/31



MP faces high levels of bushfire and flood risk. There is also intense usage of water for agricultural purposes.

31/31



MP has a low level of employment self-sufficiency. There are opportunities to improve local employment beyond the tourism sector.

30/31

Summary continued

This report objectively quantifies current and projected needs across the Southern Metropolitan Region relative to the remainder of Greater Melbourne.

Results from the key metrics are summarised in the table below, outlining results of each LGA within the Region across Greater Melbourne's 31 LGAs. Each of the metrics and sub-metrics should be interpreted in their full context, however, which will enable the data to tell a full spectrum of stories.

At a glance, the ranking table below reveals likely correlation between the Employment and economy, Health, Recreation and culture and Transport metrics as each of these are largely based on accessibility according to road and public transport travel time data (then adjusted to particular contexts). Suggested areas of focus are identified below.

Several SA2s in the Region record the **highest level of current early childhood education need** in Greater Melbourne, with needs primarily concentrated in growth areas.

Four out of six LGAs in the Region are placed in the **top quartile of job accessibility needs** across Greater Melbourne.

Five out of the six councils score in the top quartile of need in Greater Melbourne. For example, **recycled water infrastructure** has been a common thread to address agricultural water use

There are **limited health and social assistance services** in some areas of the Region, with accessibility challenging regardless of transport mode.

Each LGA faces several challenges related to housing that increased supply of affordable housing will alleviate, including population growth driving **unmet dwelling needs**.

Limited access to **regionally significant recreation and culture facilities** is exacerbated by infrastructure shortfalls and available transport options to access them.

There are significant populations **without access to bus stops** within 400 metres, let alone access to sufficient service frequency.

	Education	Employment and economy	Environment	Health	Housing	Recreation and culture	Transport
Cardinia	26	26	27	25	23	24	23
Casey	29	31	24	24	31	28	31
Frankston	19	27	25	20	20	17	20
Greater Dandenong	20	16	12	11	21	6	12
Kingston	17	17	28	21	15	15	16
Mornington Peninsula	23	30	31	31	25	30	28

Lowest-ranked quartile
Highest-ranked quartile

Numbers denote rankings in each sub-category (lower rank = greater need)

The next stage of this project will explore how to best resolve identified needs

The Investment Framework will consider a process to determine prioritisation of needs and how funding can be sought at different levels of government. Key questions to address in this project stage are:

Questions

What are councils' constraints to addressing this problem?

- Consider the extent to which councils able to address this problem, including any capability and resourcing gaps when seeking funding

How can councils attract funding?

- Consider alignment between identified needs and State and/or Commonwealth Government policies and strategies

How can investment solve the problem?

- Determine suitable Investment Framework to substantiate how particular investments can address a given problem
- Consider costs of not investing

How could this framework work in practice?

- Apply framework to three potential projects in the Region as practical case studies

Deliverables

Options Workshop

An Options Workshop will explore these questions with council CFOs and PMOs and discuss approaches to seeking funding for potential investments.

CFO
attendance and
input

Options Paper and Investment Framework

An Options Paper will outline funding pathways. This will form part of the Investment Framework to be applied to three examples of priority investments in readiness for use regarding future projects.