ESSENTIAL ECONOMICS

ONE MELBOURNE OR TWO?

Implications of Population Growth for Infrastructure and Services in Interface Areas

UPDATED REPORT

Prepared for

Interface Councils

by

Essential Economics Pty Ltd

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Contents

EXECUTIVE SUMMARY

This report has been prepared for the group of Interface Councils by Essential Economics Pty Ltd.

The key purpose of this study is to identify long-term infrastructure and service requirements for the Interface Councils, together with their associated costs, that will deliver liveability standards for Interface residents comparable to residents living in non-Interface metropolitan areas.

1 Role and Contribution of Interface Councils

- Interface Councils will continue to play a critical role in supporting Metropolitan Melbourne's economy in the coming decades, including accommodating approximately 64% of metropolitan population growth and approximately 57% of labour force growth over the period 2011-2026.
- Interface Councils are responsible for the management of 90% of Melbourne's Green Wedges, 98% of Melbourne's and 11% of Victoria's agricultural production, and the management of 55% of Melbourne's local road network, including a significant number of unsealed roads.
- A set of Strategic Development Objectives have been compiled by the Interface Councils focused on improved infrastructure and services provision (public transport, community services, etc), early intervention initiatives, and expanded local employment opportunities to overcome existing disadvantages and to ensure long-term economic efficiency in the Interface areas.

2 Population Outlook

- Population projections prepared by the State Government (DPCD) and id Consulting show that between 625,000 and 650,000 additional persons (approximately) will be accommodated in the Interface over the coming 15 years.
- This population growth is expected to be significantly underpinned by increases in families and working-age residents, but strong growth is also anticipated in the 65+ years aged group. This demography highlights the infrastructure challenges for the Interface, with the need to adequately service increasing requirements across all age cohorts.

3 Socio-Economic Benchmarking

- Benchmarking analysis show that compared to the Metropolitan Melbourne averages, the Interface Councils are characterised by relatively low average incomes, poor educational and health outcomes, high unemployment rates, and high levels of youth disengagement with regard to higher education and workforce participation. Early intervention through the delivery of appropriate and timely infrastructure and services is critical to alleviate this situation.
- The Interface has a significant deficit in the provision of local employment opportunities with only approximately 1 job provided for every 2 labour force participants (compared to a 1:1 ratio for non-Interface areas). There is a notable lack of diversity in local job opportunities in the Interface, especially with regard to professional jobs.
- A relatively low provision of higher order services (hospitals, TAFEs, Courts, libraries, arts centres etc) is observed in the Interface, as well as poor provision of public transport options.

- Lack of local job and service provision, together with inadequate public transport infrastructure has led to a heavy reliance on private vehicle-based travel in the Interface creating significant congestion-related economic dis-benefits.

- Over the past five years little progress has been made in closing the gap between Interface and non-Interface areas in terms of local job provision, educational outcomes and employment diversity (with the relative lack of professional and management jobs very apparent). Between 2006-2011 the jobs deficit in Interface areas increased from approximately 240,000 jobs to 280,000 jobs, while unemployment rates have trended well above non-Interface levels.

4 Future Infrastructure Service Requirements and Costs

- Significant infrastructure and resources are now required to ensure Interface Council areas are adequately provided for in order to close the gap with non-Interface Council areas.

- Investment of approximately $9.8 billion (in constant 2011 dollars) will be required over the coming 15 years for the provision of a range of new and upgraded infrastructure and services in the Interface, as shown in the Table below.

Estimated Costs Associated With Providing Key Infrastructure and Services, Interface Councils, 2011-2026

Component	Units Required	New Buildings Required	Estimated Costs* (by 2026)
Kindergarten	7,440 places	74 buildings	$64 million
Primary School	72,710 places	290 buildings	$619 million
Secondary School	50,060 places	95 buildings	$496 million
TAFE	61,370 places	12 buildings	$364 million
Aged Care	8,595 beds	146 buildings	$1,149 million
Hospitals	2,560 beds	34 buildings	$1,093 million
Libraries	9,125m^2 floorspace	18 buildings	$19 million
Sub-total			$3,804 million
Public Transport (Capital investment and annual operational subsidy)	+121,225 users		$6,000 million
Total			**$9,804 million (or $9.8 billion)**

*Costs include land purchase, building construction, carparking, landscaping and site works.

5 State Economic Benefits of Infrastructure and Resource Funding

- Based on modelling prepared by the Bureau of Transport and Regional Economics, cumulative congestion costs between 2011 to 2026 in the Interface are estimated to be approximately $42 billion.

- In contrast, the cost of providing key infrastructure over this period ($9.8 billion) represents just 23% of these cumulative congestion costs. The provision of more local jobs, better community services and enhanced public transport options in the Interface would be expected to reduce reliance on vehicle-based travel over time.

- The provision of infrastructure and services identified in this study would be expected to deliver approximately 36,000 additional jobs in the Interface in the next 15 years, and this

would assist in meeting a share of the overall employment target of creating 245,000 jobs over this period.

- Importantly, the provision of higher-order services (such as better public transport options, major hospitals, TAFEs, schools, kindergartens, aged care facilities etc), will considerably improve liveability in the Interface, making these localities more attractive investment propositions.

- Enhanced infrastructure and service provision will also improve diversity of employment, health and education outcomes (through early intervention), reduce pressure on road infrastructure, and assist in improving environmental outcomes in the Interface.

INTRODUCTION

Background

This report has been prepared for the group of Interface Councils by Essential Economics Pty Ltd.

The Interface Council group comprises the ten contiguous local government areas (LGAs) that form metropolitan Melbourne's outer urban ring, and mark the interface of 'city' and 'country'.

As such, the interface regions have a dual identity that makes them part-urban and part-rural. This presents unique challenges for planning, growth and economic development in outer urban municipal areas, as Interface Councils generally do not have access to the same resources or infrastructure as do other metropolitan Councils, and do not qualify for most forms of regional assistance, despite being 90% rural in character.

The key purpose of this study is to identify long-term infrastructure and service requirements for Interface Councils, together with their associated costs, that will deliver liveability standards for Interface residents comparable with their non-Interface counterparts. This evidence-based analysis will allow the Interface Councils to advocate to Federal and State departments for funding and other support to ensure the required level of infrastructure and services are delivered in a timely manner.

Objectives

The objectives of this report are:

- To project the implications of population growth in Interface Councils on their resources and infrastructure requirements
- To estimate infrastructure and service needs and associated costs required to meet population growth projections and to close the provision gap with non-Interface Councils
- To identify benefits to the State of ensuring an equitable level of service provision in Interface Councils

This Report

This report is organised in the following chapters:

Chapter 1: Role and Contribution of Interface Councils

Chapter 2: Evaluation Framework

Chapter 3: Population Outlook

Chapter 4: Socio Economic Profiling and Benchmarking

Chapter 5: Future Infrastructure and Service Requirements and Costs

Chapter 6: State Economic Benefits of Infrastructure and Resource Funding

Chapter 7: Key Findings

1 ROLE AND CONTRIBUTION OF INTERFACE COUNCILS

1.1 Introduction: Membership and Purpose

The Interface Councils of Melbourne are a consortium of outer LGAs that have come together to promote outer Melbourne and to ensure its future as a liveable location. The member Councils, in alphabetical order, are as follows:

- The Cities of **Casey, Hume, Whittlesea and Wyndham**
- The Shires of **Cardinia, Melton, Mitchell**, **Mornington Peninsula**, **Nillumbik** and **Yarra Ranges.**

The group is operationally distinct from other groupings of Councils, and is unique in having a membership base that covers Melbourne's geographic east, west, south and north.

The group includes all seven LGAs that come under the planning auspices of the Growth Areas Authority (Cardinia, Casey, Hume, Melton, Mitchell, Whittlesea and Wyndham), but the participation of Mornington Peninsula, Nillumbik and Yarra Ranges emphasises that the issues that bring the group together extend beyond just urban development planning issues, and include much higher-order questions related to the dual-identity of Melbourne's Interface as the home of both urban *and* rural communities.

1.2 Location and Geographic Context

Melbourne, like most Australian capital cities, is a 'city of suburbs'. The official metropolitan area, as defined by the Melbourne Statistical Division (MSD) in the Australian Standard Geographical Classification, has a large geographic footprint, as illustrated in Figure 1.1.

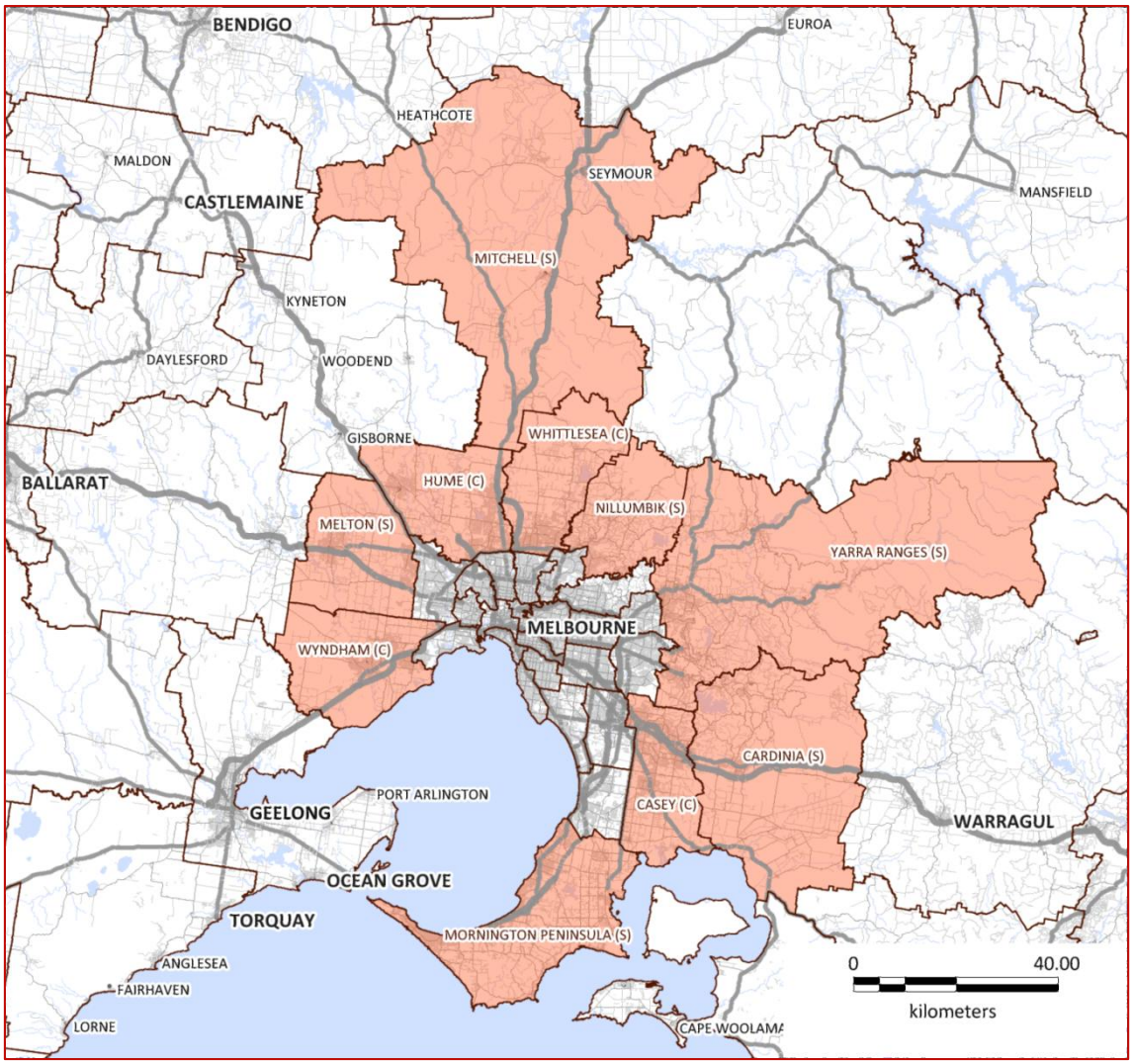
Melbourne's population increased by approximately 665,000 persons over the past decade (2001-2011), creating significant demand for new housing and placing new growth pressures on the Interface Councils in particular. As a result, the State Government has made successive changes to the city's Urban Growth Boundary (UGB), and has established the Urban Development Program (UDP) to help ensure the suitable provision of residential and industrial land supply.

Recognising that changing settlement and development patterns are reshaping the city's boundaries, the Australian Bureau of Statistics (ABS) is redefining the functional extent of the metropolitan area by replacing the MSD with the Melbourne GCCSA (Greater Capital City Statistical Area). The GCCSA brings areas to the north of the Statistical Division into the spatial and geo-economic definition of Melbourne for the first time, including parts of Mitchell Shire.

Future ABS publications and Census results (2011 onwards) will use the new GCCSA boundary to define Melbourne, and this highlights the importance of understanding and responding to changes in Melbourne's social and economic geography, especially at the fringe.

Figure 1.1 shows the location of the Interface Councils with reference to metropolitan Melbourne and the surrounding peri-urban area.

Figure 1.1: Location of Interface Council Areas



Source: Essential Economics Pty Ltd

1.3 Identity of Interface Councils

The Interface sub-region, like all of Melbourne's metropolitan sub-regions, is in large part defined by its geography, and in particular by its location relative to the Melbourne Central Business District (CBD). This in turn influences land values, land uses, population trends, and the socio-economic activities and well-being of local residents.

In a geographical sense, the Interface connects *urban* and *suburban* Melbourne with *peri-urban* Melbourne. In other words, the Interface could be viewed as a doughnut-shaped ring that bridges the inner and middle city with the hinterland. Most importantly, the majority of Interface Councils consider themselves to be *part of the city,* as opposed to the peri-urban, which is adjacent to the city.

In view of its distance from Melbourne CBD and the central activities core, the Interface has an economic and social interdependency with places other than the traditional city centre, such as middle and outer metropolitan activity centres (eg Dandenong), peri-urban towns (eg Romsey), and in some

cases regional towns or cities (eg Warragul). As such, the character of the Interface combines both urban and rural elements.

Traditionally in Melbourne, young families and new migrants have generally looked to the urban fringe in search of affordable housing and as a pathway to home ownership (noting that the once-affordable inner city areas have long since undergone gentrification). The Interface areas continue to play the same role today in terms of providing relatively lower-priced land and housing. During the population boom of the previous decade (2001 to 2010), during which time Melbourne's population grew by approximately 605,000 people, almost 6 in 10 persons made their home in the outer suburbs. This includes a higher-than-average proportion of young families and culturally and linguistically diverse communities. As a result, socio-economic indices and most other social and economic indicators (eg SEIFA, VAMPIRE) usually show lower levels of material and societal well-being in Interface areas than in the other areas of Melbourne.

A good deal of diversity exists *within* the Interface, too. The ten member Councils are far from being the 'same' as each other, and differences exist for reasons such as their location in respect to different sides of the city, their different histories, and their different local economies. For example, Hurstbridge and Diamond Creek in the Shire of Nillumbik have been the home of settled communities since the mid-nineteenth century, and this contrasts profoundly with parts of the growth area Councils to the west of Melbourne which are developing large new communities from scratch.

However, the Interface Councils as a group have a strong common interest in ensuring that their communities remain strong and do not get overlooked simply because they have a mixed identity of urban, suburban and rural characteristics.

1.4 Supporting Melbourne's Growth and Liveability

The Interface Councils make a significant ongoing contribution to supporting the economy, sustainability and liveability of Melbourne, and of Victoria as a whole. Their function and role in the metropolitan area is distinct from that of the inner city and the middle ring of suburbs and – in a time of strong population growth and structural economic change in Australia – the importance of the Interface Councils in terms of their socio-economic and environmental role is increasing rather than decreasing.

In particular, four aspects of the Interface region help to define its important strategic contribution to the quality of life in Melbourne:

- Supporting population expansion
- Managing Green Wedges
- Supporting agricultural production.
- Supporting the management and maintenance of local roads

Each of these aspects is considered below.

Supporting Population Expansion

Having been regarded as one of the world's most liveable cities for almost two decades, Melbourne has attracted more overseas immigrants than any other Australian city in recent years. Interstate relocations to Melbourne have also increased. The Interface has been crucially important to ensuring that sufficient quantities of affordable housing have been available. This has helped to accommodate population

growth, support Victoria's economic growth, and maintain liveability across the whole metropolitan area.

Table 1.1 shows that between 2001 and 2010 the ten Interface Councils accommodated 318,480 of Melbourne's new residents, whereas the other twenty-two Councils accommodated 264,640 new residents. In other words, a minority of Councils – the ten Interface Councils – facilitated around 55% of the city's population boom.

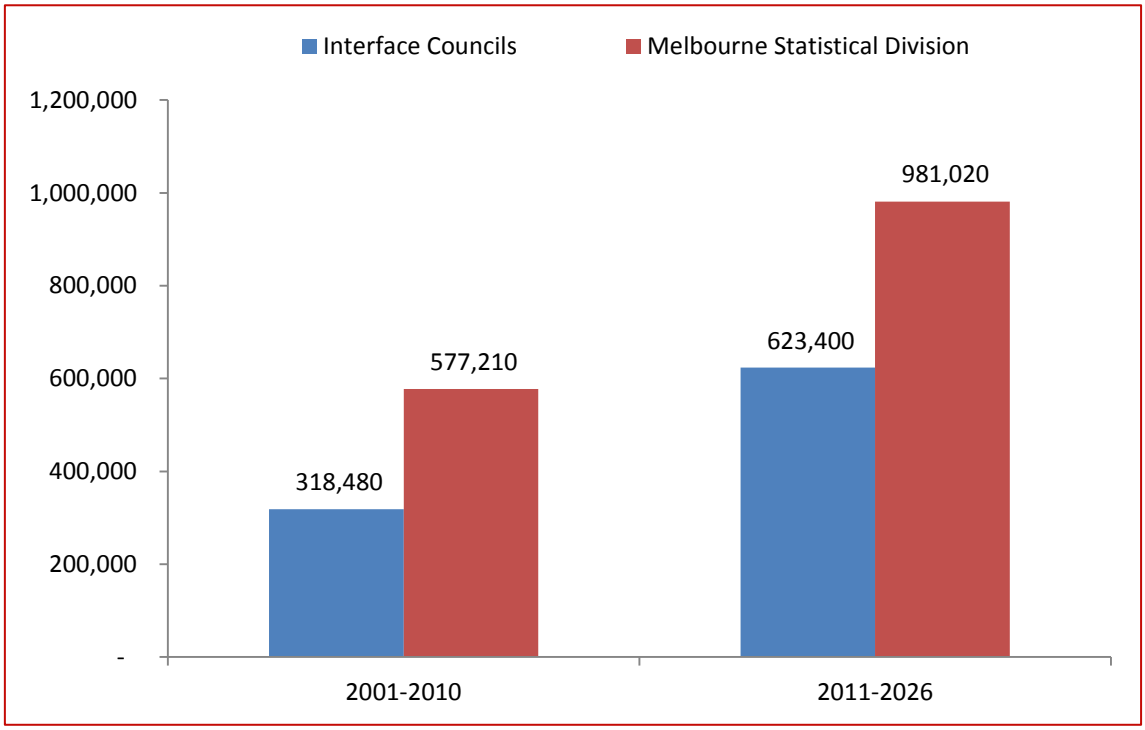
Table 1.1: Historic Population Trends, Selected Locations 2001 to 2010

	2001	2005	2010	Change 2001-10	AAGR 2001-10
Interface Councils	986,810	1,112,640	1,305,290	+318,480	+3.2%
Metropolitan Melbourne (excluding Interface Councils)	2,513,220	2,599,600	2,777,860	+264,640	+1.1%
Melbourne Statistical Division	3,471,630	3,680,610	4,048,840	+577,210	+1.7%

Source: ABS Regional Population Growth, Australia, Cat. No. 3218.0
Note: AAGR - Annual Average Growth Rate. Figures rounded

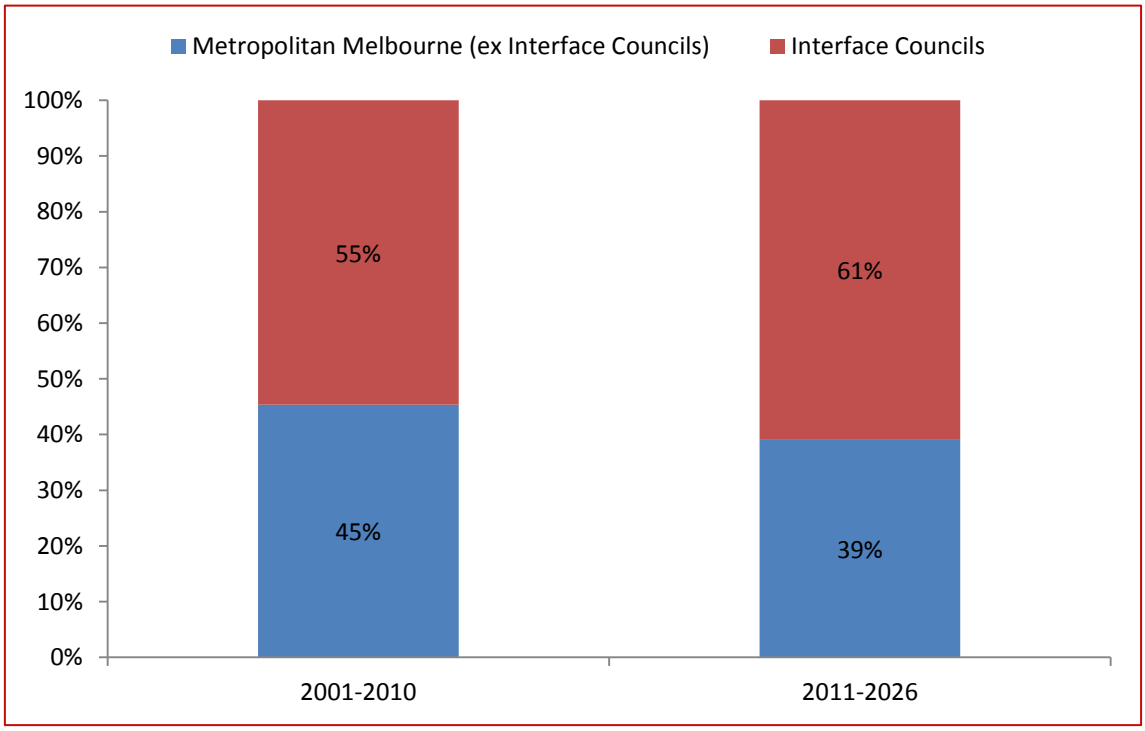
The trend for Interface Councils to do the 'heavy lifting' in terms of facilitating population growth is expected to continue to 2026, as Melbourne's population approaches, and then exceeds, 5 million people. The Interface Council areas are anticipated to accommodate approximately 60% of Melbourne's population growth over the coming 15 years according to State Government projections (although other forecasts show an even higher growth share). This data is shown in Figures 1.2 and 1.3, and the population outlook is discussed in greater detail in Chapter 3.

Figure 1.2: Interface Council's Historic and Projected Population, 2001 to 2026



Source: ABS Regional Population Growth, Australia, Cat No. 3218.0; Victoria in Future 2012.

Figure 1.3: Historic and Projected Share of Metropolitan Population Growth for Interface Councils, 2001 to 2026



Source: ABS Regional Population Growth, Australia, Cat No. 3218.0; Victoria in Future 2012.

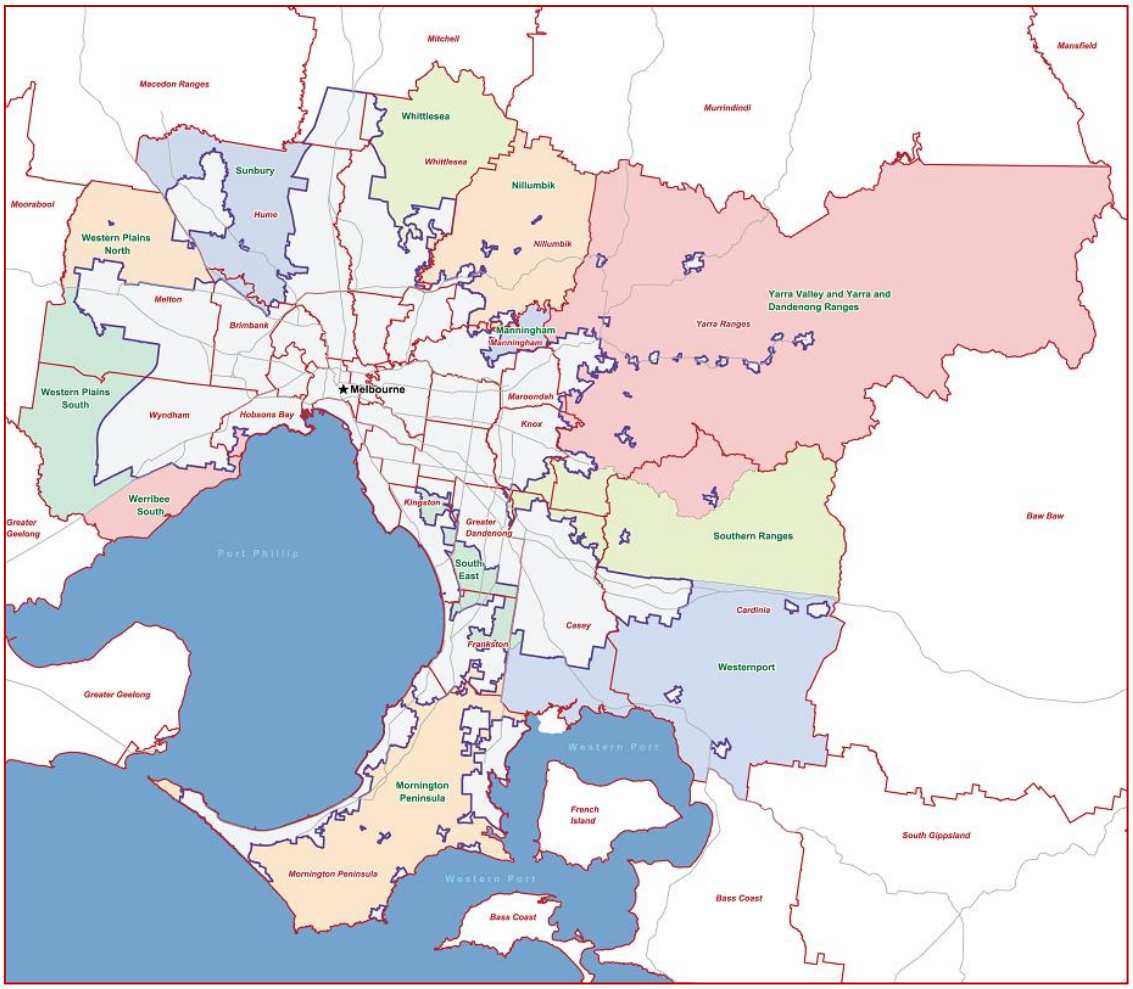
Managing Green Wedges

Melbourne's twelve metropolitan green wedges span a large proportion of the Interface and ensure that sufficient open space is conserved for biodiversity, agriculture, tourism and recreation, and cultural heritage, as well as vital infrastructure such as reservoirs, sewage treatment plants, quarries and airports.

These open spaces were set aside to be the "lungs of Melbourne" by former Premier Sir Rupert Hamer in 1971, and were given legislative protection by former Premier Steve Bracks in 2002. As the map at Figure 1.4 clearly shows, a significant overlap exists between the location of green wedges and the location of the Interface, with Interface Councils accounting for the provision of approximately 90% of green wedge land.

The green wedges are governed by Green Wedge Management Plans, effectively in partnership between Councils and the State Government.

Figure 1.4: Location of Metropolitan Green Wedge Areas



Source: Department of Planning and Community Development
Note: LGA names written in red; green wedge names written in green.

Supporting Agricultural Production

The Interface Councils accommodate the vast majority of metropolitan Melbourne's agricultural land holdings, and the activities from this land contribute significantly to metropolitan agricultural production. In 2006 – the most recent year for which data is available – the nine Interface Councils in the MSD (ie excluding Mitchell Shire) provided 224,400ha, or 97%, of the metropolitan area's total agricultural landholdings of 230,000ha.

The inclusion of Mitchell Shire raises the total amount of agricultural land in the Interface by 126,600ha to approximately 356,000ha.

The gross value of agricultural production in the MSD in 2006 was $1.017 billion, with the nine Interface Councils of the MSD contributing 94% of the total (or 98% if Mitchell Shire production is included). As shown in Table 1.2 and Figure 1.5, the gross value of agricultural production in the Interface Councils was $993 million, in contrast to just $58 million from the remainder of the city, reflecting the fact that land use priorities are significantly different in inner and middle Melbourne.

The value of agricultural production in Victoria was $9.2 billion in 2006, with the Interface council areas responsible for approximately 11% of this total.

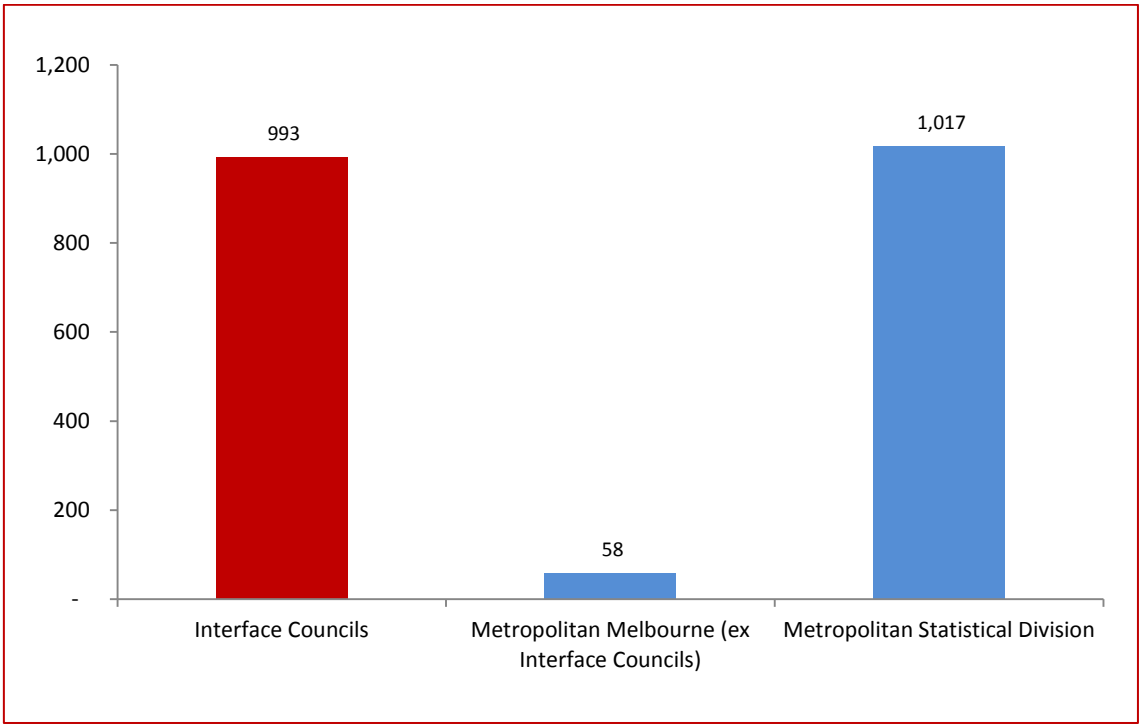
Updated ABS Agricultural Census 2011 data for small areas will be available later in 2013.

Table 1.2: Agricultural Land Holdings and Gross Value of Production, 2006

	Agricultural Land Holdings	Production
Interface Councils	351,000ha	$993m
Metro Melbourne (excluding Interface Councils)	5,600ha	$58m
Metropolitan Statistical Division	230,000ha	$1,017m
Victoria	**15,475,000 ha**	**$9,227m**

Source: ABS National Regional Profiles, 2005-2009; ABS Value of Selected Agricultural Commodities Produced, Cat. No. 7502.0.

Figure 1.5: Gross Value of Agricultural Production ($ millions), 2006



Source: ABS National Regional Profiles, 2005-2009

Local Roads

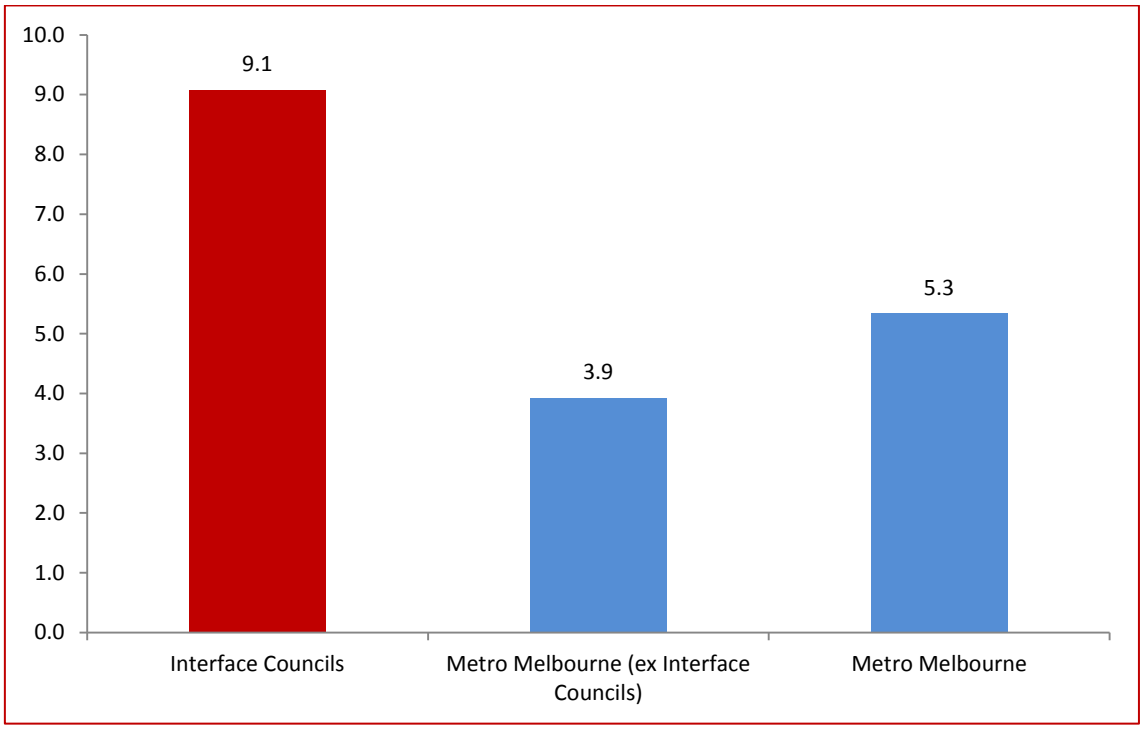
The Interface Councils are responsible for the maintenance of significantly longer lengths of local roads compared to Metropolitan Melbourne (excluding Interface Councils) and the MSD. When Mitchell Shire is excluded, the Interface Councils are responsible for 10,990km of local roads and this represents approximately 50% of all local roads in the MSD. On a per capita basis, the Interface Councils have 9.1km of local roads per 1,000 population, and this contrasts with 3.9km per 1,000 population for Metropolitan Melbourne (excluding Interface Councils) and 5.3km per 1,000 population for the MSD. Importantly, the Interface Councils are responsible for a considerable proportion of Metropolitan Melbourne's unsealed roads. This information is presented in Table 1.3 and Figure 1.6.

Table 1.3: Length of Council Operated Roads, Selected Areas, 2010

	Length of Roads (Km)	Population (No.)	Km per 1,000 Population
Interface Councils	12,390	1,364,800	9.1
Metropolitan Melbourne (excluding Interface Councils)	10,830	2,755,820	3.9
Melbourne Statistical Division	21,820	4,083,570	5.3

Source: Victorian Grants Commission - Annual Report 2010/11

Figure 1.6: Council Local Roads KMs per 1,000 Population, Selected Areas, 2010



Source: Victorian Grants Commission - Annual Report 2010/11

1.5 Policy Orientation

It is highly likely that by the middle of this century Australia's population will have exceeded 30 million and, according to some estimates, will have surpassed 35 million and be fast approaching 40 million. At both the Federal and State levels, long-term policy-makers are developing strategies to plan for the accommodation of this growth, and to ensure that the economy can develop in a way that can capture the full benefits of population growth while preserving the liveability and sustainability of Australian cities.

Metropolitan growth areas across Australia will play a fundamental role in the coming decades in ensuring a successful transition to a nation with a much larger population and with new economic opportunities. Melbourne's Interface will therefore assume a role of increased State and national significance, as it plays its part in facilitating growth and maintaining living standards.

The public policy framework therefore bears great relevance to the Interface, and is outlined below.

Federal Policy Directions

At the Federal level, a renewed emphasis is placed on the role of 'localism' as a possible means to address the challenges and opportunities of the future, and this creates a central role for cities and regions. The three main pillars of this approach are as follows:

- The **National Urban Policy.** The *Our Cities, Our Future* policy sets out the priorities, goals, objectives and principles for how metropolitan areas should develop, noting their strategic importance to economic productivity, liveability and sustainability. The objectives that relate most closely to the Interface are: improving labour and capital productivity; integrating land use and infrastructure; improving the efficiency of urban infrastructure; protecting and sustaining the natural and built environments; supporting affordable living choices; improving accessibility and reducing dependence on private vehicles; and supporting community well-being.

- The **National Population Policy**. The *Sustainable Australia - Sustainable Communities* policy seeks to enhance urban and suburban liveability by improving the provision of social and economic infrastructure. Recognising that typical patterns of urban settlement are creating congestion in urban areas, the policy supports and provides funding to local and State agencies to plan for more employment opportunities outside CBDs. A good mix of local employment provision is critical to ensuring the future prosperity of the Interface Councils as liveable and successful communities.

- The **Regional Development Australia** (RDA) initiative. This initiative brings all spheres of government together to develop individual economic development plans for every metropolitan and country region in Australia. Nine RDA regions are located in Victoria, including four that cover Metropolitan Melbourne (Mitchell Shire is included in the non-metropolitan RDA region of Hume). Through the RDA process, the Federal Government provides policy support and funding for informed local and regional decision-making on planning matters, economic matters, environmental issues, social inclusion, business growth and investment attraction.

State Policy Directions

The Victorian Government is currently preparing its new Metropolitan Planning Strategy (MPS). The Government's Ministerial Advisory Committee recently issued a Discussion Paper called "*Melbourne, let's talk about the future"* which is now subject to a public submission process prior to the preparation of the draft MPS.

The Discussion Paper identifies the prospect of 'two Melbournes', noting (p26):

> *"concern was expressed about the potential emergence of 'two Melbournes' – a successful and 'choice rich' inner core and a fringe with fewer choices – and the growing distance between where people could afford to live and where jobs were located"*

Challenges identified for Melbourne's growth areas include:

- Ensuring social and economic participation for everyone regardless of where they live
- Providing jobs closer to where people live
- Improving transport connections to jobs and services
- Providing easy access to childcare and schools
- Ensuring easy access to the highest level of education to assist up-skilling and economic participation
- Ensuring health and education services are located close to where people live to improve job provision, social connection and provide community amenity
- Ensuring that services are provided in a more timely manner to urban growth areas and established outer areas of Melbourne

The Discussion Paper identifies the following principles to inform the MPS:

1 A distinctive Melbourne

2 A globally connected and competitive city

3 Social and economic participation

4 Strong communities

5 Environmental resilience

6 A polycentric city linked to regional cities

7 Living locally – a '20 minute' city

8 Infrastructure investment that supports city growth

9 Leadership and partnership

The final MPS is expected to spell out a substantial ongoing role for the Interface Councils in facilitating Melbourne's population growth, dwelling growth and economic expansion. The GAA remains the key planning co-ordination body for the growth areas, with the new Growth Corridor Plans being the principal instruments for guiding and implementing high-level, integrated land use and transport planning.

1.6 Strategic Development Objectives of Interface Councils

Although the Interface region includes all of Melbourne's designated growth areas, the development issues in the Interface are broader than those relating to land use and activity centre planning.

At the heart of the Interface region's long-term development objectives is the need to ensure that its resident communities are provided with the opportunities to secure the best possible standard of living for themselves, and that they are not left behind as second-tier residents of Melbourne.

This risk exists because Interface communities do not usually experience the full benefits of urban living (such as reasonably comprehensive public transport access), nor do they receive full access to the investment assistance offered to regional communities (such as capital expenditure grants).

Accordingly, the list of priorities for Interface Councils is broad and extends across several themes, as follows:

- Providing more diverse jobs closer to home, to ensure the viability and sustainability of all communities in Melbourne
- Addressing transport disadvantage, including roads and public transport
- Addressing rural/urban funding inequity
- Ensuring effective green wedge management and land management
- Ensuring effective water management
- Improving community infrastructure, including sports and cultural facilities
- Providing better services for young people, including early intervention support and mental health support
- Maximising agricultural production
- Providing equitable access to post-secondary education, health and community resources to address issues of comparative disadvantage.

1.7 Summary and Implications

1 The Interface Councils are a strategic grouping of outer local government areas (including all of Melbourne's growth areas) that have come together to promote outer Melbourne and to ensure its future as a liveable location.

2 Interface Councils play an important role in supporting Metropolitan Melbourne's economy, and this role will become more critical as Melbourne's population expands to 5 million persons and beyond.

3 The ongoing and future role of the Interface Councils includes:

- Accommodating approximately 65% of metropolitan population growth over the next 15 years
- Supporting Melbourne’s labour force requirements by providing 55% (or more) of labour force growth between 2011-2026
- Responsible for management of 90% of Melbourne’s Green Wedges
- Responsible for 98% of Melbourne’s agricultural production and 11% of Victoria’s agricultural production
- Responsible for 55% of Melbourne’s local road network, including a considerable amount of non-sealed local roads

4 The Interface Councils have developed a set of Strategic Development Objectives aimed at ensuring living standards for Interface residents are comparable with those experienced in non-Interface Metropolitan areas. To achieve the desired outcome, improved infrastructure and services (public transport, community services, and local jobs) will need to be delivered in a timely manner to remove existing disadvantage and ensure economic efficiency in the Interface.

5 This study will assist in identifying key areas of disadvantage and infrastructure and service under-provision, together with estimating requirements and costs associated with meeting population expansion needs and closing the gap with non-interface Metropolitan provision.

2 EVALUATION FRAMEWORK

2.1 Introduction

An Evaluation Framework has been prepared in conjunction with the Interface Council Group to guide the analysis. The Framework includes population scenarios, benchmarking options, potential indicators to identify infrastructure and service gaps, and data collection tools (including a Council data survey).

2.2 Framework Development

The Evaluation Framework was developed through discussions and feedback with Interface Council members. A Council Survey was prepared and completed by each member Council prior to the commencement of this study, with some of this earlier data being used to inform the current analysis.

2.3 Population Scenarios

Recognising that differing population and demographic projections are available, the Interface Council Group agreed it would be prudent to assess future requirement against two population scenarios.

These population scenarios are based on the following:

Scenario 1: Department of Planning and Community Development (DPCD) – Victoria in Future 2012

Scenario 2: Forecast id (using population and demographic projections prepared for each member Council).

2.4 Benchmarking

The following three benchmarking options were considered for the study:

Option 1: Benchmark against a selected small group of municipalities (eg Boroondara, Manningham, Moonee Valley)

Option 2: Benchmark against middle-ring metropolitan municipalities that neighbour Interface Councils (ie Banyule, Brimbank, Darebin, Greater Dandenong, Frankston, Hobsons Bay, Knox, Manningham, Maroondah, Moonee Valley)

Option 3: Benchmark against the balance of Metropolitan Melbourne municipalities excluding the Interface Councils (similar to the approach used by the National Growth Areas Alliance)

The Interface Council Group selected Option 3 as providing the most meaningful benchmark to assess liveability standards and future infrastructure and service needs. This approach is similar to the method adopted by SGS Planning and Economics in preparation of economic analysis for the National Growth Area Alliance (*Cost Benefit Analysis of Investment in Growth Areas, 2009*), and therefore provides a level of consistency when assessing issues relating to growth areas from a State and national perspective.

For benchmarking purposes, the 22 non-Interface LGAs have been grouped to provide a comparison of socio-economic factors and gap identification. These municipalities are shown in Table 2.1

Data relating to the Interface and Metropolitan Melbourne (excluding Interface Councils) does not sum to the total for the MSD. This is due to the inclusion of Mitchell Shire Council in the Interface Council Group, noting that this municipality forms part of regional Victoria and not the MSD.

The analysis in this report provides data comparisons for the following defined areas:

- Interface Councils
- Metropolitan Melbourne (excluding Interface Councils)
- Melbourne Statistical Division.

Table 2.1: Non-Interface Metropolitan Melbourne Municipalities Grouping

Local Government Area		
Banyule	Hobsons Bay	Monash
Bayside	Kingston	Moonee Valley
Boorondarra	Knox	Moreland
Brimbank	Manningham	Port Phillip
Darebin	Maribrynong	Stonnington
Frankston	Maroondah	Whitehorse
Glen Eira	Melbourne	Yarra
Greater Dandenong		

2.5 Indicators

A suite of potential indicators were prepared by the consultants as a guide to identifying key infrastructure and service needs. The indicators were based on anecdotal evidence, a review of the Interface Council Workplan, and discussions with the Interface Council Group.

As Table 2.2 shows, areas for analysis focus on improved community infrastructure and its impact on improving health, education, employment and liveability outcomes. Potential indicators were prepared for the following categories:

- Provision of educational services
- Provision of health services
- Provision of community and recreational services
- Access to suitable employment opportunities
- Access to an appropriate level of transport infrastructure
- Land management

Not all potential indicators identified have been used in the analysis due to lack of available comparable data for Interface and non-Interface areas.

Table 2.2: Evaluation Indicators Matrix

Category	Current Situation	Potential Gaps	Future Needs (Potential indicators)
Provision of educational services	• Lag in the provision of local education facilities • Local residents with relatively low educational qualifications • Relatively low proportion of local residents employed in professional occupations • Relatively high level of school leaver disengagement • Relatively low level of labour force participation • Relatively high unemployment rates	• Under-provision of primary, secondary and higher education facilities	• Primary school places required (public and private) • Secondary school places required (public and private) • TAFE/VET places required
Provision of health services	• Lag in the provision of local health services • Relatively poor outcomes reported by health agencies for a range of medical and mental health outcomes • Relatively low child immunisation rates • Relatively low level of child health checks • Relatively poor outcomes observed in terms of self-reported health and subjective wellbeing	• Under-provision of medical facilities and services, including mental health services	• Maternal child and health centres required • Hospitals/hospital beds required (public and private) • Aged care beds required • GP clinics/primary care centres required • Mental Health services required

Category	Current Situation	Potential Gaps	Future Needs (Potential indicators)
Provision of community and recreational services	• Relatively low provision of kinder/preschool facilities • Relatively low provision of child care facilities • Relatively low provision of public library facilities • Relatively low provision of courts and legal services • Relatively low provision of arts and cultural facilities • Relatively low provision of sports and recreational facilities • Relatively low opportunities to participate in arts and cultural activities reported • Relatively low presence of State-level sports facilities	• Under-provision of recreational and community facilities that impact on liveability	• Kinder/preschool places required • Child care places/centres required • Public library floorspace/resources required • Parks/recreational space (ha) required • Municipal Performing Arts Centre(s) required • Municipal Leisure Centre (s) required • State -level sports facilities required • Court facilities required
Access to suitable employment opportunities	• Relatively low proportion of local jobs provided to serve local labour force participants • Relatively long distances travelled by local labour force participants to access work outside municipality • Relatively high unemployment rates • Relatively poor diversity of employment within local area • Relatively poor outcomes reported in terms of work-life balance	• Under-provision of jobs – especially higher-value jobs	• Number of jobs required to achieve employment self-containment • Number of jobs required by industry type and occupation to achieve greater employment diversity

Category	Current Situation	Potential Gaps	Future Needs (Potential indicators)
Access to an appropriate level of transport infrastructure	• Relatively high car ownership rates • Relatively poor access to public transport options • Very low public transport usage for work purposes • Responsibility for relatively high number of km of local roads • significant increase in vehicle traffic on local roads	• Under-provision of public transport and infrastructure and services •	• Number of public transport facilities required eg trains stations, trams routes (if applicable), bus routes, night-rider routes • Number of park-and-ride facilities required • Increase in traffic volumes on local roads • Km of roads qualifying for transfer from Council to VicRoads responsibility
Land Management	• Provision of 90% of Green Wedge land which is accessible for all Melbournians • Relatively high proportion of parks and recreational zoned land • Provision of the majority of Metropolitan Melbourne's productive agricultural land	• Under-provision of funding for programs focused on protecting and managing Green Wedges, open space and agricultural land	• Additional funding required for land management programs

2.6 Data Collection

Interface Council Survey

As noted previously, a data collection survey was prepared and compiled by the Interface Council Group prior to the commencement of this study. While the survey was not specifically tailored for the requirements of this analysis, some data has been used in the study, either directly or for the purposes of verification of other datasets.

The Interface Council Survey template is shown in Table 2.3.

Table 2.3: Interface Councils Survey

Category	Measure
Family and Community Services	
1. Infants and Mothers	
Maternal child and health centres	No. of centres
Kindergarten/preschool dental clinics	No. of clinics
2. Families and children	
Play centres (without teachers)	No. of centres
Crèches and day nurseries (including day care centres)	No. of centres
3. Community Health	
Health clinics	No. of centres
Community health centres	No. of centres
4. Community Welfare	
Youth centres, activities	No. of centres
Migrant centres, services	No. of centres
Refuges, drop-in centres, neighbourhood houses	No. of centres
5. Education	
Kindergartens/preschools	No. of kindergartens/preschools
Play centres (teacher supervised)	No. of centres
Family day care places	No. of day care places per annum
6. Housing	
Staff residences	No. of units
Aged persons units/disabled persons units (except aged residential care facilities, i.e. hostels and nursing homes, which should be recorded under 'Residential Care'	No. of units
Aged and Disabled Services Residential Care	
7. Residential Care	
Retirement villages, Nursing Homes, Hostels, Supported residential care	
Low care (hostels)	No. of beds
High care (nursing homes)	No. of beds
8. Community Care	
Adult Day Centres (planned activity groups)	No. of centres
Disability day programs	No. of program days per annum
9. Aged Services	
Senior Citizen Centres (including public halls used principally as Senior Citizen Centres)	No. of centres
Recreation and Culture	
10. Public Halls	
Public halls (exclude dedicated Senior Citizen Centres or Halls of Community Centres principally used as Senior Citizen Centres)	No. of halls
11. Libraries	
Regional libraries	No. of libraries
Local libraries	No. of libraries
Mobile libraries	No. of units
12. Other culture	

Category	Measure
Museums	No. of museums
Art galleries	No. of galleries
Theatres	No. of theatres
Performing Arts centres	No. of centres
13. Passive Recreation	
Parks, gardens, reserves	No. of hectares
Nature parks, zoos, fauna parks, flora parks	No. of hectares
Bicycle tracks through parks and gardens	No. of kilometres
Pedestrian tracks through parks and gardens	No. of kilometres
14. Active Recreation	
Sports complexes (indoor)	No. of centres
Swimming pools (exclude sports complexes)	No. of pools
Golf courses	No. of courses
Tennis courts	No. of courts
Bowling greens	No. of greens
Sports fields	No. of sports fields
Waste Management	
15. Sanitation	
Transfer stations	No. of stations
Local Roads and Bridges	
16. Local Sealed + Local Formes & Surfaced + Local Natural Surface	
Local sealed roads	No. kilometres
Local unsealed roads	No. kilometres

Source: Interface Councils Survey 2011

Other Data Sources

A significant range of other data sources have been used in the preparation of this report, and these are listed as follows:

- Australian Bureau of Statistics – Census of Population and Housing 2006 and 2011
- Australian Bureau of Statistics – Journey to Work 2006 and 2011
- Australian Bureau of Statistics – National Regional Profiles, 2006-2010
- Australian Bureau of Statistics – Schools Australia 2006, Cat No. 4221.0
- Australian Bureau of Statistics – Socio-Economic Indexes for Areas (SEIFA), 2006
- Australian Bureau of Statistics – Regional Population Growth, Australia, Cat No. 3218.0
- Australian Bureau of Statistics – Wage and Salary Earner Statistics for Small Areas, Time Series 2003-04 to 2008-09, Cat No. 5673055003
- Aged Care Victoria.com.au
- Bureau of Transport and Regional Economics – Estimating urban traffic and congestion cost trends for Australian cities, 2007
- Community Indicators Victoria
- Connecting Mitchell – http://www.connectingmitchell.org
- Davis Langdon – The Blue Book 2011
- Department of Health and Ageing – The State of Our Public Hospitals June 2010
- Department of Education, Employment and Workplace Relations - Small Area Labour Markets, June Quarter 2011
- Department of Health and Ageing Aged Care Service List 2011
- Department of Human Services – Aged Care Residential Services Generic Brief, 1999
- Department of Human Services – Design Guidelines for Hospitals and Day Care Procedure Centres, 2004
- Department of Justice – http://www.justice.vic.gov.au
- Department of Planning and Community Development – Annual Survey of Public Libraries 2009/10
- Department of Planning and Community Development – Victoria in Future, 2008
- Department of Infrastructure and Transport – Population Growth, Jobs Growth and Commuting flows in Melbourne, Research Report 125
- Department of Transport – The Victorian Transport Plan, 2008
- Essential Economics – Growth Area Framework Plans: Activity Centre and Employment Planning, 2010
- Forecast id (various)

- Griffiths University – Unsettling Suburbia, The New Landscape of Oil and Mortgage Vulnerability in Australian Cities; Research Paper 17, August, 2008
- Kindergarten Parents Victoria Inc
- Metlink – http://www.metlinkmelbourne.com.au
- Oliver Hume Real Estate – advice on land values
- Productivity Commission – Report on Government Services, 2011
- Public Transport Users Association – Common Urban Myths about Transport, 2010
- SGS Economics and Planning Pty Ltd – National Growth Area Alliance Research Project, 2007
- SGS Economics and Planning Pty Ltd – submission into *Enhancing Victoria's Liveability*, 2008
- Victorian Grants Commission – Annual Report, 2010/11
- Victorian TAFE Association (http://www.vta.vic.edu.au)

2.7 Summary

In conjunction with the Interface Council Group, an Evaluation Framework has been prepared to guide the analysis. The Framework includes two population scenarios, a benchmarking group to reference liveability standards, and a suite of indicators to identify future infrastructure and service needs in the Interface.

3 POPULATION OUTLOOK

3.1 Introduction

This Chapter explores the population outlook for Metropolitan Melbourne and the Interface Councils based on official State Government population projections (Victoria in Future 2012) and population projections prepared by id Consulting for each of the Interface Councils.

Differences in methodologies are described and a summary of population and dwelling projections for the period 2011 to 2026 for each data set is provided.

3.2 Victoria in Future 2012

Methodology

DPCD has released updated population and household projections for Victoria (*Victoria in Future 2012*) which are based on the 2011 ABS population estimates and supersede the projections published by DPCD in 2008.

Like the 2008 projections, the VIF 2012 projections are based on ABS Estimated Resident Population (ERP) data (March 20011 release) and focus on two main components of population change:

- Natural increase (births less deaths)
- Net migration (people moving into an area minus those moving out).

Within these components, more detailed analysis is undertaken when estimating future change, and this analysis includes:

Natural increase

- How births are affected by age structures and fertility rates
- How deaths are affected by age structures and mortality rates

Migration

- Overseas migration
- Interstate migration
- Within-state migration

In developing projections, the DPCD analyses:

- Demographic data and housing development information;
- Victoria's economic, social and demographic trends; and
- Detailed local knowledge gained through consultation with local governments, regional service providers, peers and stakeholders.

Population forecasts

VIF 2012 data shows that over the period 2011-2026, the population of the Interface Councils is expected to increase from 1,360,900 persons to 1,984,300 persons, representing an increase of +623,400 persons. As Table 3.1 shows, in growth terms the population of the Interface Councils is expected to expand by 2.5% pa over the period, and this compares to 1.4% pa for the MSD.

Table 3.1: Victoria in Future 2012 Population Projections, Selected Locations, 2011 to 2026

	2011	2016	2021	2026	Change 2011-2026	AAGR 2011-2026
Interface Councils	1,360,900	1,573,850	1,781,040	1,984,300	+623,400	+2.5%
Melbourne Statistical Division	4,137,430	4,483,600	4,808,840	5,118,450	+981,020	+1.4%

Source: Department of Planning and Community Development, *Victoria in Future 2012*
Note: AAGR - Annual Average Growth Rate; Figures rounded

Forecast Demographic Change

A more detailed examination of VIF 2012 data, presented in Table 3.2, shows the demographic composition of the Interface Councils by age group is expected to gradually change over the 2011-2026 period, with a reduction in the proportions of pre-school aged persons (7.6% to 7.0%), school aged persons (21.4% to 20.3%) and working aged persons (61.0% to 57.5%); but a significant increase in proportion of retirement aged persons (from 10.1% in 2011 to 15.1% in 2026).

Table 3.2: Victoria in Future 2012 Population Projections by Age Groupings, Interface Councils, 2011 to 2026

Age Group	2011		2016		2021		2026		Change 2011-2026	AAGR 2011-2026	Change in Share of Population 2011-2026
	No.	%	No.	%	No.	%	No.	%	No.	%	%
Persons 0-4	103,150	7.6%	116,660	7.4%	129,960	7.3%	139,730	7.0%	+36,580	2.0%	-0.5%
Persons 5-19	291,110	21.4%	323,990	20.6%	361,570	20.3%	403,330	20.3%	+112,220	2.2%	-1.1%
Persons 20-64	829,730	61.0%	945,340	60.1%	1,048,340	58.9%	1,141,580	57.5%	+311,850	2.1%	-3.4%
Persons 65+	136,910	10.1%	187,860	11.9%	241,170	13.5%	299,660	15.1%	+162,750	5.4%	5.0%
Total	**1,360,900**	**100.0%**	**1,573,850**	**100.0%**	**1,781,040**	**100.0%**	**1,984,300**	**100.0%**	**+623,400**	**2.5%**	**0.0%**

Source: Department of Planning and Community Development, *Victoria in Future 2012*
Note: AAGR - Annual Average Growth Rate; Figures rounded

Forecast Dwelling Requirements

VIF 2012 estimates total dwellings in the Interface Councils will increase from 502,560 dwellings in 2011 to 751,040 dwellings in 2026, representing an expansion of +248,480 new dwellings and an average annual dwelling growth of 2.7% over the period (compared to 1.6% dwelling growth for the MSD).

This data is included in Table 3.3. The Interface Councils share of MSD dwelling growth over the period 2011-2026 is estimated to be approximately 56%.

Table 3.3: Victoria in Future 2012 Forecast Dwelling Requirements, Interface Councils, 2011 to 2026

	2011	2016	2021	2026	Change 2011-2026	AAGR 2011-2026
Interface Councils	502,560	586,060	669,050	751,040	+248,480	+2.7%
Melbourne Statistical Division	1,618,540	1,771,850	1,920,450	2,062,170	+443,630	+1.6%
Interface Council's share of MSD growth over period	-	54.5%	55.9%	57.9%	56.0%	-

Source: Department of Planning and Community Development, *Victoria in Future 2012*
Note: AAGR - Annual Average Growth Rate; Figures rounded

3.3 Forecast id

Methodology

The modelling process used by id Consulting for producing small-area forecasts is based on a 'bottom-up' approach, with all assumptions being derived from a local perspective. The components of the model are derived exclusively from housing and demographic assumptions. The drivers of the forecasts are predominantly based on levels of new residential development and demographic assumptions, such as in and out migration rates from the local areas. Figure 3.1 on the following page describes the modelling process used by .id Consulting in its population and household forecasts.

The population forecasts are based on a combination of three statistical models. These include a cohort component model, a housing unit model, and a household propensity model. Each of the models has a series of inputs, which – when linked to the other models – gives the forecast outputs. The models are further explained below, and the explanations are sourced from id Consulting.

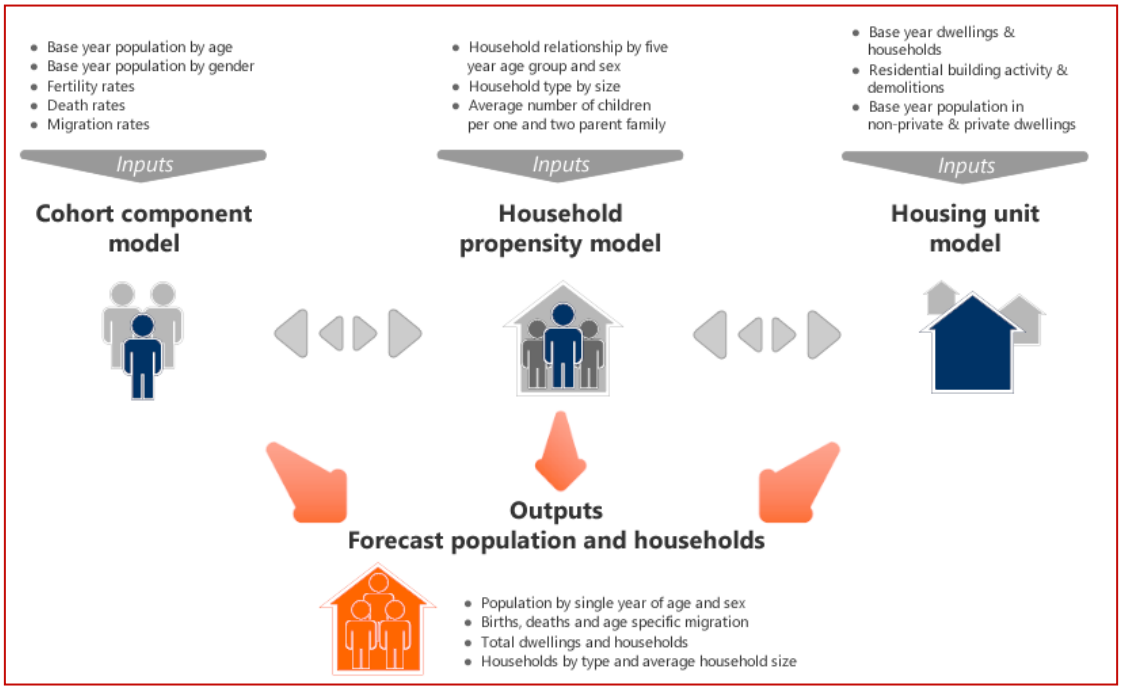
Cohort Component Model

The cohort component model is a standard demographic model used for population forecasts. It takes a base population by single year of age and sex and makes assumptions about future levels of births, deaths and migration, with the result being a forecast population by age and sex.

Each year the population ages by one year, with additions to population through in-migration and births. Births are derived by multiplying age-specific fertility rates of women aged 15-44 by the female population in these age groups for all years during the forecast period. The population decreases are based on out-migration and deaths. Deaths are derived by multiplying age and sex-specific mortality rates for all age groups for all years during the forecast period.

In and out-migration is based on multiplying the population in each age group by a migration matrix. The base year population is derived from 2006 Census counts and then adjusted to an estimated resident population by small area. Each year through the forecast period, the population modelled against age-specific birth, death and migration rates to create new population figures.

Figure 3.1: Overview of Forecast id Methodology



Source: http://home.id.com.au/id-community/public-resources/population-forecasts

Housing Unit Model

The housing unit model is used to forecast future levels of residential development in areas and the resulting impact on the total population and the number of households. This model is critical in giving population forecasts credibility, especially in areas where residential development constraints exist and where historical migration patterns would be expected to change.

The housing unit model is based on forecasting a number of variables. These include total population living in private and non-private dwellings, the number of households, and the number of dwellings. The share of housing stock that does not contain households is known as the vacancy rate. The population living in private dwellings divided by the number of households is known as the average household size.

These variables have changing relationships over time, as households undergo normal demographic processes, such as family formation and ageing. Levels of residential development, vacancy rates and average household size (see housing propensity model below) are used as the drivers of the model. Every year there is an assumption about the level of residential development activity, which adds to the stock of dwellings in an area. This stock of dwellings is multiplied by the vacancy rate, which gives the total number of vacant dwellings and the total number of occupied private dwellings (households). Households are multiplied by the assumed average household size for the year to derive the new number of persons living in private dwellings. The average household size is derived from the household propensity model (see below).

Population in non-private dwellings is modelled separately. A non-private dwelling is a form of housing, which is communal in nature. Examples of non-private dwellings include nursing homes, student accommodation, nursing quarters, military barracks and prisons. In forecasting the number of persons in non-private dwellings, the population is analysed according to the different types of living arrangements. Decisions about future changes may be based on local knowledge through consultation with institutions or local government if a large number of people are living in non-private dwellings.

Household Propensity Model

This model is used to integrate the cohort component and housing unit models so as to ensure consistency between the outputs of both models. The model works by assuming that the age structure of the population is an indicator of household size and type. These differences are assumed at the local area based on the household type and size from the 2006 Census.

The population is divided into household types based on five-year age groups and sex. Each of these household types has an associated household size. From this relationship, all the household-forming population (adults and any non-dependents) effectively represent a share of a household. Dependents in a household (children) represent no share of a household, although their departure frequently drives demand for housing in the region. Lone persons represent 1 or 100% of a household. Couples with dependents represent 50% of household. Couples without dependents represent almost 50% of a household (as they can include related adults). Lone parents represent 100% of a household. Group household members' and other household members' shares vary according to the region (20%-45%, 5 persons to 2.5 persons per household).

These relationships are extrapolated from 2006 with some adjustments, depending on the type of area. While the overall trend assumes that a greater share of the population will live in smaller households at all age groups in the future, many areas will go against this trend, depending on their place within the life cycle of suburbs. The projected decrease in the fertility rate and resulting likelihood of smaller families reinforces the assumption that a greater share of the population will live as couples and alone in the future.

Population Forecasts

Forecast id data shows that over the period 2011-2026, the population of the Interface Councils is expected to increase from 1,350,080 persons to 1,994,640 persons, representing an increase of +664,560 persons. In growth terms, the population of the Interface Councils is expected to expand by 2.6% pa over the period, and this compares to 1.4% pa for the MSD. This data is shown in Table 3.4.

Table 3.4: Forecast id Population Projections, Selected Locations, 2011 to 2026 (NEW)

	2011	2016	2021	2026	Change 2011-2026	AAGR 2011-2026
Interface Councils	1,350,080	1,562,430	1,776,840	1,994,640	+664,560	+2.6%
*Melbourne Statistical Division	4,137,430	4,483,600	4,808,840	5,118,450	+981,020	+1.4%

Source: Forecast id (various); Department of Planning and Community Development, *Victoria in Future 2012*
Notes: *Data for Melbourne Statistical Division and Victoria is sourced from VIF 2012, as projections at metropolitan and State level are not prepared by id Consulting; AAGR - Annual Average Growth Rate; Figures rounded

Forecast Demographic Change

A detailed review of Forecast id data shows the demographic composition of the Interface Councils is expected to gradually change over the period 2011-2026, as shown in Table 3.5, with a small reduction in the proportions of pre-school aged persons (7.8% to 7.6% over the period) and working aged persons (60.1% to 58.1% over the period), and a moderate increase in the proportion of retirement aged persons (from 10.4% in 2011 to 12.9% in 2026).

Table 3.5: Forecast id Population Projections by Age Groupings, Interface Councils, 2011 to 2026

Age Group	2011		2016		2021		2026		Change 2011-2026	AAGR 2011-2026	Change in Share of Population 2011-2026
	No.	%	No.	%	No.	%	No.	%	No.	%	%
Persons 0-4	105,520	7.8%	122,590	7.8%	136,940	7.7%	152,020	7.6%	+46,500	2.5%	-0.2%
Persons 5-19	292,750	21.7%	335,350	21.5%	381,870	21.5%	427,910	21.5%	+135,160	2.6%	-0.2%
Persons 20-64	811,450	60.1%	924,650	59.2%	1,039,300	58.5%	1,157,990	58.1%	+346,540	2.4%	-2.0%
Persons 65+	140,360	10.4%	179,840	11.5%	218,730	12.3%	256,720	12.9%	+116,360	4.1%	2.5%
Total	**1,350,080**	**100.0%**	**1,562,430**	**100.0%**	**1,776,840**	**100.0%**	**1,994,640**	**100.0%**	**+644,560**	**2.6%**	**0.0%**

Sources: Forecast id (various)
Note: AAGR - Annual Average Growth Rate; Figures rounded

Forecast Dwelling Requirements

Forecast id estimate total dwellings in the Interface Councils will increase from 502,190 in 2011 to 746,520 in 2026, representing an expansion of +244,330 new dwellings; this represents an average annual dwelling growth of 2.7% over the period (compared to 1.6% dwelling growth for the MSD), as shown in Table 3.6.

The Interface Councils' share of MSD dwelling growth over the period 2011-2026 is estimated to be approximately 55%.

Table 3.6: Forecast id Estimated Dwelling Requirements, Interface Councils, 2011 to 2026

	2011	2016	2021	2026	Change 2011-2026	AAGR 2011-2026
Interface Councils	502,190	582,540	664,330	746,520	+244,330	+2.7%
*Melbourne Statistical Division	1,618,540	1,771,850	1,920,450	2,062,170	+443,630	+1.6%
Interface Council's share of MSD growth over period		52.4%	55.0%	58.0%	55.1%	

Sources: Forecast id (various) ; Department of Planning and Community Development, Victoria in Future 2012
Notes: *Refers to VIF 2012 estimates, as Forecast id does not provide estimates at the MSD level; AAGR - Annual Average Growth Rate; Figures rounded

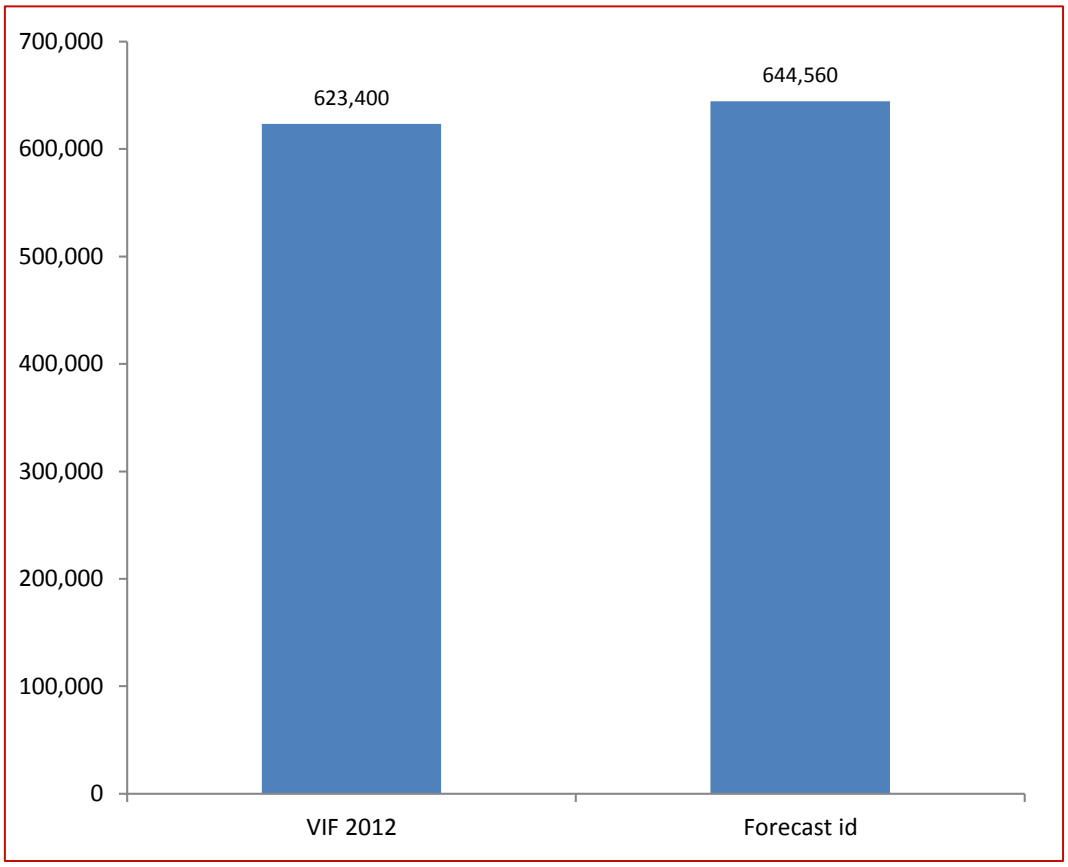
3.4 Differences between VIF and Forecast id Projections

When comparing population and dwelling outcomes over the period 2011 to 2026, the main differences between the VIF 2012 and Forecast id projections are as follows:

- Forecast id projects slightly higher population growth of +644,560 persons compared to projections by VIF 2012 which show +623,400 persons. Over the period, this difference is +21,160 persons or +3.3%, as presented in Table 3.7 and Figure 3.2.
- Forecast id projects population growth will be strongly influenced by younger (0-19 years) and working aged (20-64 years) cohorts, and this contrasts with VIF 2012 which projects a much stronger growth influence from the 65+ year age cohort, and a lesser impact from younger and working-aged cohorts, as shown in Table 3.8 and Figure 3.3. For example, by 2026 Forecast id project 29.1% of the population will be 0-19 years (cf 27.3% for VIF 2012), 58.1% will be between 20-64 years (cf 57.5% for VIF 2012) and 12.9% will be 65 years + (cf 15.1% for VIF 2012).
- Little difference is evident in the number of dwellings estimated, with both Forecast id and VIF 2012 projecting approximately 245,000 new dwellings and an annual growth rate in dwelling

development of 2.7%, as shown in Table 3.9. This outcome implies a higher average household size for new dwellings under the Forecast id projections (given higher population outcomes) and is consistent with a larger share of families and lower share of retirees (as identified in the demographic composition).

Figure 3.2: Comparison of Population Growth Projections – VIF 2012 v Forecast id, Interface Councils, 2011-2026



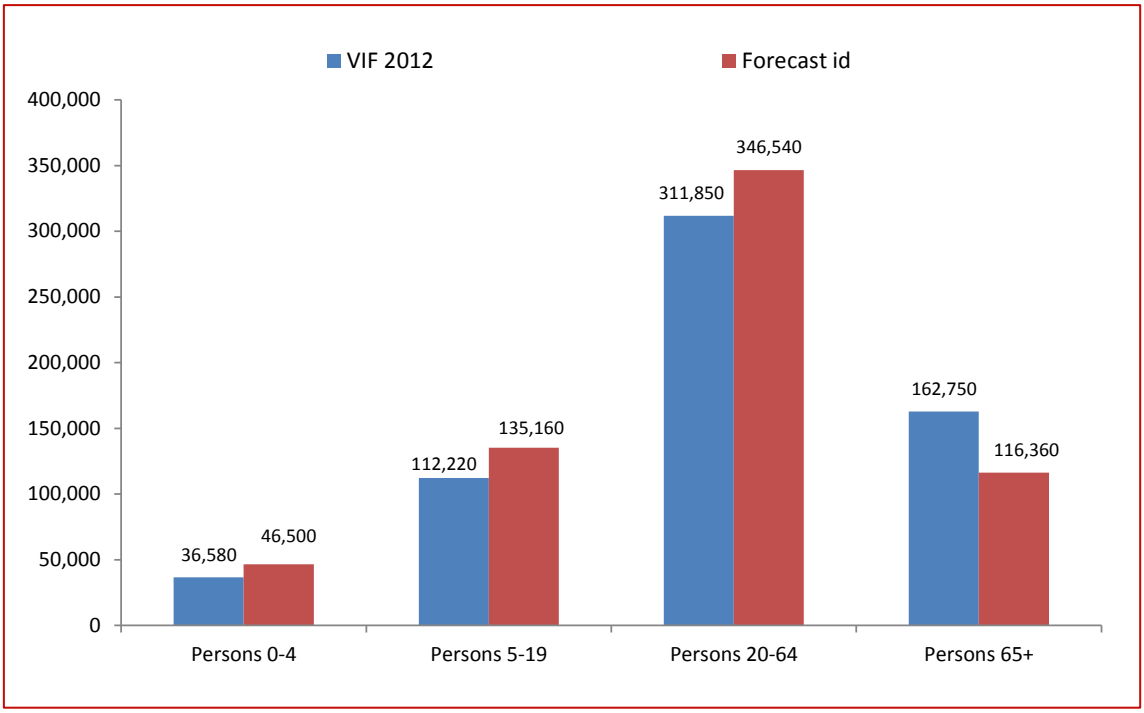
Sources: Forecast id (various); Department of Planning and Community Development, Victoria in Future 2012

Table 3.7: Comparison of Population Outcomes, VIF 2012 and Forecast id Projections, 2011-2026

	2011		2016		2021		2026		Change		Difference
	VIF 2012	Forecast id	VIF 2012	Forecast id	VIF 2012	Forecast id	VIF 2012	Forecast id	VIF 2012	Forecast id	VIF 2012 v Forecast id
Persons 0-4 years	103,150	105,520	116,660	122,590	129,960	136,940	139,730	152,020	36,580	46,500	-9,920
Persons 5-19 years	291,110	292,750	323,990	335,350	361,570	381,870	403,330	427,910	112,220	135,160	-22,940
Persons 20-64 years	829,730	811,450	945,340	924,650	1,048,340	1,039,300	1,141,580	1,157,990	311,850	346,540	-34,690
Persons 65+ years	136,910	140,360	187,860	179,840	241,170	218,730	299,660	256,720	162,750	116,360	+46,390
Total	**1,360,900**	**1,350,080**	**1,573,850**	**1,562,430**	**1,781,040**	**1,776,840**	**1,984,300**	**1,994,640**	**623,400**	**644,560**	**-21,160**

Sources: Forecast id (various); Department of Planning and Community Development, Victoria in Future 2012
Note: Figures rounded

Figure 3.3: Comparison of Population Growth Projections, by Age Cohorts – VIF 2012 v Forecast id, Interface Councils, 2011-2026



Sources: Forecast id (various); Department of Planning and Community Development, Victoria in Future 2012

Table 3.8: Comparison of Population by Demographic Cohort, VIF 2012 and Forecast id Projections, 2011-2026

	2011		2016		2021		2026	
	VIF 2012	Forecast id	VIF 2012	Forecast id	VIF 2012	Forecast id	VIF 2012	Forecast id
Persons 0-4	7.6%	7.8%	7.4%	7.8%	7.3%	7.7%	7.0%	7.6%
Persons 5-19	21.4%	21.7%	20.6%	21.5%	20.3%	21.5%	20.3%	21.5%
Persons 20-64	61.0%	60.1%	60.1%	59.2%	58.9%	58.5%	57.5%	58.1%
Persons 65+	10.1%	10.4%	11.9%	11.5%	13.5%	12.3%	15.1%	12.9%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Sources: Forecast id (various); Department of Planning and Community Development, Victoria in Future 2012

Table 3.9: Comparison of Estimated Dwelling Requirements, VIF 2008 and Forecast id Projections, 2011-2026

	2011	2016	2021	2026	Change 2011-2026	AAGR 2011-2026
Forecast id	502,190	582,540	664,330	746,520	+244,330	+2.7%
VIF 2012	502,560	586,060	669,050	751,040	+248,480	+2.7%

Sources: Forecast id (various); Department of Planning and Community Development, Victoria in Future 2012
Note: AAGR - Annual Average Growth Rate; Figures rounded

3.5 Conclusions

1 The State Government (DPCD) and id Consulting have prepared long-term population, demographic and household projections for the Interface Councils. Due to different methodologies (and the timing when the data was prepared), the datasets provide some contrasting outcomes in relation to the coming 15 years.

2 While both scenarios indicate an increase of approximately +245,000 households between 2011 and 2016, Forecast id data shows a higher population growth outcome (approximately +645,000 persons) compared with VIF 2012 (approximately +623,000 persons) over the period.

3 When demography is considered, the Forecast id data shows population growth is strongly underpinned by increases in families and working aged residents, whereas VIF 2012 anticipates a lesser focus on these cohorts, but strong growth in the 65+ years aged group.

4 In view of these different outcomes, both datasets are considered when assessing future infrastructure and service requirements for the Interface Councils.

4 SOCIO ECONOMIC PROFILING AND BENCHMARKING

4.1 Introduction

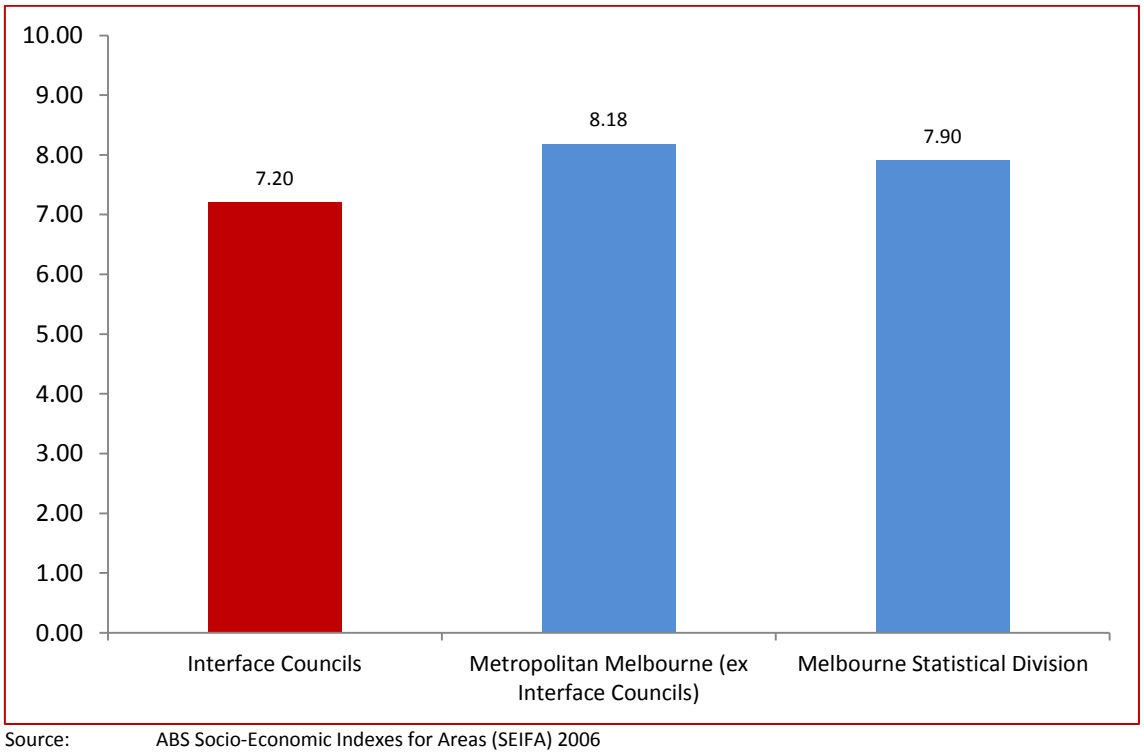
This Chapter provides a benchmarking assessment to show how the Interface Councils compare to the balance of Metropolitan Melbourne (excluding Interface Councils) and the MSD against a range of socio-economic indicators (health, education, income, employment, transport etc). Based on these benchmarks, gaps in infrastructure and service provision are identified.

4.2 SEIFA

Every five years the ABS prepares a series of indices relating to social advantage and disadvantage status for each municipality in Australia. These indicators are known as Socio-Economic Indexes for Area (SEIFA) and are based on data compiled from the Census of Population and Housing. The Index of Relative Socio-Economic Disadvantage focuses primarily on disadvantage, and is derived from Census variables such as low income, low educational attainment, unemployment, and dwellings without motor vehicles.

Data compiled for 2006 and presented in Figure 4.1 (note, 2011 data is not available until mid-2013) shows that when measured in terms of decile (that, is the average score on an equal scale on 0-10), the Interface Councils are relatively disadvantaged (with the group falling within the 7-8 decile) compared to Metropolitan Melbourne (excluding Interface Councils), with this group of Councils falling within the 8-9 decile, and the MSD which shows the average across all metropolitan councils is the 8th decile. This data highlights the significant disparity in the Interface's social and economic resource base compared to non-Interface areas and this is further explored below.

Figure 4.1: Index of Relative Socio-Economic Disadvantage by Decile, Selected Locations, 2006

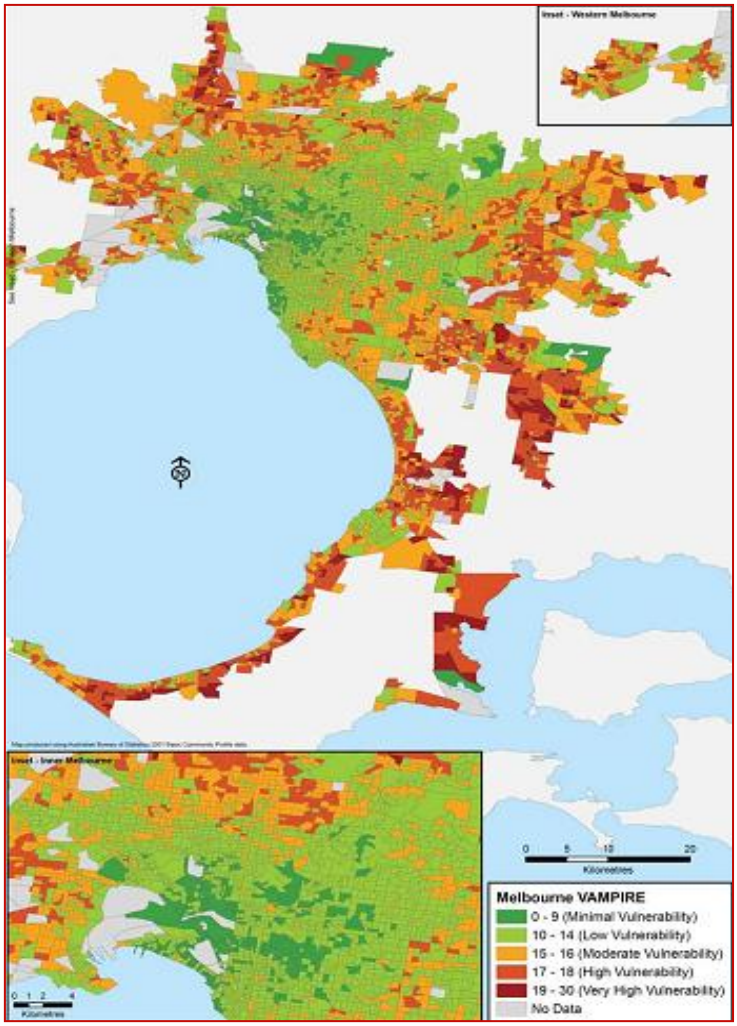


Source: ABS Socio-Economic Indexes for Areas (SEIFA) 2006

4.3 Vulnerability Assessment for Mortgage, Petroleum, and Inflation Risks and Expenditure (VAMPIRE)

The Vulnerability Assessment for Mortgage, Petroleum, and Inflation Risks and Expenditure (VAMPIRE) has been developed by Griffiths University to assist in understanding household vulnerability to key socio-economic stress factors. Specifically, VAMPIRE is an index that calculates the level of household vulnerability at the local level and is based on ABS Census data. VAMPIRE combines Census information on car dependence, mortgages and incomes at the Collector District level. VAMPIRE data for 2006 clearly shows that high and very high vulnerability levels are principally focused in Interface locations. In contrast, minimal and low vulnerability levels are almost exclusively focused on inner and middle ring Metropolitan areas. This data, as shown in Figure 4.2, highlights the challenges facing residents of many Interface Councils (especially in Growth Areas) associated with lack of public transport options, car dependency and relatively high housing costs compared to non-Interface areas.

Figure 4.2: Vulnerability Assessment for Mortgage, Petroleum, and Inflation Risks and Expenditure (VAMPIRE); Metropolitan Melbourne, 2006

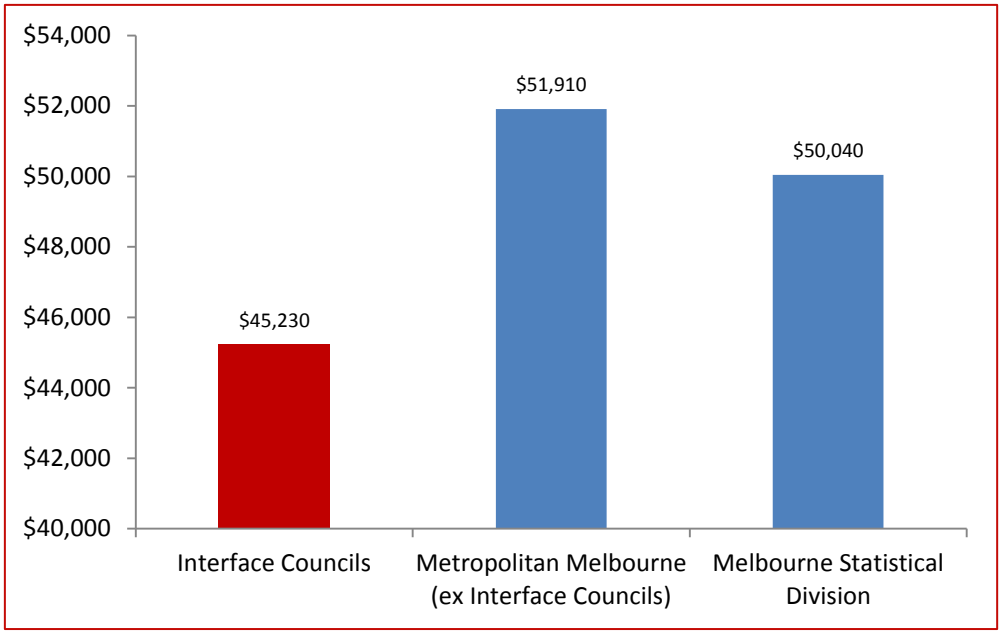


Source: Unsettling Suburbia, The New Landscape of Oil and Mortgage Vulnerability in Australian Cities; Research Paper 17, Griffiths University (2008)

4.4 Income

Average wages for Interface Council labour force participants ($45,230) are approximately 13% lower than for non-Interface metropolitan labour force participants ($51,910), and 10% lower than for all MSD labour force participants ($50,040). This information is based on ABS wage data for 2009/10 and is shown in Figure 4.3.

Figure 4.3: Average Wages ($), Selected Locations, 2009/2010



Source: ABS Wage and Salary Earner Statistics for Small Areas, 2009-10, Cat. No. 5673.0.55.003

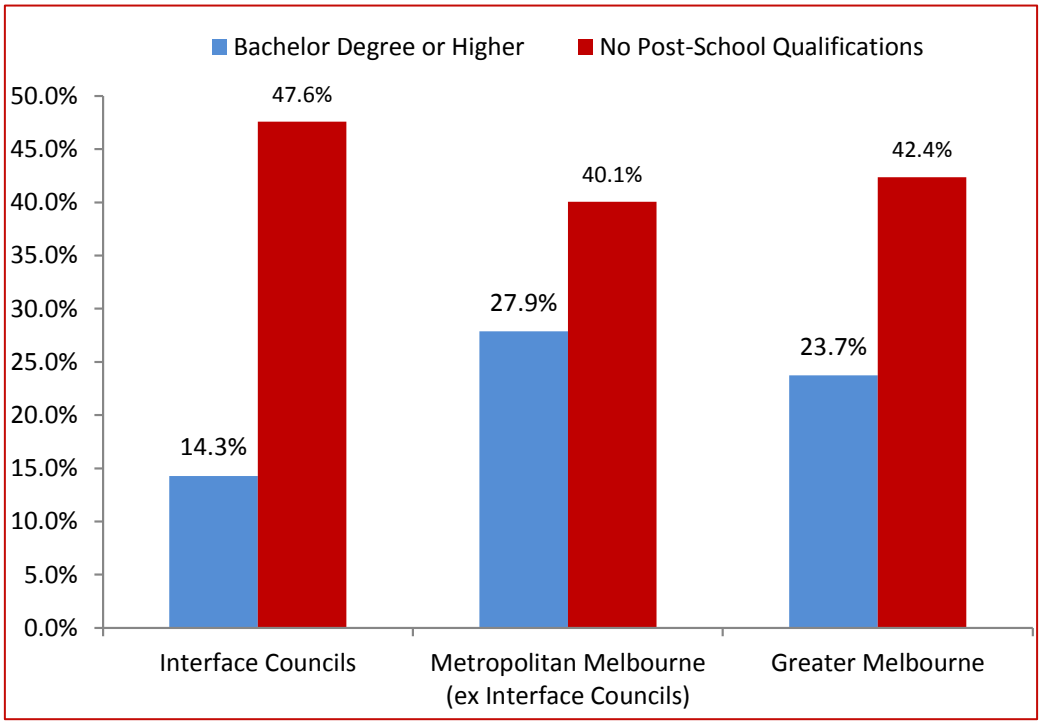
4.5 Education

Qualifications

Interface residents have significantly lower educational qualifications compared to non-Interface residents and MSD residents overall, according to data sourced from 2011 ABS Census.

For example, just 14% of Interface residents aged 15 years and over hold a degree or higher qualification compared to 28% for non-Interface residents and 24% for MSD residents overall. Additionally, 48% of Interface residents aged 15 years and over hold no post-school qualifications, compared to 40% for non-Interface residents and 42% for MSD residents. These patterns are shown in Figure 4.4.

Figure 4.4: Share of Post-School Qualifications for Residents Aged 15 years +, Selected Areas, 2011



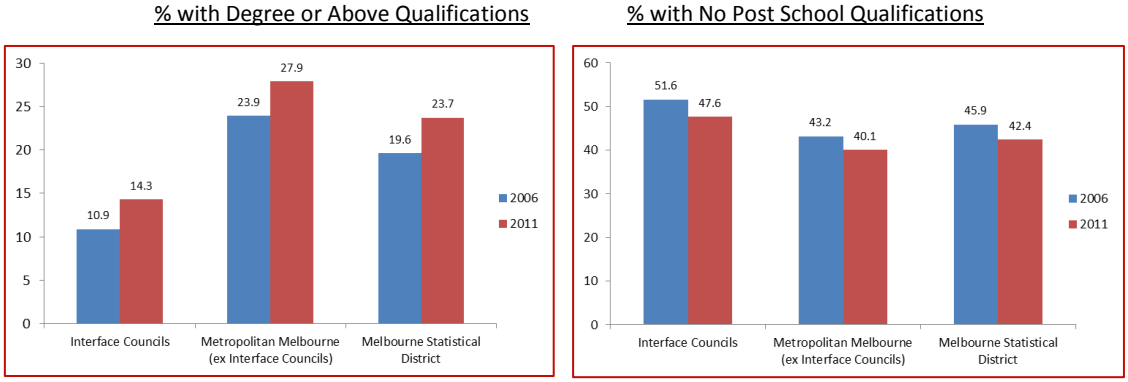
Source: ABS Census of Population and Housing, 2011

Between 2006 and 2011, the proportion of Interface residents aged 15 years and over holding a degree or higher qualification increased from 11% to 14%, while the proportion of Interface residents aged 15 years and over holding no post-school qualifications declined from 52% to 48%.

However, this uplift in qualifications is broadly in line with trends observed for non Interface areas over the 5-year period, with the proportion of non-Interface residents aged 15 years and over holding a degree or higher qualification increasing from 24% to 28%, while the proportion of non-Interface residents aged 15 years and over holding no post-school qualifications has declining from 43% to 40%.

This data shows the gap in educational qualifications between Interface and non-Interface residents has not closed over the period 2006-2011, as shown in Figure 4.5.

Figure 4.5: Trend in Post-School Qualifications for Residents Aged 15 years +, Selected Areas, 2006-2011

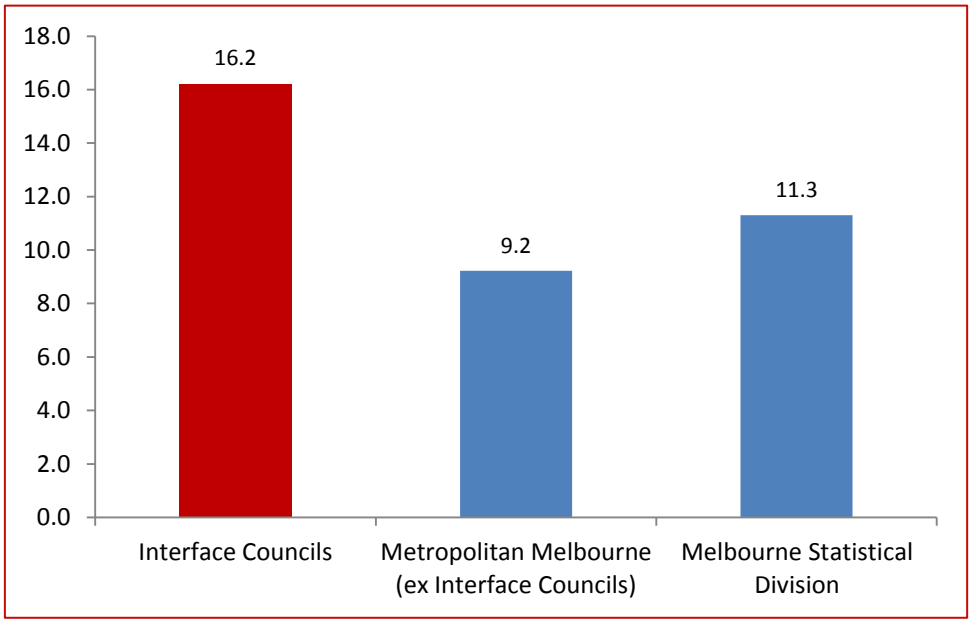


Source: ABS Census of Population and Housing, 2006 and 2011

Youth Engagement

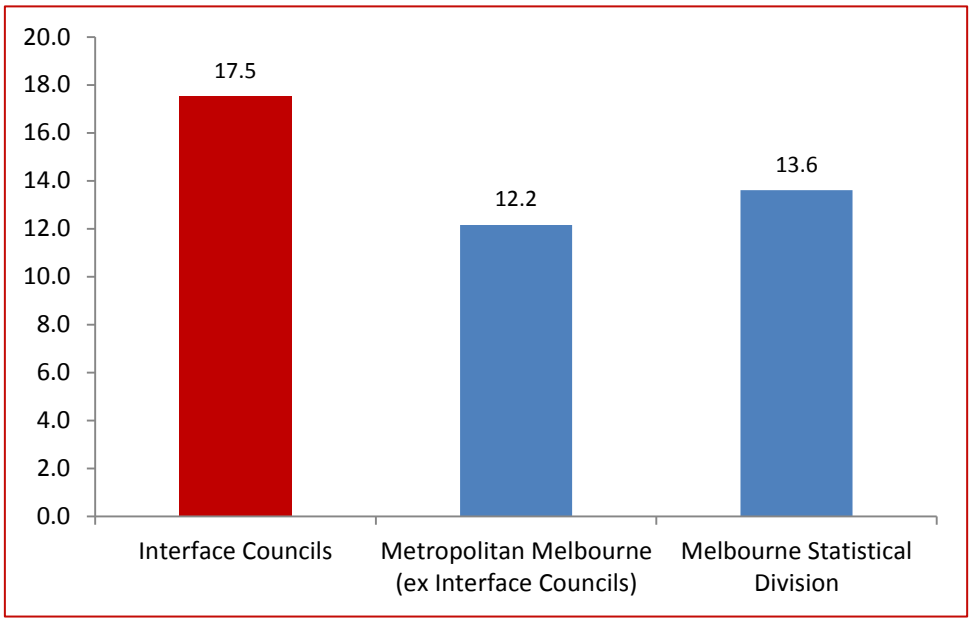
A significantly higher level of youth disengagement relating to further education and work participation exists in Interface Councils relative to non-Interface Councils and the MSD. According to data sourced from Community Indicators Victoria (for 2006), 16% of resident 17 year olds in Interface Councils were not attending any educational institution and this compares to 9% for non-interface Council areas and 11% for the MSD. Similarly, 18% of Interface Council residents aged 15-19 years were not engaged in either work or study, and this compares to 12% for non-Interface Councils, and 14% for the MSD. This data is shown in Figures 4.6 and 4.7.

Figure 4.6: Share of 17 Year Olds Not Attending Any Educational Institution, Selected Locations, 2006



Source: Community Indicators Victoria, 2006

Figure 4.7: Share of 15-19 Year Olds Not Engaged at all in Work or Study, Selected Locations, 2006



Source: Community Indicators Victoria, 2006

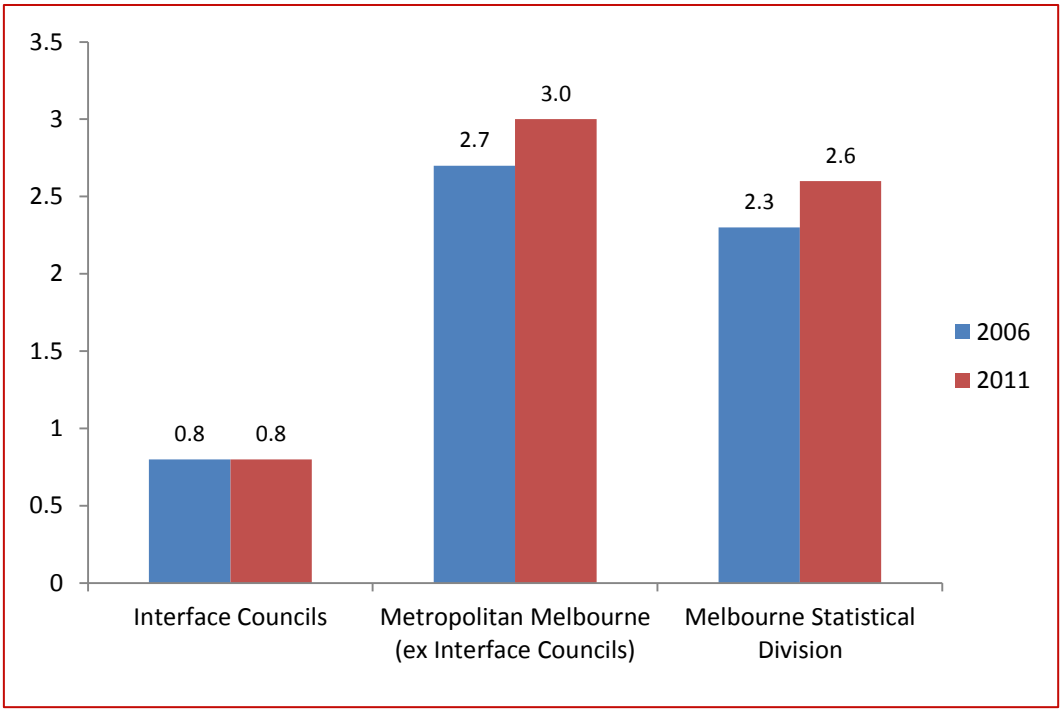
Provision of Tertiary Education Facilities

A proxy for the provision of services is the relative proportion of jobs located in a particular area associated with an activity. When tertiary education provision is considered, ABS Journey-To-Work (JTW) data for 2011 shows that only 0.8% of jobs in Interface Council areas are associated with this activity, and this compares to 3.0% for non-Interface Councils areas and 2.6% for the MSD, as shown in Figure 4.8.

Between 2006 and 2011, the proportion of tertiary jobs located in Interface areas has remained the same (0.8%), and this contrasts with growth in tertiary education employment in non-Interface areas which increased in proportional terms from 2.7% to 3.0%.

This data, if used as a proxy for the availability of tertiary education facilities and services, indicates **the gap in provision has increased** between Interface and non-Interface areas over the period 2006-2011.

Figure 4.8: Job Provision in Tertiary Education Services (Share of Total Jobs), Selected Locations, 2011

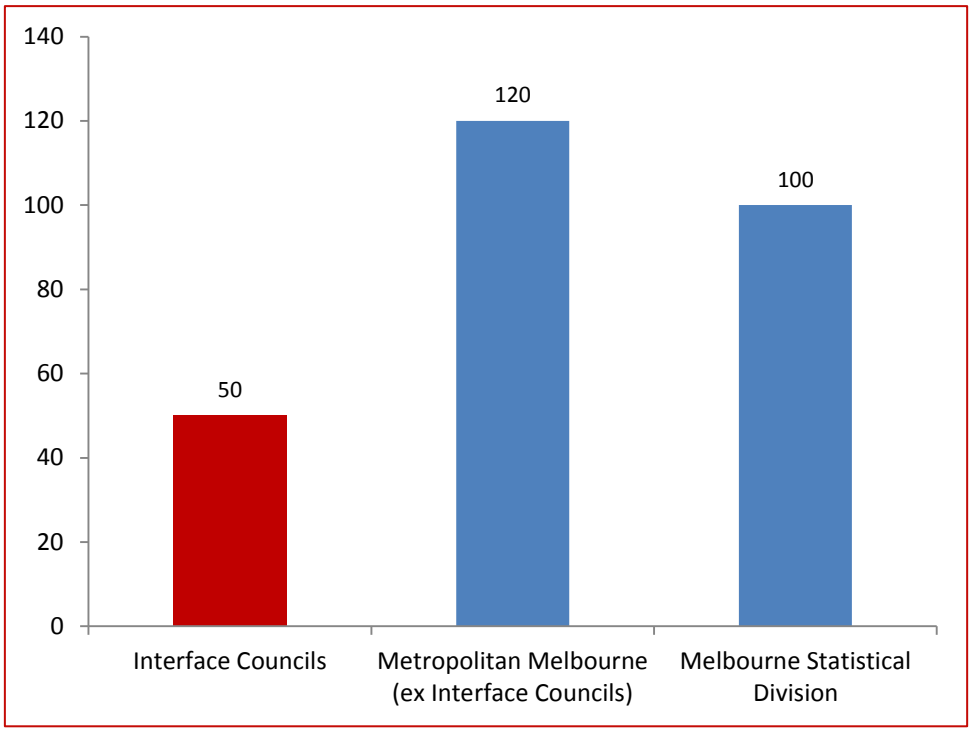


Source: ABS Census – Journey to Work 2011

A review of TAFE annual reports and other data shows that enrolments in TAFE courses located in Interface Council areas are significantly lower than for non-Interface areas and the MSD. Interface Council areas have 50 TAFE enrolments per 1,000 population aged 15-64 years, which is only approximately 40% of the ratio of enrolments for TAFEs located in non-Interface Council areas (120 enrolments per 1,000 population aged 15-64 years) and 50% of the MSD ratio (100 enrolments per 1,000 population aged 15-64 years).

This data, which is presented in Figure 4.9, indicates a relatively low provision of TAFE facilities and courses in the Interface, leading to a situation where Interface residents might have to travel long distances to access appropriate courses, or may lead to a situation where some are deterred from participating in TAFE (and this may also reflect the data above relating to low levels of youth engagement in further education in Interface Councils).

Figure 4.9: No. of TAFE Enrolments per 1,000 Population Aged 15-64 Years, by Selected Locations, 2010



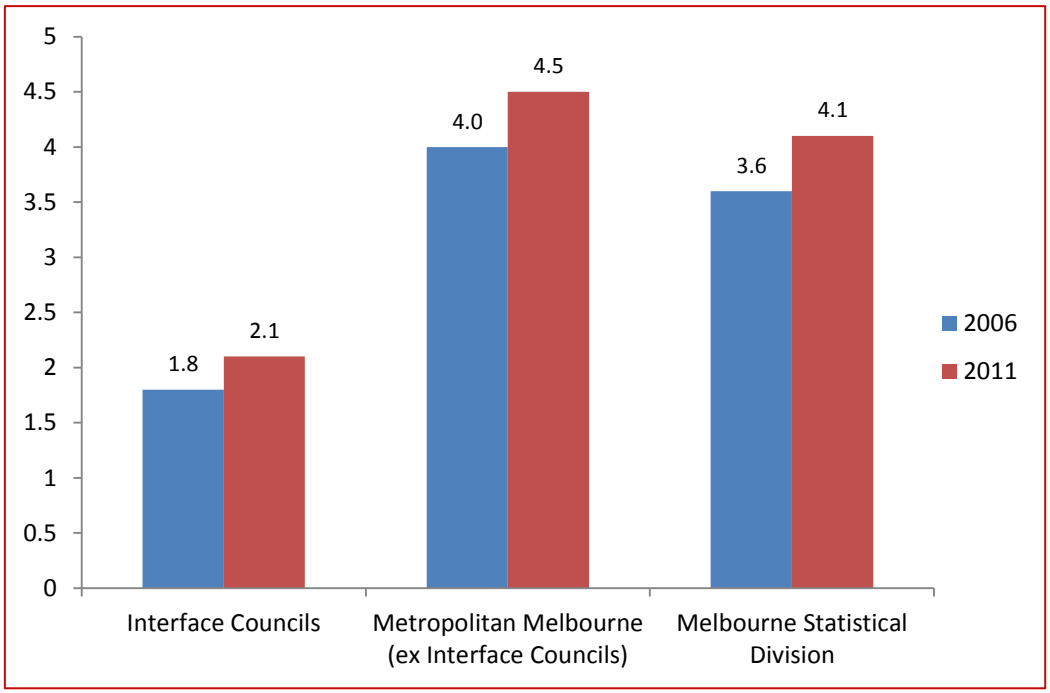
Source: TAFE annual Reports 2010/2011; websites
Note: Does not include workplace, online or offshore enrolments

Interface Council areas have a relatively low proportion of jobs associated with hospital services. ABS JTW data for 2011 shows that only 2.1% of jobs in Interface Council areas are associated with this activity, and this compares to 4.5% for non-Interface Council areas and 4.1% for the MSD, as shown in Figure 4.10.

Between 2006 and 2011, the proportion of hospital services jobs located in Interface areas has increased from 1.8% to 2.1%; however, this is broadly in line with proportional growth in non-Interface areas which has increased from 4.0% to 4.5% over the five-year period.

This data, if used as a proxy for locally provided hospital-related facilities and services, indicates **the gap in provision has not improved** between Interface and non-Interface areas over the period 2006-2011.

Figure 4.10: Job Provision in Hospital Services (Share of Total Jobs), Selected Locations, 2006 and 2011



Source: ABS Census – Journey to Work 2006 and 2011

Interface Council areas have a considerably lower provision of hospital beds (which includes psychiatric beds) compared to non-Interface Councils and the MSD. Currently, Interface Council areas have an estimated 11 beds per 10,000 population, which is only 37% of the allocation for non-Interface Council areas (30 beds per 10,000 population) and 46% of the ratio for the MSD at 24 beds per 10,000 population. These patterns are shown in Table 4.1 and Figure 4.11.

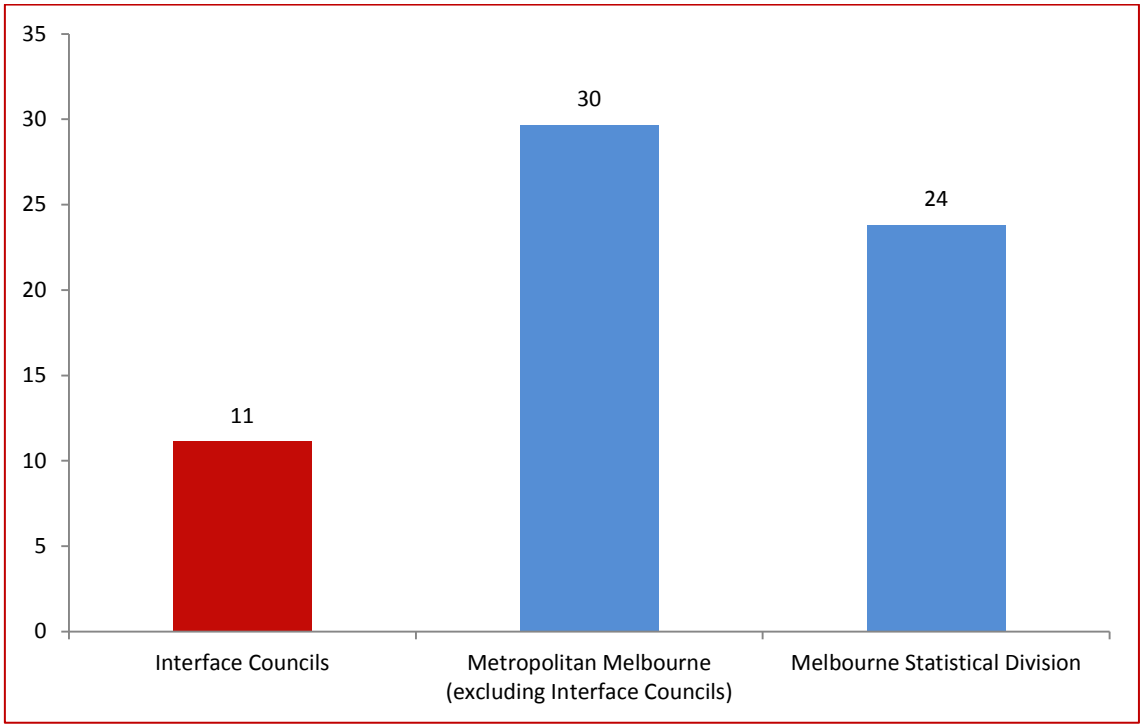
Table 4.1: Estimated No. of Public Hospital Beds per 10,000 Population, Selected Locations, 2011

	No. of Hospital beds	Estimated Population	No. of Beds per 10,000 Population
Interface Councils	1,515	1,360,900	11
Metropolitan Melbourne (excluding Interface Councils)	8,345	2,812,510	30
Melbourne Statistical Division	9,860	4,137430	24

Source: Public hospital and health services annual reports (various); DPCD Victoria in Future 2012

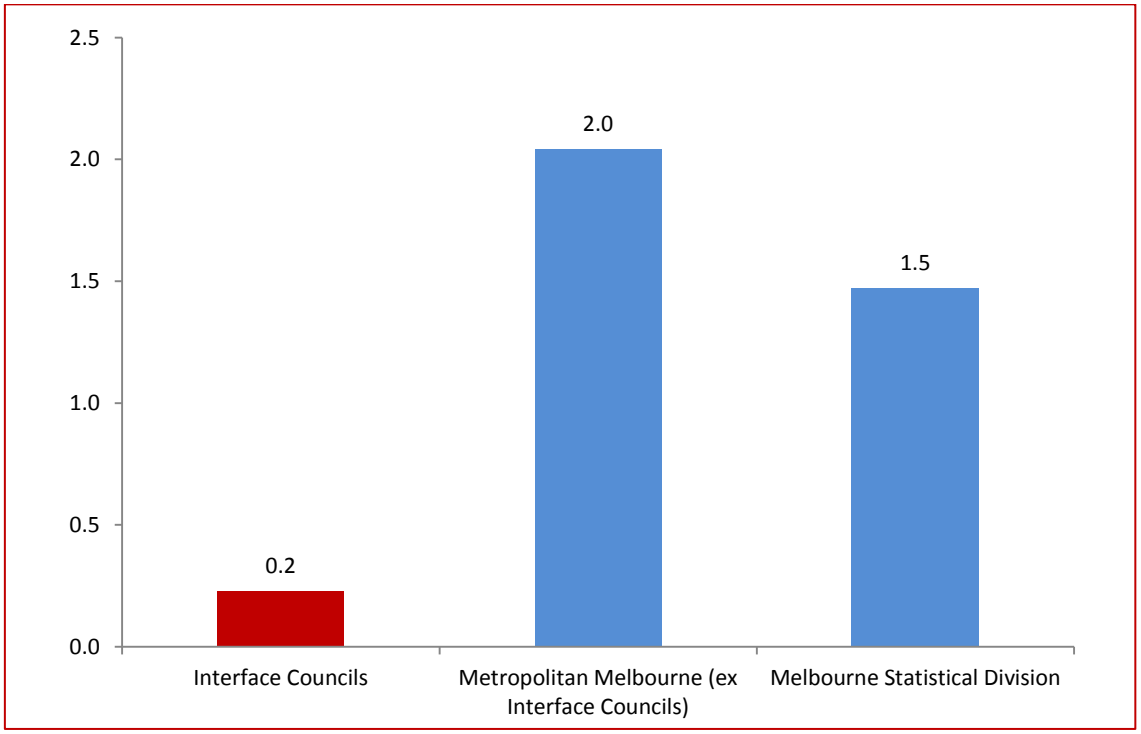
Department of Human Services data shows a relatively low provision of day procedure centres in Interface Council areas. Interface Councils have only 0.2 centres per 100,000 population, and this contrasts with 2.0 per 100,000 population in non-Interface Council areas and 1.5 centres per 100,000 population across the MSD, as shown in Figure 4.12.

Figure 4.11: Estimated No. of Public Hospital Beds per 10,000 Population, Selected Locations, 2011



Source: Public hospital and health services annual reports (various); DPCD Victoria in Future 2012

Figure 4.12: Provision of Day Procedure Centres per 100,000 Population, Selected Locations, 2011



Source: Public hospital and health services annual reports (various); DPCD Victoria in Future 2012

The Department of Education and Early Childhood Development advise no data is available in regard to kindergarten places at an LGA level. In view of this situation, an audit of kindergarten/pre-school places has been undertaken using information sourced from Kindergarten Parents Victoria. As Table 4.2 and

Figure 4.13 show, Interface Council areas have approximately 25 kindergarten / pre-school facilities per 10,000 persons aged 0-4 years, and this is lower than the ratio for non-Interface Council areas (36 facilities per 10,000 persons aged 0-4 years) and the MSD (32 facilities per 10,000 persons aged 0-4 years). However, as kindergarten facilities vary in size, the level of under-provision identified might not be as significant since new kindergarten facilities developed in growth areas are generally well-planned and have larger capacities compared with some facilities located in inner city areas. Discussions with the Interface Council group indicate that kindergarten provision is likely to be close to the metropolitan average.

Table 4.2: Provision of Kindergarten/Pre-School Facilities per 10,000 persons Aged 0-4 Years, Selected Locations, 2011

	No. of Kindergartens/Pre-Schools	No. Population	No. of Kindergarten/Pre-Schools per 10,000 Persons Aged 0-4 Years
Interface Councils	260	103,150	25
Metro Melbourne (excluding Interface Councils)	586	166,600	36
Melbourne Statistical Division	835	267,240	31

Source: Kindergarten Patents Victoria inc; ABS Regional Population Growth, Australia, Cat No. 3218.0

Figure 4.13: Provision of Kindergarten/Pre-School Facilities per 10,000 Persons Aged 0-4 Years, Selected Locations, 2011

Source: Kindergarten Patents Victoria inc, ABS Regional Population Growth, Australia, Cat No. 3218.0

4.6 Aged Care Facilities

The Australian Government Department of Health and Ageing provides data on the number of residential aged care places (private, public and religious) for each LGA. As Table 4.3 and Figure 4.14 show, Interface Council areas have 523 residential aged care places per 10,000 persons aged 65 years+, and this is a lower provision than the ratio for non-Interface Council areas (621 residential aged per

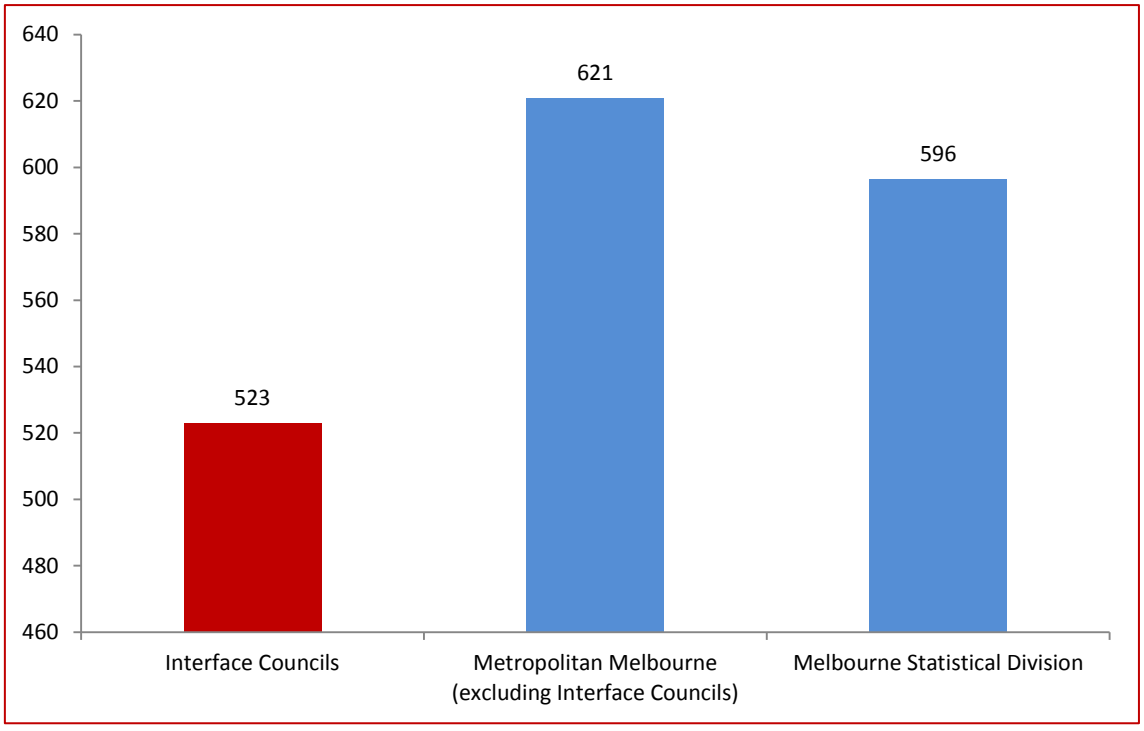
10,000 persons aged 65 years+) and the MSD (596 residential aged care places per 10,000 persons aged 65 years+). This data shows Interface Council areas experience a lag in the provision of aged care residential places (and by definition facilities), with the comparative gap between Interface and non-Interface areas in provision of residential low care places being especially high.

Table 4.3: Provision of Residential Aged Care Places per 10,000 population Aged 65 Years +, Selected Locations, 2011

	Number of Places	Population Aged 65 years +	Number of Places per 10,000 persons aged 65 Years +
Residential High Care			
Interface Councils	3,600	136,910	263
Metropolitan Melbourne (excluding Interface Councils)	11,920	401,340	297
Melbourne Statistical Division	15,430	534,180	289
Residential Low Care			
Interface Councils	3,560	136,910	260
Metropolitan Melbourne (excluding Interface Councils)	12,990	401,340	324
Melbourne Statistical Division	16,430	534,180	308

Source: Australian Government Department of Health and Ageing Aged Care Service List 2011

Figure 4.14: Provision of Residential Aged Care Places (Low Care and High Care) per 10,000 population Aged 65 Years +, Selected Locations, 2011



Source: Department of Health and Ageing Aged Care Service List 2011

4.7 Public Administration Facilities

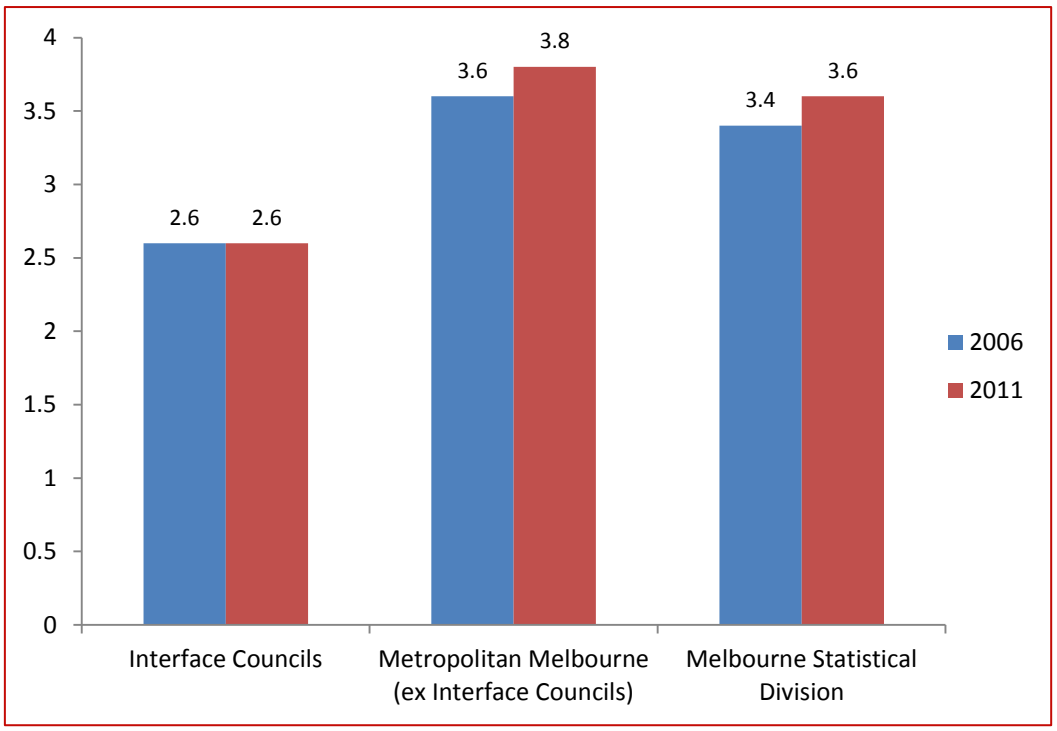
Public Administration

Interface Council areas have a relatively low proportion of jobs associated with public administration. ABS JTW data for 2011 shows that only 2.6% of jobs in Interface Council areas are associated with this activity and this compares to 3.8% for non-Interface Councils areas and 3.6% for the MSD, as shown in Figure 4.15. This data indicates that, apart from the provision of Local Government services, a generally low provision of State government and agency facilities and jobs exists in Interface Council areas.

Between 2006 and 2011, the proportion of public administration jobs located in Interface areas has remained the same (2.6%), and this contrasts with growth in public administration employment in non-Interface areas which has increased in proportional terms from 3.6% to 3.8%.

This data, if used as a proxy for public administration facilities and services, indicates **the gap provision has increased** between Interface and non-Interface areas over the period 2006-2011.

Figure 4.15: Job Provision in Public Administration (Share of Total Jobs), Selected Locations 2006 and 2011



Source: ABS Census – Journey to Work 2006 and 2011

An example of under-provision of public administrations facilities relates to court services, where Department of Justice data shows that only three of metropolitan Melbourne's 19 major courts are located in Interface Council areas, as shown in Table 4.4.

Table 4.4: Provision of Court Facilities, Selected Locations, 2011

	Magistrates Court	County Court	Supreme Court	Other Courts	Total Courts
Interface Councils	2	0	0	1	3
Metropolitan Melbourne (excluding Interface Councils)	9	1	1	5	16
Melbourne Statistical Division	11	1	1	6	19

Source: Department of Justice

4.8 Employment

Job Provision Ratio

ABS Journey to Work data provides information on the number of jobs provided in a particular location. This data – when combined with ABS Census data relating to labour force numbers – enables an assessment of job provision or 'employment sustainability' to be made for a particular location. The job provision ratio is defined as the number of jobs provided in a geographical area divided by the number of resident labour force participants in that area.

Analysis of 2011 data shows the Interface Council areas have a job provision ratio of 0.55 jobs/per resident labour force participant and this is only approximately half the provision for Metropolitan Melbourne (excluding Interface Councils) which has a 1.04 jobs/per resident. The job provision ratio for the MSD is 0.89 jobs/per resident labour force participant.

As Table 4.5 and Figure 4.16 show, in 2011 the Interface Councils had a local jobs deficit of approximately 280,000 jobs, when measured in terms of employment sustainability.

Table 4.5: Job Provision, Selected Locations 2011

	Interface Councils	Metropolitan Melbourne (excluding Interface Councils)	Melbourne Statistical Division
Jobs in LGA	335,380	1,356,920	1,682,710
LGA Labour Force	612,660	1,302,190	1,898,880
Local jobs deficit/surplus	**-277,280**	**+54,730**	**-216,170**
Job Provision Ratio	**0.55**	**1.04**	**0.89**

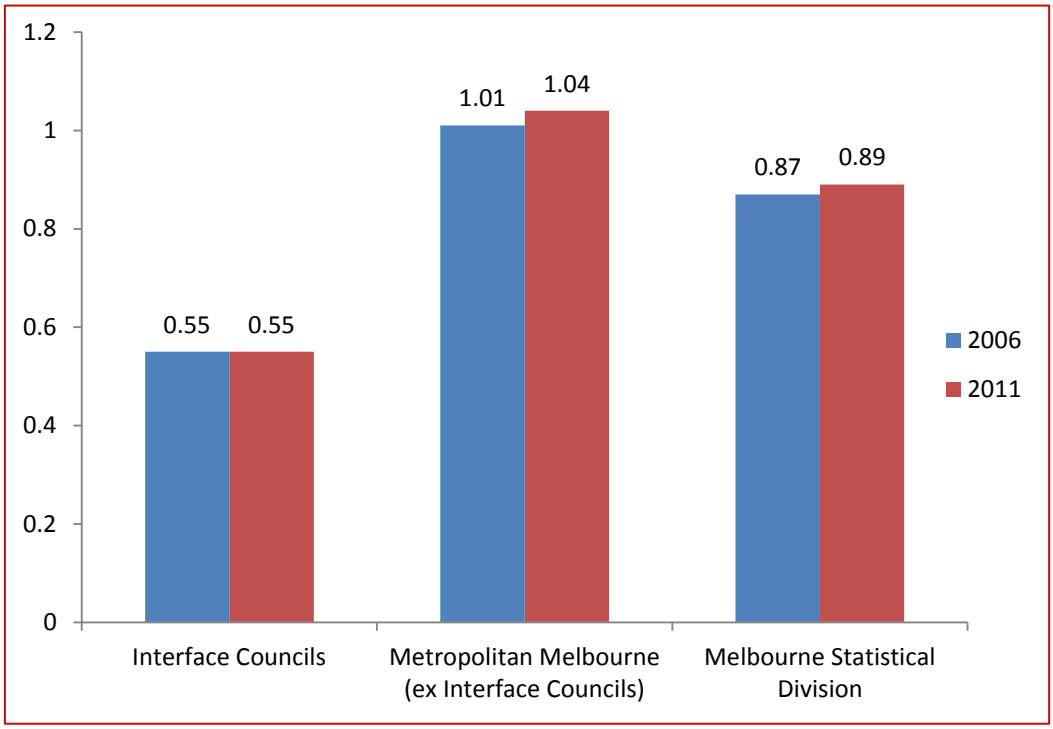
Source: ABS Journey to Work 2011
Note: Figures rounded

Between 2006 and 2011, the job provision ratio in Interface areas has not improved, remaining at 0.55 jobs/per resident labour for participant, while the jobs deficit has increased from approximately -241,000 jobs to approximately -277,000 jobs.

In contrast, job creation in non-Interface areas has improved from 1.01 to 1.04 jobs/per resident labour force participant, with the jobs surplus increasing from approximately 13,000 jobs to approximately 55,000 jobs.

Over the past five years little progress has been observed in the provision of sufficient new jobs in Interface areas to improve job sustainability outcomes, in fact the data shows Interface areas have gone backwards slightly compared to non-Interface areas in terms of job sustainability.

Figure 4.16: Job Provision Ratio, Selected Locations, 2006 and 2011



Source: ABS Census – Journey to Work 2006 and 2011

Job Provision by Occupation

Interface Councils have a relatively low proportion of local management and professional jobs (28% of all jobs), compared to non-Interface Council areas (42% of all jobs) and the MSD (39% of all jobs). In contrast, Interface Councils provide a considerably higher proportion of local 'blue collar' jobs (such as those associated with trades, technicians, machinery operators, labourers etc) compared with metropolitan benchmarks.

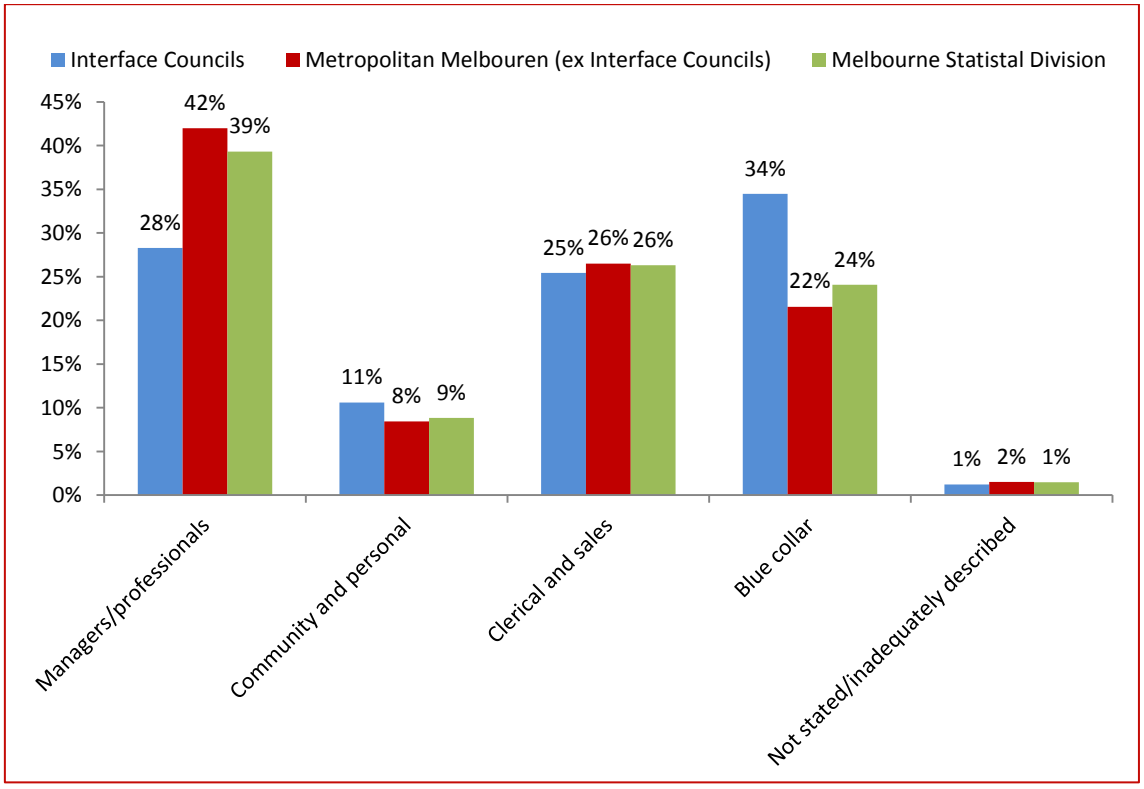
As Table 4.6 and Figure 4.17 show, 34% of local jobs in Interface Council areas can be considered 'blue collar', compared with 22% for non-Interface Council areas, and 24% for the MSD. Little difference exists in the proportions of jobs provided in community and personal services, or in clerical and sales in the Interface Councils and across Metropolitan Melbourne.

Table 4.6: Job Provision by Occupation, Selected Locations 2011

	Interface Councils		Metropolitan Melbourne (excluding Interface Councils)		Melbourne Statistical Division	
	No.	*%*	*No.*	*%*	*No.*	*%*
White Collar Occupations						
Managers	39,120	11.7%	188,250	13.9%	226,030	13.4%
Professionals	55,720	16.6%	381,720	28.1%	435,780	25.9%
Community and Personal Service Workers	35,570	10.6%	114,320	8.4%	148,540	8.8%
Sales Workers	40,200	12.0%	126,810	9.3%	166,020	9.9%
Clerical and Administrative Workers	45,040	13.4%	232,740	17.2%	276,660	16.4%
Sub-total	*215,650*	64.3%	*1,043,840*	76.9%	*1,253,030*	74.5%
Blue Collar Occupations						
Technicians and Trades Workers	50,210	15.0%	145,690	10.7%	194,670	11.6%
Machinery Operators and Drivers	29,130	8.7%	65,170	4.8%	93,670	5.6%
Labourers	36,250	10.8%	81,660	6.0%	116,730	6.9%
Sub-total	*115,590*	34.5%	*292,520*	21.6%	*405,070*	24.1%
Not Stated	630	0.2%	2,050	0.2%	2,650	0.2%
Inadequately Described	3,510	1.0%	18,510	1.4%	21,960	1.3%
Total	**335,380**	100.0%	**1,356,920**	100.0%	**1,682,710**	100.0%

Source: ABS Census – Journey to Work 2011
Note: Figures rounded

Figure 4.17: White Collar and Blue Collar Employment Provision (%), Selected Locations, 2011



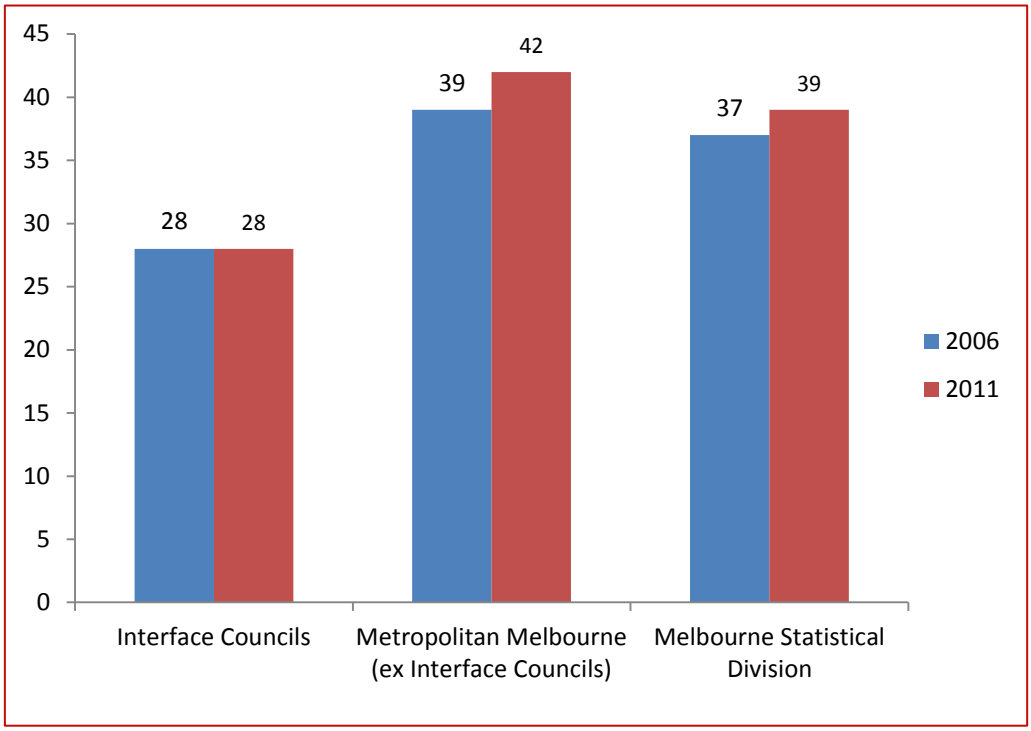
Source: ABS Census – Journey to Work 2011
Note: Figures rounded

Between 2006 and 2011, the proportion of white collar jobs located in Interface areas has increased from 62% to 64%, and the proportion of blue collar jobs has declined from 37% to 35%. This shift, however, is smaller than the change observed for non-Interface areas where the proportion of white collar jobs has increased from 74% to 77%, with blue collar jobs declining from 25% to 22%.

Importantly, the proportion of management and professional jobs located in Interface areas has remained static (28% of all jobs) over the five-year period, and this contrasts with proportional growth in these job categories for non-Interface areas which has increased from 39% to 42% between 2006 and 2011, as shown in Figure 4.18.

Over the past five years, therefore, little progress has been made in closing the gap in the provision of white collar jobs in Interface areas compared to non-Interface areas. In fact, the data shows Interface areas have gone backwards compared to non-Interface areas in terms of the white collar/blue collar jobs mix and in the relative provision of management and professional jobs.

Figure 4.18: Provision of Professional and Management Jobs (% Share of Total Jobs), Selected Locations 2006 and 2011



Source: ABS Census – Journey to Work 2006 and 2011

As Table 4.7 and Figure 4.19 show, the 2011 jobs deficit is observed across all occupations but most notably for managers and professionals (-68,240 jobs), technicians and trades workers (-53,580 jobs) and clerical and administrative workers (-56,010 jobs). Overall, white collar occupations account for 62% of the jobs deficit, while blue collar occupations account for 38% of the jobs deficit. Note that this data does not include labour force participants whose occupations are not stated or inadequately described, and this accounts for the difference in the jobs deficit shown in Tables 4.5 and 4.7.

Table 4.7: Job Deficit by Occupation, Interface Councils 2011

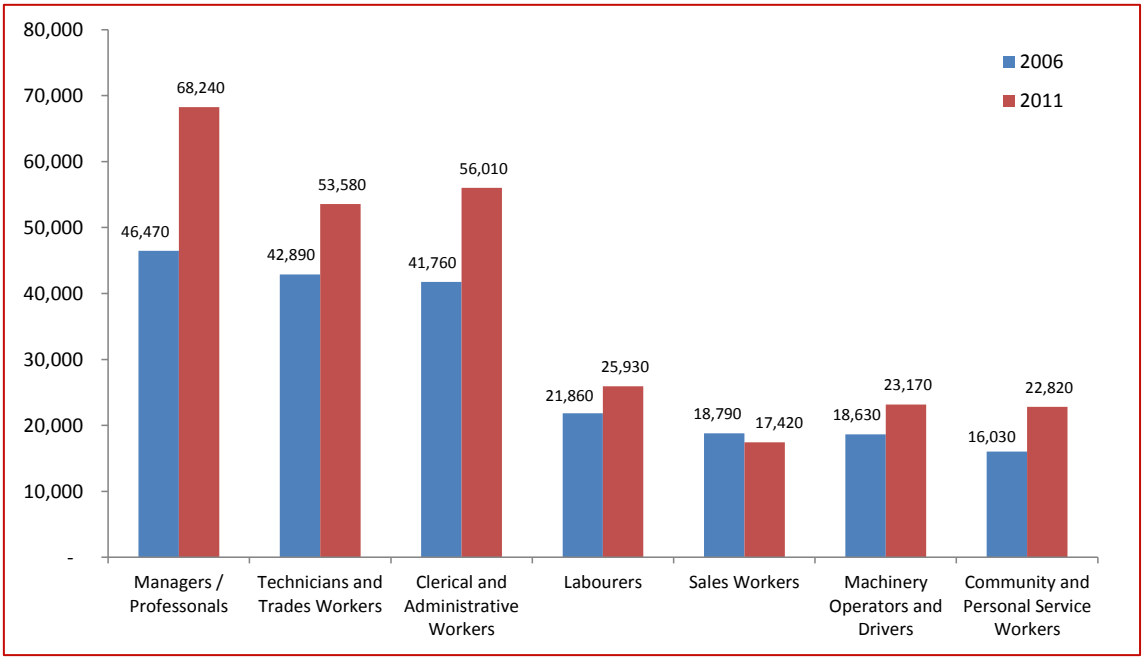
Occupation	Jobs Provided in Interface Councils	Local Jobs Required	Jobs Deficit	Share of Total Deficit
White Collar Occupations				
Managers	39,120	66,700	-27,580	10.3%
Professionals	55,720	96,380	-40,660	15.2%
Community and Personal Service Workers	35,570	58,390	-22,820	8.5%
Clerical and Administrative Workers	40,200	96,210	-56,010	21.0%
Sales Workers	45,040	62,460	-17,420	6.5%
Sub-total	*215,650*	*380,140*	*-164,490*	61.6%
Blue Collar Occupations				
Technicians and Trades Workers	50,210	103,790	-53,580	20.0%
Machinery Operators and Drivers	29,130	52,300	-23,170	8.7%
Labourers	36,250	62,180	-25,930	9.7%
Sub-total	*115,590*	*218,270*	*-102,680*	38.4%
Total	**331,240**	**598,410**	**-267,170**	**100.00%**

Source: ABS Census of Population and Housing 2006, ABS Journey to Work 2006
Note: Figures rounded

Between 2006 and 2011, the jobs deficit has increased in relation to all occupations in the Interface area, including the deficit in management/professional jobs (21,770 jobs), technical and trades jobs (10,690 jobs), and clerical and administrative jobs (increasing by 14,250).

Proportionally, the increased deficit in jobs over the past five years in the Interface area has been most pronounced with regard to management and professional jobs, which in 2011 account for 26% of the jobs deficit compared to 23% in 2006.

Figure 4.19: Jobs Deficit by Occupation, Interface Councils 2006 and 2011



Source: ABS Census – Journey to Work 2006 and 2011
Note: Figures rounded

Unemployment Rate

The unemployment rate in Interface Council areas is considerably higher than the Metropolitan Melbourne average. The unemployment in the Interface was 6.0% at September 2012 and this compares to 5.2% for Metropolitan Melbourne (excluding Interface Councils) and 5.5% for the MSD. This is according to data published by the Department of Education, Employment and Workplace Relations and summarised in Table 4.8 and Figure 4.20.

Table 4.8: Unemployment Rate, Selected Locations, September 2012

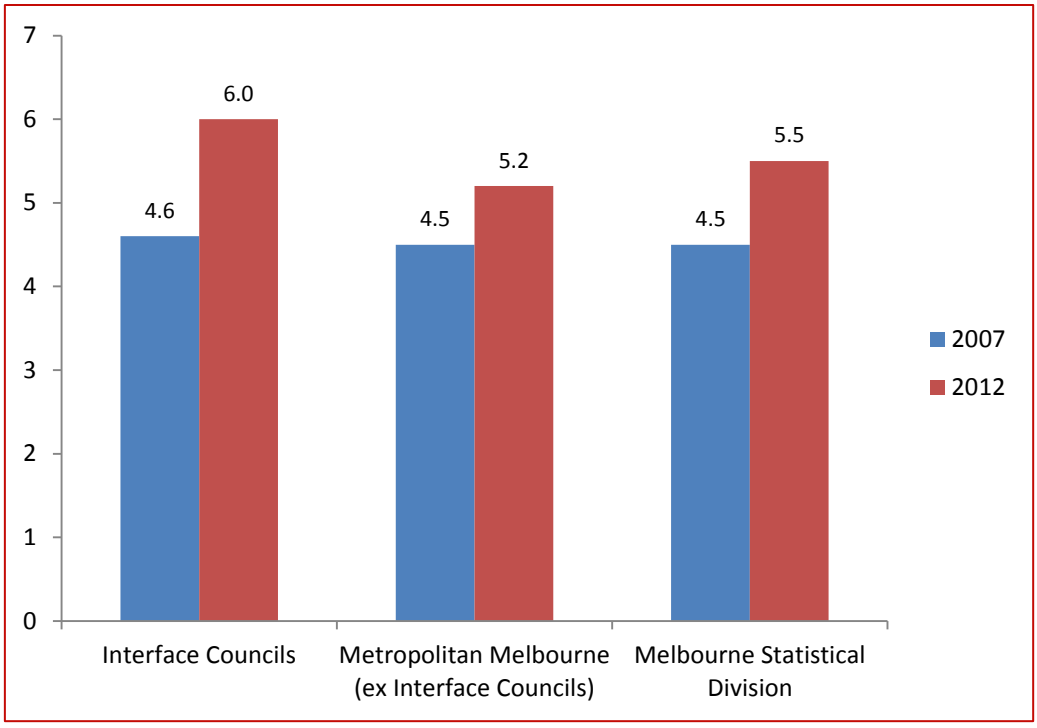
	Employed	Unemployed	Labour Force	Unemployment Rate
Interface Councils	631,730	40,350	672,070	6.0%
Metropolitan Melbourne (excluding Interface Councils)	1,510,870	83,260	1,594,130	5.2%
Melbourne Statistical Division	2,142,600	123,600	2,266,200	5.5%

Source: Department of Education, Employment and Workplace Relations - Small Area Labour Markets, September 2012
Note: Figures rounded

In the five-year period between September 2007 and September 2012, the unemployment rate for Interface labour force participants increased from 4.6% to 6.0%, which is significantly higher than the increase in unemployment observed for labour force participants in non-Interface areas (4.5% to 5.2%).

The differential in the unemployment rate between Interface and non-Interface labour force participants has increased from 0.1% to 0.8% over the five-year period, highlighting the relative uplift in unemployment as the labour force has expanded in the Interface.

Figure 4.20: Comparison of Unemployment Rates (%), Selected Locations, September 2007 and September 2012



Source: Department of Education, Employment and Workplace Relations - Small Area Labour Markets, September Quarter 2007 and 2012

Estimated Future Job Requirements

The resident labour force in the Interface Council area is projected to expand by approximately +305,000 persons over the period 2011 to 2026, as shown in Table 4.9 and Figure 4.21. This represents approximately 55% of Metropolitan Melbourne labour force growth over the period. Labour force growth in the Interface Council area is projected to average of 2.5% pa over the period, and this is expected to be significantly higher than 0.9% pa for Metropolitan Melbourne (excluding Interface Councils) and 1.4% pa for the MSD. Under the existing patterns of job provision, labour force expansion of this level will lead to a situation where significantly larger numbers of labour force participants in Interface areas will need to commute long distances to access employment. This situation highlights the imperative of providing a greater level employment and more diverse employment opportunities in Interface areas to improve local job provision ratios.

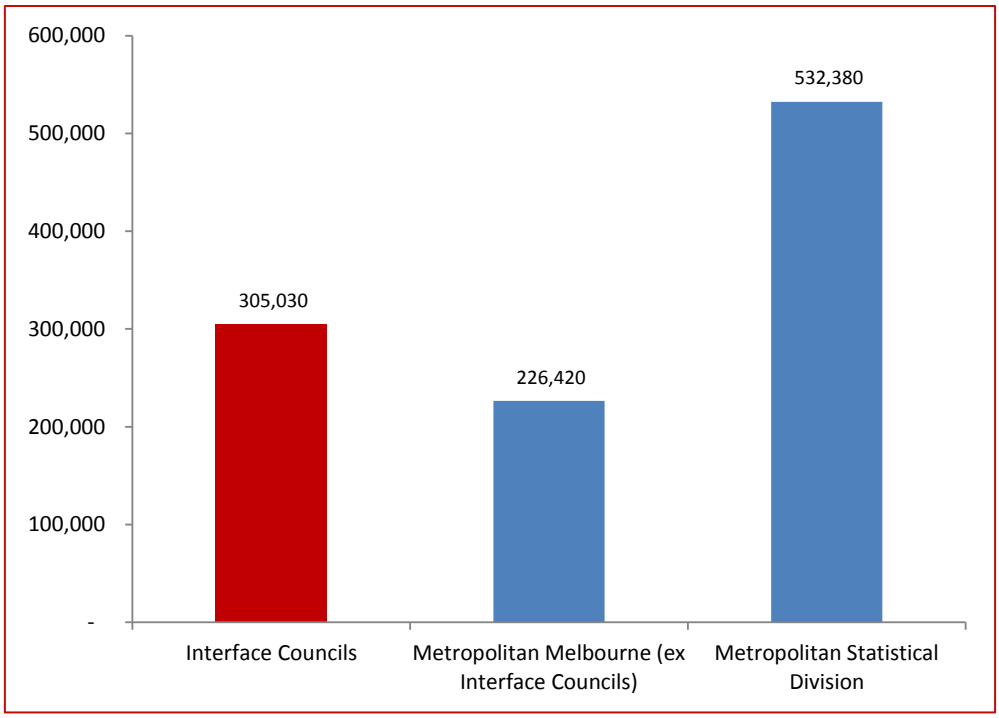
In terms of local job provision, approximately 168,000 new jobs are required in Interface Council areas if the job provision ratio remains at 0.55 jobs/per resident labour force participant (refer to Table 4.5). This represents 11,180 new local jobs per year over the 15-year period, and this requirement will be considerably higher if Interface Councils are to achieve a higher ratio of locally-based employment more akin to the Metropolitan Melbourne average for local job provision.

Table 4.9: Estimated Labour Force Expansion, Selected Locations, 2011-2026

	2011	2026	Change 2011-26	AAGR 2011-26
Interface Councils	665,930	970,960	+305,030	+2.5%
Metropolitan Melbourne (excluding Interface Councils)	1,595,890	1,822,310	+226,420	+0.9%
Metropolitan Statistical Division	2,245,300	2,777,680	+532,380	+1.4%

Source: Department of Education, Employment and Workplace Relations - Small Area Labour Markets, June Quarter 2011; Department of Planning and Community Development – Victoria in Future 2012; Essential Economics

Figure 4.21: Labour Force Average Annual Growth Rate, Selected Locations, 2011-2026



Source: Department of Education, Employment and Workplace Relations - Small Area Labour Markets, June Quarter 2011; Department of Planning and Community Development – Victoria in Future 2012; Essential Economics

Employment Accessibility

Nearly 9 in 10 labour force participants (88%) from Interface areas access their place of employment solely through the use of vehicle-based travel (car, truck, motor cycle etc). This compares to the lower proportions of vehicle-based travel for non-Interface labour force participants (72%) and for labour force participants across the MSD (77%). The figures are summarised in Table 4.10 and Figure 4.22.

In contrast, only a very small proportion of Interface Council labour force participants use public transport to access their place of work (5.1%), and this is significantly lower than proportions for non-Interface Council labour force participants (14.3%) and MSD labour force participants (11.4%).

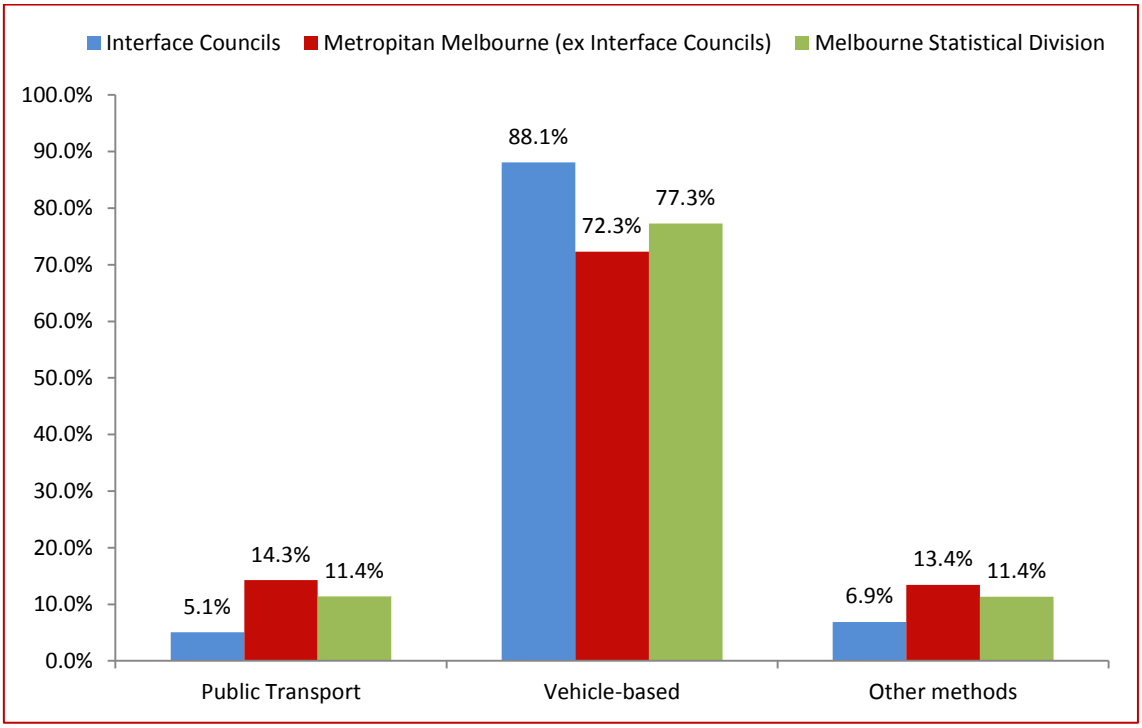
The principal reasons for these differences include the lack of public transport options available in Interface areas compared to non-Interface areas (this is assessed in Section 4.12), and the relatively poor levels of employment available at a local level for Interface labour force participants, resulting in increased travel requirements to access jobs.

Table 4.10: Mode of Travel to Work for Labour Force Participants, by Location of Work, 2011

	Interface Councils		Metropolitan Melbourne (excluding Interface Councils)		Melbourne Statistical Division	
	No.	*%*	*No.*	*%*	*No.*	*%*
Mode of Transport						
Train	21,000	4.0%	94,400	8.5%	114,970	7.1%
Bus	4,050	0.8%	18,460	1.7%	22,470	1.4%
Ferry	140	0.0%	290	0.0%	410	0.0%
Tram	440	0.1%	41,960	3.8%	42,400	2.6%
Taxi	760	0.2%	3,190	0.3%	3,940	0.2%
Public Transport	***26,390***	***5.1%***	***158,300***	***14.3%***	***184,190***	***11.4%***
Car driver	419,350	80.3%	737,450	66.5%	1,146,170	70.8%
Car passenger	31,310	6.0%	51,850	4.7%	82,350	5.1%
Truck	7,180	1.4%	6,990	0.6%	13,930	0.9%
Motor cycle / scooter	1,900	0.4%	6,010	0.5%	7,860	0.5%
Vehicle-based	***459,740***	**88.1%**	***802,300***	**72.3%**	***1,250,310***	**77.3%**
Bicycle	1,410	0.3%	24,280	2.2%	25,640	1.6%
Other	2,560	0.5%	5,700	0.5%	8,170	0.5%
Two or more methods	23,650	4.5%	70,790	6.4%	94,010	5.8%
Walked only	8,290	1.6%	48,160	4.4%	55,910	3.5%
Other methods	***35,910***	**6.9%**	***148,930***	**13.4%**	***183,730***	**11.4%**
Total	***522,040***	***100.0%***	***1,109,530***	***100.0%***	***1,618,230***	***100.0%***

Source: ABS Census – Journey to Work 2011
Note: Excludes labour force participants working from home, not working on Census day, and those not stating their mode of travel; Figures rounded

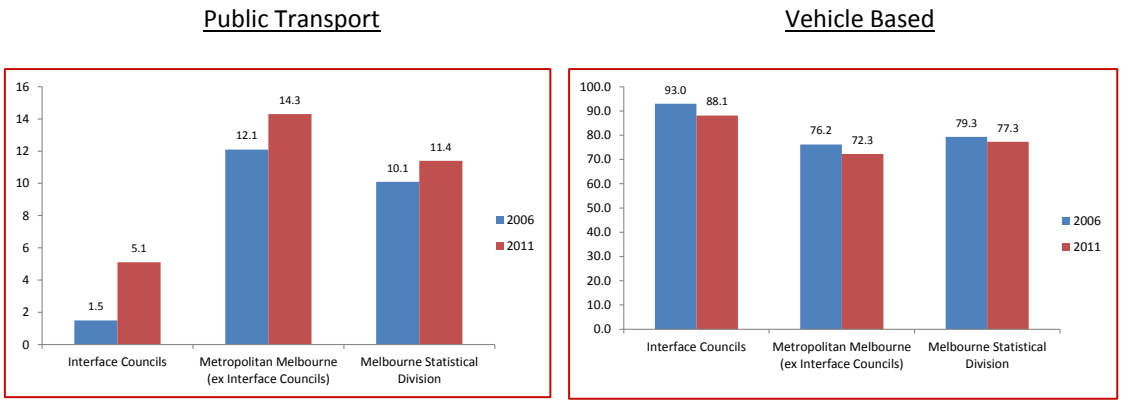
Figure 4.22: Comparison of Mode of Travel to Work, by Location of Employment, 2011



Source: ABS Census – Journey to Work 2011
Note: Excludes labour force participants working from home, not working on Census day, and those not stating their mode of travel; Figures rounded

Between 2006 and 2011, the proportion of vehicle-based travel by Interface labour force participants has declined from 93% to 88%, and the proportion of workers accessing their employment by public transport has increased from 2% to 5%. These travel mode trends are broadly similar to those observed for non-Interface labour force participants whose proportion of vehicle-based travel has declined from 76% to 72%, with the proportion of public transport usage increasing from 12% to 14% over the five-year period, as shown in Figure 4.23.

Figure 4.23: Mode of Travel to Work (% Share), Selected Areas, 2006 and 2011



Source: ABS Census – Journey to Work 2006 and 2011

Commuting Distance

Workers in Outer Melbourne (which covers approximately the same catchment as the Interface Council area) commute significantly longer distances to their place of work compared to workers living in Inner Melbourne and Middle Melbourne, according to data prepared by the Department of Infrastructure and Transport (*Population Growth, Jobs Growth and Commuting Flows in Melbourne*, Research Report 125).

For example, the average commuting distance for Inner Melbourne residents is 7.5km and this compares to 19.1km for Outer Melbourne residents. Importantly, resident workers in Outer Melbourne are extremely car-reliant (83% private car use, compared Inner Melbourne 46% private car use), highlighting the likely significant adverse impacts on the environment, road infrastructure, congestion, vehicle costs etc associated with existing limited metropolitan public transport provision and relatively poor employment distribution in Outer Melbourne.

Data relating to communing patterns is shown in Table 4.11.

Table 4.11: Average Commuting Distance for Journey to Work and Principal Mode of Travel to Work, 2006

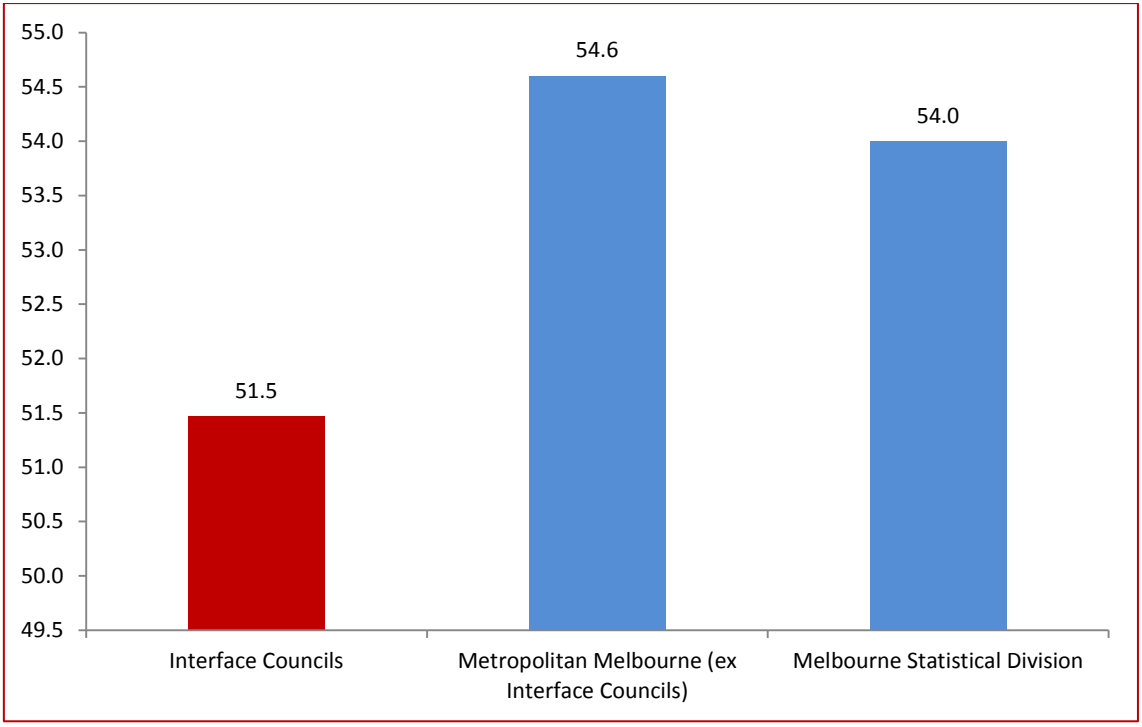
	Average Commuting Distance to Access Employment	Share Accessing Employment Exclusively by Private Vehicle	Share Using Public Transport Exclusively
Inner	7.5km	46.2%	26.0%
Middle	12.5km	72.6%	16.6%
Outer	19.1km	83.4%	7.6%
Melbourne Statistical Division	**14.8km**	**79.3%**	**10.1%**

Source: Australian Government - Department of Infrastructure and Transport, *Population Growth, Jobs Growth and Commuting Flows in Melbourne,* October 2011

Work-life balance

The provision of local jobs and efficient access to place of work are key influences on work-life balance, in that minimising daily work travel times provides greater time for non-work activities. Information sourced from Victorian Community Indicators shows that Interface Council labour force participants report lower work-life balance outcomes than their Metropolitan Melbourne counterparts. For example, 51.5% of the resident labour force in the Interface Council area disagree with the statement “work and family life often interfere with each other" and this compares with 54.6% for Metropolitan Melbourne (excluding Interface Councils) and 54.0% for the MSD, as shown in Figure 4.24.

Figure 4.24: Share of Employed People Who Disagree that Work and Family Life Often Interfere with Each Other,



Source: Community Indicators Victoria

4.9 Community Services

Arts and Cultural Activities

In this analysis, jobs provided in the creative and performing arts (which includes activities such as visual arts, dance, drama, music, creative writing etc) are used as a 'proxy' for associated facilities that support this sector and this indicates a relative lack of facilities in Interface Council areas compared with the Metropolitan Melbourne average and the MSD. Just 591 jobs in this sector are located in the Interface Councils area, and this represents 0.18% of total jobs provided, which is only half the rate observed for Metropolitan Melbourne (excluding Interface Councils) at 0.39% and the MSD (0.35%).

Between 2006 and 2011, the proportion of creative and arts jobs located in the Interface area has marginally increased from 0.16% to 0.18%; however, proportional growth in non-Interface areas has been greater, increasing from 0.32% to 0.39%.

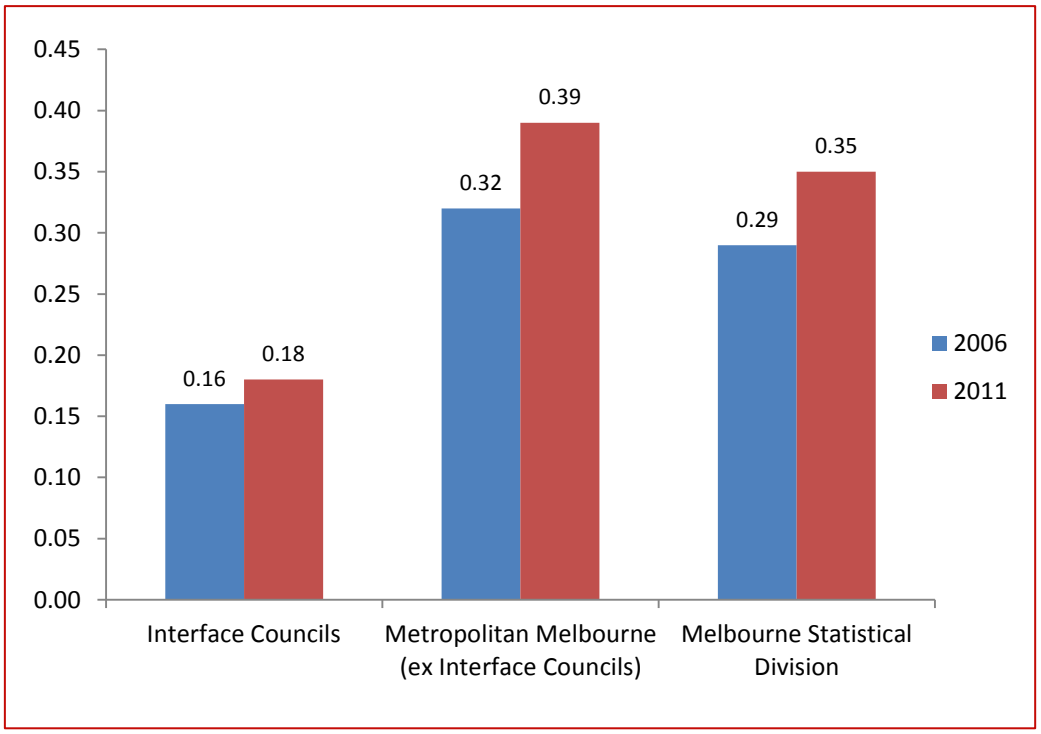
This data, if used as a proxy for locally provided arts and cultural facilities and services, indicates **the gap in provision has increased** between Interface and non-Interface areas over the period 2006-2011, as shown in Figure 4.25.

Table 4.12: Number of Creative and Performing Arts Jobs Provided, Selected Locations, 2011

	Interface Councils	Metropolitan Melbourne (excluding Interface Councils)	Melbourne Statistical Division
Jobs Provided	591	5,272	5,850
Share of Total Jobs Provided	0.18%	0.39%	0.35%

Source: ABS Census – Journey to Work 2011

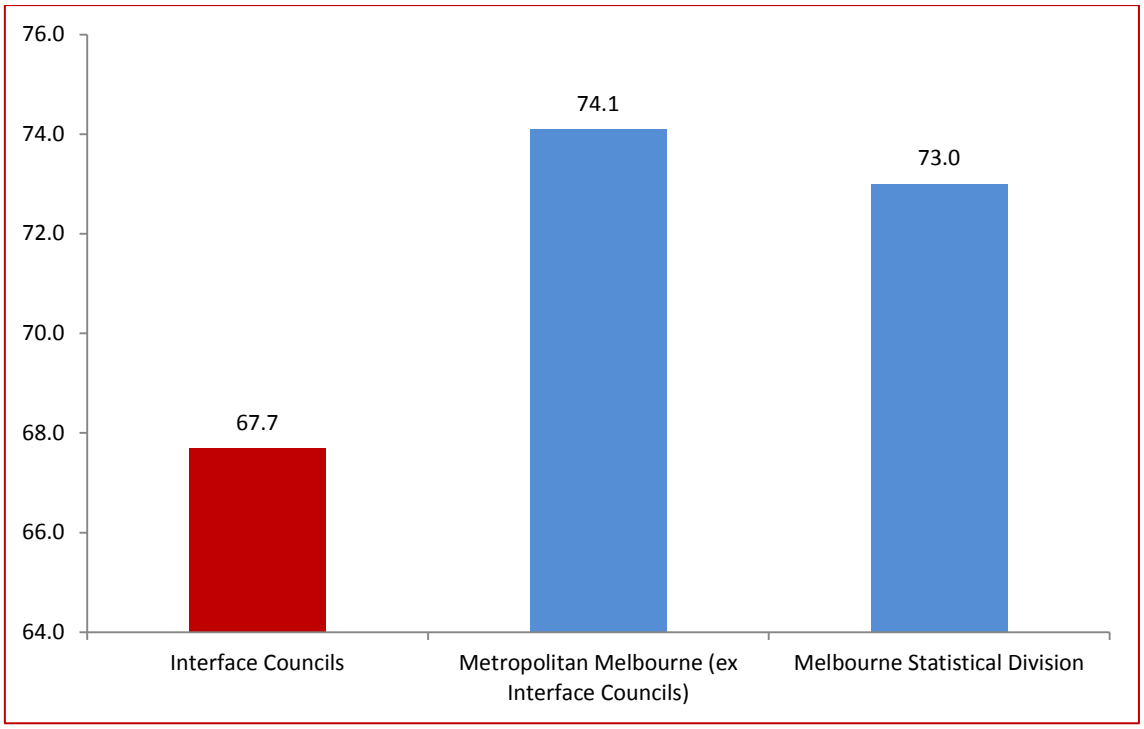
Figure 4.25: Job Provision in Creative and Performing Arts (Share of Total Jobs), Selected Locations 2006 and 2011



Source: ABS Census – Journey to Work 2006 and 2011

Victorian Community Indicators data highlights the relative lack of access to arts and cultural facilities, as shown in Figure 4.26. The proportion of Interface Council residents reporting sufficient opportunities to participate in arts and cultural activities (68%) is lower than proportions for non-Interface Council areas (74%) and the MSD (73%).

Figure 4.26: Proportion of Resident Having Sufficient Opportunities to Participate in Arts and Cultural Activities, Selected Locations



Source: Community Indicators Victoria

Public Library Resources

Interface Councils have a lower ratio of public library service points and weekly operating hours compared to the Metropolitan Melbourne average.

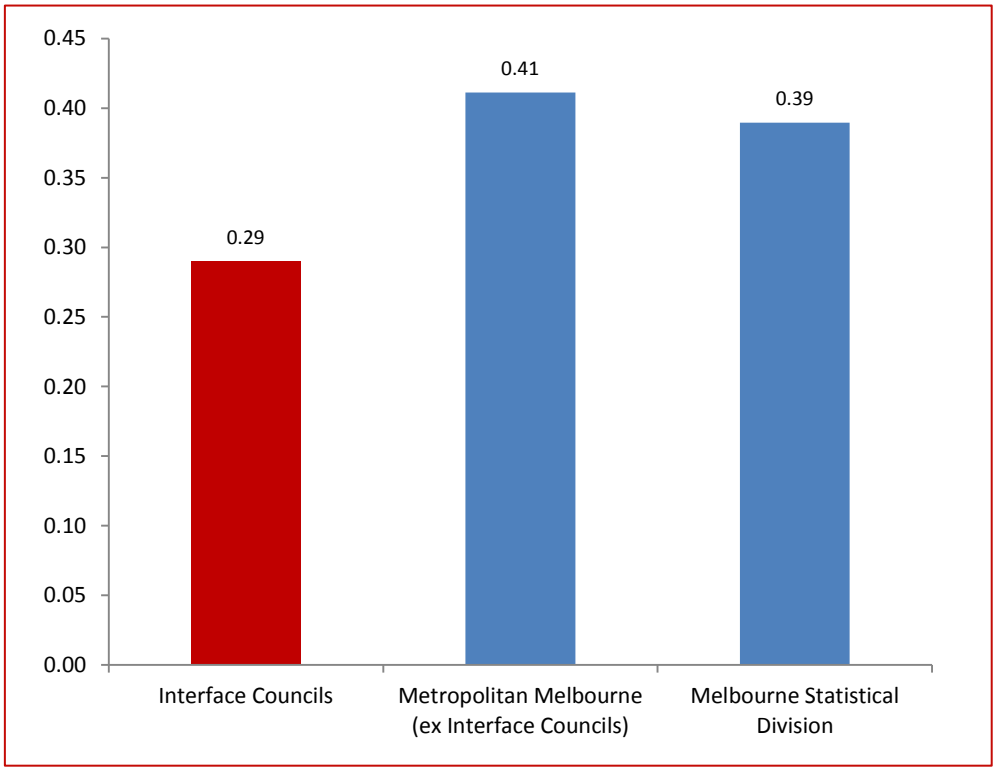
For example, the Interface Councils have 0.29 static services points per 10,000 population, compared to 0.41 and 0.39 static service points per 10,000 population for non-Interface Council areas and the MSD, respectively, according to the DPCD Annual Survey of Public Libraries 2009/10. This information is shown in Table 4.13 and Figure 4.24. Similarly, in terms of library operating hours the Interface Councils provide 15.4 hours per week per 10,000 population, which is significantly below the 18.2 hours per 10,000 population provided in Metropolitan Melbourne (excluding Interface Councils) and the 17.4 hours per 10,000 population provided in the MSD, as also shown in Table 4.13 and in Figures 4.27 and 4.28.

Table 4.13: Public Library Services Points and Operating Hours, Selected Locations, 2009/10

	Interface Councils	Metropolitan Melbourne (excluding Interface Councils)	Melbourne Statistical Division
Total number of Service Points	34	123	163
Operating hours per week	1,830	5,430	7,260
Service points per 10,000 population	0.29	0.41	0.39
Operating hours per week per 10,000 population	15.4	18.2	17.4

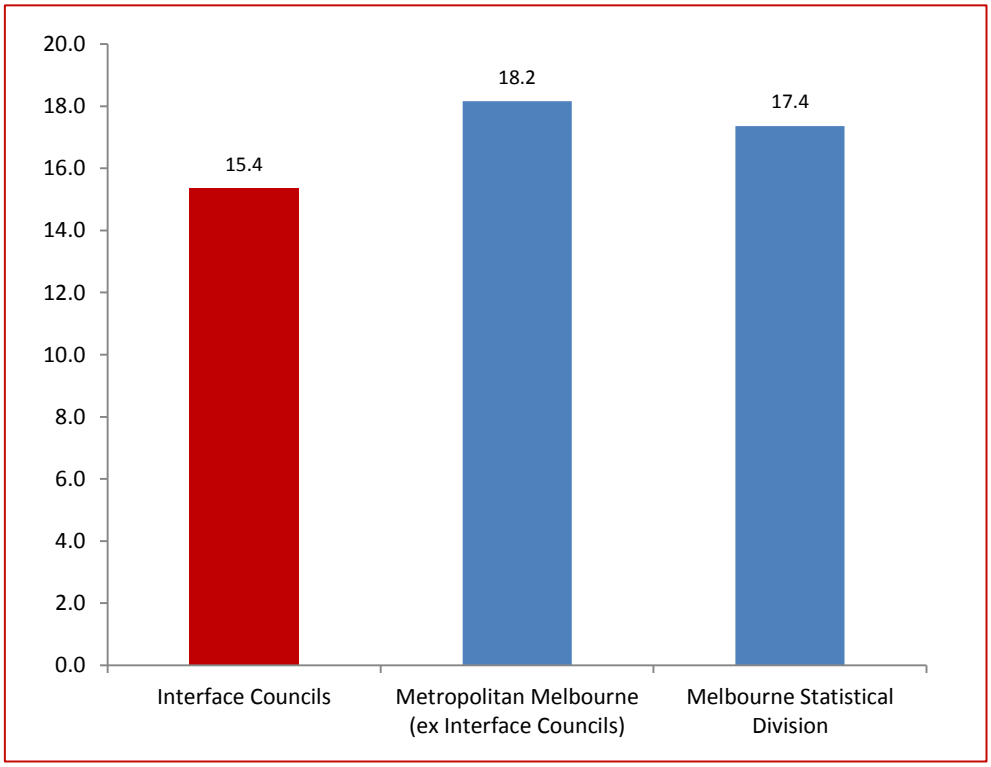
Source: DPCD, Annual Survey of Public Libraries 2009/10

Figure 4.27: Library Service Points (Static) per 10,000 Population, Selected Areas, 2009/10



Source: DPCD, Annual Survey of Public Libraries 2009/10

Figure 4.28: Library Operating Hours (per week) per 10,000 Population, Selected Areas, 2009/10



Source: DPCD, Annual Survey of Public Libraries 2009/10

4.10 Transport

Access to Public Transport

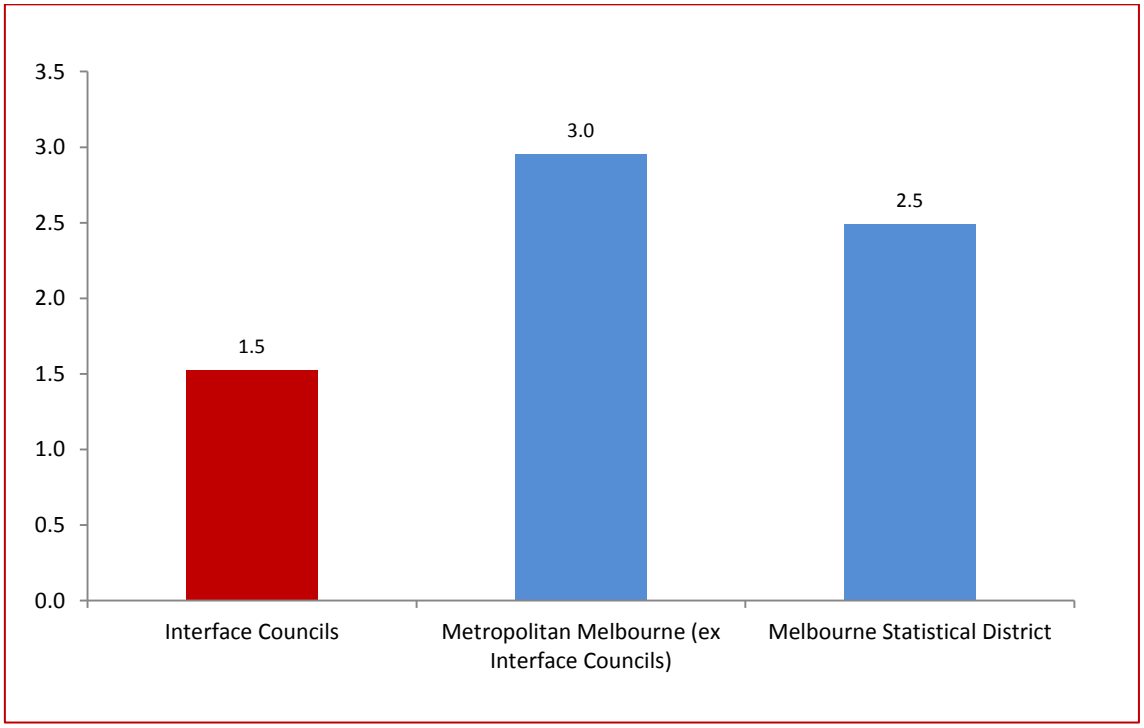
Compared to the Metropolitan Melbourne average, the Interface Councils are significantly under-provided for in terms of public transport options. When assessed in terms of access to tram lines, train lines, and bus routes (including night bus routes), Metlink data shows that Interface Council residents have access to 1.5 public transport routes per 10,000 population, which is half the rate of transport access (3.0 public transport routes per 10,000 population) available to Metropolitan Melbourne (excluding Interface Councils) and well below the access rate for residents of the MSD as a whole (2.5 public transport routes per 10,000 population). Public transport provision data is included in Table 4.14 and Figure 4.29.

Table 4.14: Access to Public Transport Options, Selected Areas, 2011

	Access to Train Lines (no.)	Access to Tram Lines (no.)	Access to Bus Routes (no.)	Access to Nightrider Bus Routes (no.)	Access to Public Transport Routes (no.)	Access to Public Transport Routes per 10,000 Population
Interface Councils	12	0	184	12	208	1.5
Metropolitan Melbourne (excluding Interface Councils)	69	95	603	47	814	3.0
Melbourne Statistical Division	80	95	782	59	1,016	2.5

Source: Metlink; Connecting Mitchell
Note: Figures do not total due to Mitchell Shire being excluded from Metropolitan Melbourne

Figure 4.29: Access to Public Transport Options per 10,000 Population, Selected Locations 2011



Source: Metlink; Connecting Mitchell

Private Vehicle Reliance

Private vehicle reliance (as indicated by vehicle ownership and registrations) is significantly higher in Interface Council areas compared to the Metropolitan Melbourne average. For example, Interface Council areas have 1.84 vehicles per occupied dwelling, and this compares to 1.48 vehicles per dwelling in non-Interface Council areas and 1.58 vehicles per occupied dwelling in the MSD, according to ABS Census data for 2011. The figures are shown in Table 4.15 and Figure 4.27.

Data relating to vehicle registrations (2010) highlights a similar pattern, with vehicle registrations in Interface Councils (738 per 1,000 population) being significantly higher than for non-Interface Council areas (707 registered vehicles per 1,000 population) and the MSD (712 registered vehicles per 1,000 population). This data is shown in Table 4.15 and Figures 4.30 and 4.31.

Table 4.15: Vehicle Ownership and Registrations, Selected Areas

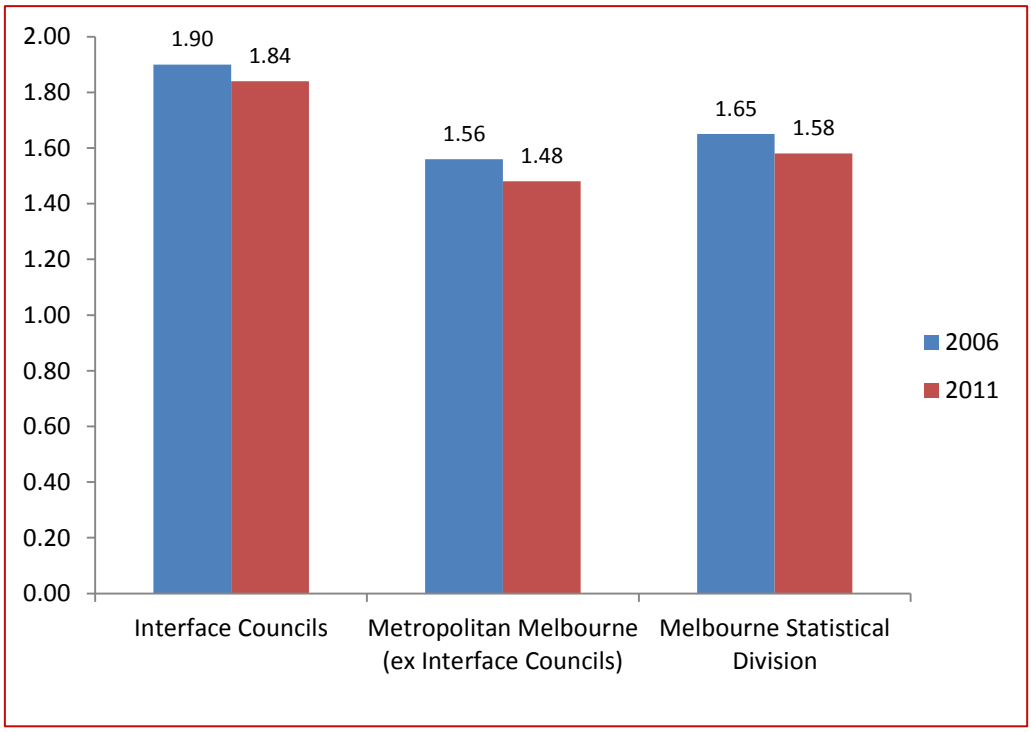
	Interface Councils	Metropolitan Melbourne (excluding Interface Councils)	Melbourne Statistical Division
Occupied Private Dwellings (2011)	446,940	1,039,510	1,474,020
Vehicles (2011)	822,320	1,537,260	2,336,040
Vehicles per Occupied Private Dwelling (2011)	**1.84**	**1.48**	**1.58**
Vehicle Registrations per 1,000 Population (2010)	**738**	**707**	**712**

Source: ABS Census of Population and Housing 2011; ABS National Regional Profiles, 2006-2010
Note: Figures rounded

Between 2006 and 2011, the number of vehicle per dwelling in Interface areas has declined from 1.90 vehicles to 1.84 vehicles. This is similar to the trend observed for non-Interface areas where the number of vehicles per dwelling has decreased from 1.56 vehicles to 1.48 vehicles.

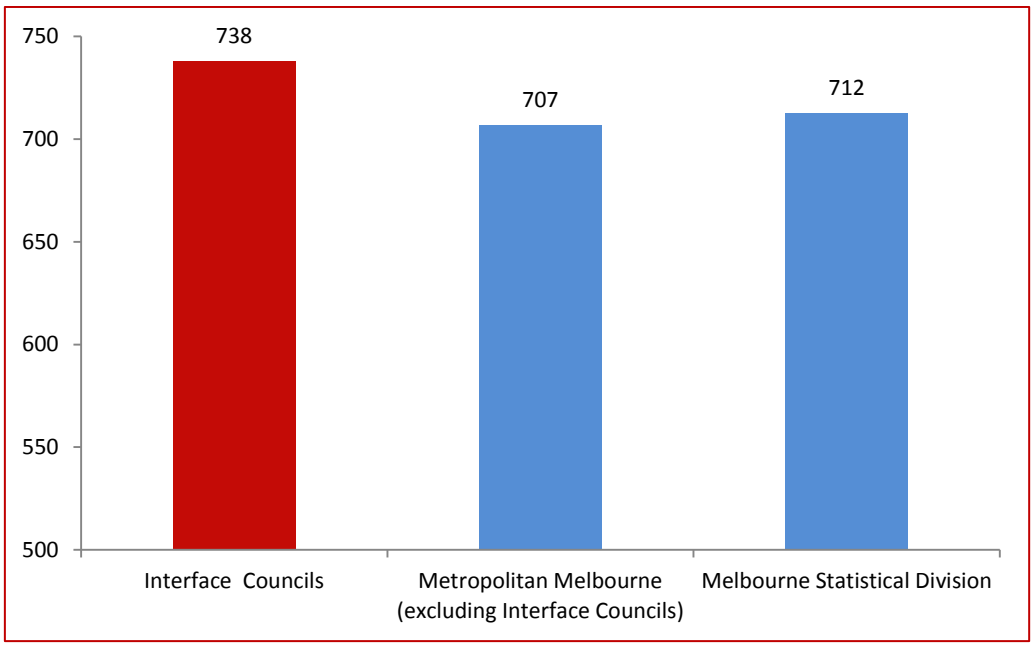
This data confirms Interface areas continue to be significantly more reliant on private vehicle travel than non-interface areas.

Figure 4.30: Comparison of Vehicle Ownership Levels (No. of Vehicles per Occupied Dwelling), Selected Areas, 2006 and 2011



Source: ABS Census of Population and Housing 2006 and 2011; Department of Planning and Community Development, Victoria in Future 2012

Figure 4.31: Comparison of Vehicle Registrations per 1,000 Population, Selected Areas, 2010



Source: ABS National Regional Profiles, 2006-2010

4.11 Conclusions

The findings of this socio-economic profiling and benchmarking analysis show that compared to the Metropolitan Melbourne averages, the Interface Council area is characterised by:

1 Relatively high level of socio-economic disadvantage, as highlighted through SEIFA and VAMPIRE

2 Relatively low average incomes

3 Relatively low educational outcomes

4 Evidence of poorer health outcomes

5 Relatively high level of youth disengagement with regard to higher education and workforce participation

6 Significant deficit in the provision of local employment opportunities

7 Relatively low provision of professional jobs

8 Relatively high unemployment rates

9 Relatively low provision of higher order services (hospitals, TAFEs, Courts etc)

10 Relatively low provision of arts and cultural services (libraries, arts centres etc)

11 Poor provision of public transport options

12 Heavy reliance on vehicle-based travel

5 FUTURE INFRASTRUCTURE AND SERVICE REQUIREMENTS AND COSTS

5.1 Introduction

This Chapter provides estimates for employment and for infrastructure and service requirements for Interface Councils over the period 2011 to 2026 (under the two population scenarios). Where under-provision is identified, future requirements are set at to reduce the gap by 50% (or by another identified measure) over the 15-year period.

Broad cost estimates have been prepared to provide general guidance on the financial implications of providing the identified level of infrastructure and services.

5.2 Employment Requirements

Job Requirements

Based on the existing job provision ration of 0.55 jobs per 1 labour force participant, between 148,000 (VIF Scenario) and 163,000 (Forecast id Scenario) additional jobs will be required in the Interface Councils area between 2011 and 2026.

The GAA has an aspirational target of ensuring the provision of 1 new job for every additional new household in growth areas. If this target is applied to the Interface Council areas, then the number of additional jobs required will be approximately 245,000 over the 15-year period under either scenario (noting that the GAA targets are based on dwelling growth and not population growth – with VIF 2012 and Forecast id project similar dwelling growth over the period).

Employment growth of this level would increase the job provision ratio to 0.60, which represents 10% growth on the existing job provision ratio. In the consultant's view, this employment growth target is realistic and achievable over the coming 15 years, especially if higher-order infrastructure and services are provided to support economic efficiency and liveability outcomes.

Employment requirements are shown in Table 5.1.

Table 5.1: Employment Requirements, Interface Councils 2011-2026

	Based on Existing Interface Job Provision = 0.55 jobs per labour force participant		Based on GAA job provision target (1 new local job for every new dwelling) = 0.60 jobs per labour force participant	
	VIF	**Forecast id**	**VIF**	**Forecast id**
2011	331,240 jobs	331,240 jobs	331,240 jobs	331,240 jobs
2026	498,990 jobs	500,330 jobs	579,720 jobs	575,570 jobs
Additional Jobs Required 2011 to 2026	**+167,750 jobs**	**+169,090 jobs**	**+248,480 jobs**	**+244,330 jobs**

Source: Forecast id (various); Department of Planning and Community Development, Victoria in Future 2012 ; ABS Census of Population and Housing 2006; ABS Journey to Work 2006; Essential Economics
Note: Figures rounded

5.3 Educational Requirements

Primary and Secondary School Places

The Department of Education advises detailed data is not available at the LGA level relating to the provision of primary and secondary school places. In view of this situation, the analysis assumes that one place per school aged child is currently being provided in the Interface Council area, noting this may overstate the existing situation where lags in provision occur.

Using this approach, an additional 72,710 primary school and 50,060 secondary school places will be required in Interface Council areas over the period 2011 to 2016. These estimates are based on Forecast id Scenario, as VIF 2012 does not provide specific age data that aligns with primary and secondary school age groups.

ABS Schools Australia 2006 (Cat. No. 4221.0) shows that in 2006 the average primary school size in Australia was 250 students and the average secondary schools size was 540 students. Applying these ratios to required school places shows a further 290 primary schools (rounded) and 95 secondary schools (rounded) will be required in Interface Council areas over the 2011-2026 period.

Primary and secondary school requirements over the coming 15 years are shown in Table 5.2.

Table 5.2: Estimated Primary and Secondary School Places Required, Interface Councils, 2011-2016

	Primary School Places		Secondary School Places	
	VIF	**Forecast Id**	**VIF**	**Forecast Id**
2011	na	136,030 places	na	115,260 places
2026	na	208,740 places	na	165,320 places
Additional Places Required 2011 to 2026	**na**	**+72,710 places**	**na**	**+50,060 places**
Additional Schools Required 2011 to 2026	**na**	**+290 schools**	**na**	**+95 schools**

Source: Forecast id (various); Essential Economics
Note: Figures rounded. na: not available

TAFE Places

Currently, 47,500 places are associated with TAFE facilities located in the Interface Councils area, and this represents approximately 50 places per 1,000 population aged 15-64 years. If this ratio is maintained, then between 16,010 (VIF Scenario) and 17,070 (Forecast id Scenario) additional places will be required over the period 2011 to 2026.

To close the gap by 50% with non-Interface Council provision (120 places per 1,000 population aged 15-64 years), a ratio of 85 places per 1,000 population aged 15-64 years would need to be provided. Applying this ratio leads to a requirement of between 60,470 (VIF Scenario) and 62,270 (Forecast id Scenario) additional places.

Data sourced from the Victorian TAFE Association shows that on average each TAFE campus in Victoria caters for approximately 5,000 enrolments annually. Using this ratio, approximately 12 new TAFE campuses will be required in the Interface over the coming 15 years to close the gap in provision by 50%.

TAFE requirements are shown in Table 5.3.

Table 5.3: Estimated TAFE Places Required, Interface Councils, 2011-2016

	Based on existing provision ratio (50 places per 1,000 Population aged 15-64 years compared to 120 per 1,000 for non-Interface areas)		Based on closing the gap in provision by 50% (85 places per 1,000 population aged 15-64 years)	
	VIF	**Forecast Id**	**VIF**	**Forecast Id**
2011	47,500 places	47,500 places	47,500 places	47,500 places
2026	63,510 places	64,570 places	107,970 places	109,770 places
Additional Places Required 2011 to 2026	**+16,010 places**	**+17,070 places**	**+ 60,470 places**	**+62,270 places**
Additional TAFE Campuses Required	**+3 campuses**	**+3 campuses**	**+12 campuses**	**+12 campuses**

Source: Forecast id (various); Department of Planning and Community Development, Victoria in Future 2008 (Second Release); TAFE annual reports (various); Essential Economics
Note: Figures rounded

5.4 Health Requirements

Public Hospital Beds

Based on the existing provision public hospital bed provision ratio of approximately 11 beds per 10,000 population, between 700 (VIF Scenario) and 730 (Forecast id Scenario) additional public hospital beds will be required in the Interface Council area between 2011 and 2026.

To close the gap by 50% with non-Interface Council provision (30 beds per 10,000 population), a ratio of 20.5 beds per 10,000 population would need to be provided. Applying this ratio leads to a requirement of between 2,550 (VIF Scenario) and 2,570 (Forecast id Scenario) additional beds.

Approximately 75 beds are provided per public hospital nationally (according to the Department of Health and Ageing – *The State of our Public Hospitals report 2010).* Using this ratio, an additional 34 public hospitals are required in the Interface over the coming 15 years to close the provision gap by 50%.

Public hospital requirements are included in Table 5.4.

Table 5.4: Estimated Public Hospital Beds Required, Interface Councils, 2011-2016

	Based on existing provision ratio (11 beds per 10,000 Population compared to 24 beds per population for non-Interface areas)		Based on closing the gap in provision by 50% (20.5 beds per 10,000 population	
	VIF	**Forecast Id**	**VIF**	**Forecast Id**
2011	1,520 beds	1,520 beds	1,520 beds	1,520 beds
2026	2,220 beds	2,250 beds	4,070 beds	4,090 beds
Additional Beds Required 2001 to 2026	**+700 beds**	**+730 beds**	**+2,550 beds**	**+2,570 beds**
Additional Public Hospitals Required 2011 to 2026	**+9 hospitals**	**+10 hospitals**	**+34 hospitals**	**+34 hospitals**

Source: Forecast id (various); Department of Planning and Community Development, Victoria in Future 2012 ; hospital and health services annual reports(various); Essential Economics.
Note: Figures rounded

5.5 Community and Recreational Requirements

Kindergarten

Detailed data relating to the provision of Kindergarten places is not available at the LGA level, according to the Department of Education and Early Childhood Development, while data compiled for the Council Survey is incomplete. In view of this situation, the State ratio of 190 places per 1,000 persons aged 0-4 years derived from the Productivity Commission's Report on Government Services 2011 has been used to estimate the existing situation. This approach may overstate the existing situation where lags in provision occur.

Using this approach, an additional 6,950 (VIF Scenario) and 8,830 (Forecast id Scenario) Kindergarten places will be required in the Interface Council area over the period 2011 to 2016.

An average of 100 places per kindergarten has been used to determine future building requirements (based on an average class size of 25 students and four groups per facility). Applying this ratio shows that between and 88 additional kindergartens are required in the Interface over the coming 15 years.

Kindergarten requirements are shown in Table 5.5.

Table 5.5: Estimated Kindergarten Places Required, Interface Councils 2011-2016

	Based on State ratio of 190 places per 1,000 persons aged 0-4 years	
	VIF	**Forecast Id**
2011	*19,600 places	*20,050 places
2026	26,550 places	28,880 places
Additional Places Required 2011 to 2026	**+6,950 places**	**+8,830 places**
Additional Kindergartens Required 2011 to 2026	**+70 Kindergartens**	**+88 Kindergartens**

Source: Forecast id (various); Department of Planning and Community Development, Victoria in Future 2008 (Second Release); Productivity Commission – Report on Government Services 2011; Kindergarten Parents Victoria; Essential Economics

Notes: * Estimated from Productivity Commission State ratios
Figures rounded

Aged Care

The Australian Government Department of Health and Ageing data shows Interface Council areas have 520 residential aged care places per 10,000 persons aged 65 years+.

Using this ratio, an additional 8,420 (VIF Scenario) and 6,190 (Forecast id Scenario) aged care residential beds will be required in the Interface Council area over the period 2011-2016.

To close the gap by 50% with non-Interface Council provision (620 places per 10,000 population), a ratio of 570 places per 10,000 population would need to be provided. Applying this ratio leads to a requirement of between 9,920 (VIF Scenario) and 7,470 (Forecast id Scenario) additional beds.

The average size of aged care residential facilities in Victoria is approximately 60 beds (sourced from report *The Victorian Government's Role in Residential Health Care, 2009*). Using this ratio between 125 (rounded) and 165 (rounded) additional residential aged care facilities will be required in the Interface over the coming 15 years).

Aged care requirements are shown in Table 5.6.

Table 5.6: Estimated Aged Care Residential Bed (High and Low Care) Required, Interface Councils, 2011-2016

	Based on existing provision ratio (520 places per 10,000 Population 65 years + compared to 620 beds per population for Non-Interface areas)		Based on closing the gap in provision by 50% (570 places per 10,000 population 65 years +	
	VIF	**Forecast Id**	**VIF**	**Forecast Id**
2011	7,160 places	7,160 places	7,160 places	7,160 places
2026	15,580 places	13,350 places	17,080 places	14,630 places
Additional Places Required 2001 to 2026	**+8,420 places**	**+6,190 places**	**+9,920 places**	**+7,470 places**
Additional Aged Care Residential Facilities Required 2011 to 2026	**+140 facilities**	**+105 facilities**	**+165 facilities**	**+125 facilities**

Source: Forecast id (various); Department of Planning and Community Development, Victoria in Future 2012; Department of Health and Ageing Aged Care Service List 2011; Essential Economics
Note: Figures rounded

Library Floorspace

The Interface Councils currently have a similar ratio of library floorspace as non-Interface Councils (23m^2 per 1,000 population). Using this ratio as an ongoing benchmark for provision, between 8,470m^2 (VIF Scenario) and 9,780m^2 of additional floorspace will be required across the Interface Councils area over the coming 15 years.

This requirement represents the equivalent of 17 to 20 new public libraries, based on an average floorspace of 500m^2.

Library floorspace requirements are shown in Table 5.7.

Table 5.7: Estimated Library Floorspace Required, Interface Councils 2011-2016

	Based on existing provision ratio (23m^2 per 1,000 population) which is the same provision as for MSD	
	VIF	**Forecast Id**
2011	26,840m^2	26,840m^2
2026	35,310m^2	36,620m^2
Additional Floorspace Required 2011 to 2026	**+8,470m^2**	**+9,780m^2**
Additional Public Libraries Required 2011 to 2026	**+17 Libraries**	**+20 Libraries**

Source: Forecast id (various); Department of Planning and Community Development, Victoria in Future 2012 ; DPCD, Annual Survey of Public Libraries 2009/10; Essential Economics
Note: Figures rounded

5.6 Public Transport Requirements

ABS JTW data shows that in 2012 only 5% of workers located in the Interface Councils area used public transport as their main mode of travel to work, and this compares to 14% for non-Interface Council areas. These ratios are used as a proxy for general public transport use across the community.

Under the existing usage ratio (5%), provision would need to be made for between 31,170 (VIF Scenario) and 32,230 (Forecast id) additional public transport users over the period 2011 to 2026 in the Interface Council area.

To close the gap by 50%, public transport usage would need to increase to 9.5%. Applying this ratio, provision would need to be made for between 120,460 (VIF Scenario) and 121,990 (Forecast id) additional public transport users by the end of the 15-year period.

Public transport usage estimates are included in Table 5.8

Table 5.8: Estimated Public Transport Usage, Interface Councils 2011-2016

	Based on Existing Public Transport Usage of 5%		Based on Closing the Gap by 50% Transport Usage of 9.5%	
	VIF	**Forecast id**	**VIF**	**Forecast id**
2011	68,050 users	67,500 users	68,050 users	67,500 users
2026	99,220 users	99,730 users	188,510 users	189,490 users
Additional Public Transport Users	**31,170 users**	**32,230 users**	**120,460 users**	**121,990 users**

Source: Forecast id (various); Department of Planning and Community Development, Victoria in Future 2012; ABS JTW 2012; Essential Economics
Note: Figures rounded

5.7 Summary of Key Infrastructure and Service Requirements

A summary of key infrastructure and service requirements based on 'closing the gap' outcomes is provided in Table 5.9. An average of the two population scenarios has also been made, which provides a realistic benchmark for requirements and the basis for an assessment of associated costs, as presented in Section 5.8.

Table 5.9: Summary of Key Infrastructure and Service Requirements, Interface Councils 2011-2026

	Additional Requirements at 2026		
	VIF	**ID**	**Average**
Jobs	+248,480 places	+244,330 places	**+246,405 jobs**
Kindergarten Places	+6,050 places	+8,830 places	**+7,440 places / 74 new buildings**
Primary School Places	na	+72,710 places	**+72,710 places / 290 new buildings**
Secondary School Places	na	+50,060 places	**+50,060 places / 95 new buildings**
TAFE Places	+60,470 places	+62,270 places	**+61,370 places / 12 new buildings**
Aged Care Residential Places	+9,920 places	+7,470 places	**+8,695 beds / 145 new buildings**
Hospital Beds	+2,550 beds	+2,570 beds	**+2,560 beds / 34 new buildings**
Library Floorspace	+8,470m^2	+9,780m^2	**+9,125 m^2 / 18 new buildings**
Public Transport Usage	+120,460 users	+121,990 users	**+ 121,225 users**

Source: Essential Economics – refer text for details
Note: Figures rounded

5.8 Costs

Based on the infrastructure requirements identified above, broad costs have been estimated associated with each service area. These are 'ball-park' estimates, recognising that detailed specialist analysis would be required to more accurately gauge costs for each item. Nevertheless, the cost estimates are useful in providing a benchmark against which economic and social costs of ongoing congestion can be made (as described in Section 6.2). Land cost estimates have been provided by Oliver Hume Real Estate based on recent average land sales values across the growth corridors.

The analysis shows that the total cost of providing key infrastructure in the Interface Council area over the coming 15 years is approximately $9.8 billion (in constant 2011 dollars).

The following provides a summary of costs for each service area by 2026 (with costs spread across the 15-year period 2011 to 2026).

Kindergarten infrastructure

The cost of providing infrastructure to support an additional 7,440 kindergarten places is estimated at $63m over 15 years (in 2011 dollars).

This is based on:

- Floorspace requirements of 37,200m^2, using a ratio of 5m^2 per place (derived from Growth Area Framework Plans: Activity Centre and Employment Planning, Essential Economics 2010)
- Construction costs of $1,450 per m^2 (derived from Davis Langdon Blue Book 2011)
- Land requirements of 7.4ha (which assumes floorspace accounts for 50% of site coverage) at an average cost of $500,000 per ha
- 10% allocation applied to total construction and land costs to allow for carparking and external site works.

Primary school infrastructure

The cost of providing infrastructure to support for an additional 72,710 primary school places is estimated at $620m over 15 years (in 2011 dollars).

This is based on:

- Floorspace requirements of 360,000m^2, using a ratio of 5m^2 per place (derived from Growth Area Framework Plans: Activity Centre and Employment Planning, Essential Economics 2010)
- Construction costs of $1,450 per m^2 (derived from Davis Langdon Blue Book 2011)
- Land requirements of 73ha (which assumes floorspace accounts for 50% of site coverage) at an average cost of $500,000 per ha
- 10% allocation applied to total construction and land costs to allow for carparking and external site works.

Secondary school infrastructure

The cost of providing infrastructure to support for an additional 50,060 secondary school places is estimated at $496m over 15 years (in 2011 dollars).

This is based on:

- Floorspace requirements of 250,000m^2, using a ratio of 5m^2 per place (derived from Growth Area Framework Plans: Activity Centre and Employment Planning, Essential Economics 2010)
- Construction costs of $1,700 per m^2 (derived from Davis Langdon Blue Book 2011)
- Land requirements of 50ha (which assumes floorspace accounts for 50% of site coverage) at an average cost of $500,000 per ha
- 10% allocation applied to total construction and land costs to allow for carparking and external site works.

TAFE infrastructure

The cost of providing infrastructure to support for an additional 61,370 TAFE places is estimated at $365m over 15 years (in 2011 dollars).

This is based on:

- Floorspace requirements of 184,000m^2, using a ratio of 3m^2 per place (derived from a review of recent TAFE developments in Melbourne)
- Construction costs of $1,700 per m^2 (derived from Davis Langdon Blue Book 2011)
- Land requirements of 37ha (which assumes floorspace accounts for 50% of site coverage) at an average cost of $500,000 per ha
- 10% allocation applied to total construction and land costs to allow for carparking and external site works.

Aged Care infrastructure

The cost of providing infrastructure to support for an additional 8,595 aged care beds is estimated at $1,149m over 15 years (in constant 2011 dollars).

This is based on:

- Floorspace requirements of 386,775m^2, using a ratio of 45m^2 per bed (derived from Department of Human Services – Aged Care Residential Services Generic Brief 1999)
- Construction costs of $2,600 per m^2 (derived from Davis Langdon Blue Book 2011)
- Land requirements of ha (which assumes floorspace accounts for 50% of site coverage) at an average cost of $500,000 per ha
- 10% allocation applied to total construction and land costs to allow for carparking and external site works.

While this estimate is expressed in terms of 'beds', the costs include all infrastructure associated with aged care facilities (lounges, kitchens, toilets, medical facilities, staff areas etc)

Hospital infrastructure

The cost of providing infrastructure to support for an additional 2,560 hospital beds is estimated at $1,093m over 15 years (in constant 2011 dollars).

This is based on:

- Floorspace requirements of 256,000m^2, using a ratio of 100m^2 per bed (derived from Department of Human Services – Design Guidelines for Hospitals and Day Care Procedure Centres, 2004)
- Construction costs of $3,780 per m^2 (derived from Davis Langdon Blue Book 2011)
- Land requirements of 51ha (which assumes floorspace accounts for 50% of site coverage) at an average cost of $500,000 per ha
- 10% allocation applied to total construction and land costs to allow for carparking and external site works.

While this estimate is expressed in terms of 'beds', the costs include all infrastructure associated with public hospital facilities (consulting rooms, laboratories, theatres, waiting rooms, kitchens, staff areas etc).

Library Infrastructure

The cost of providing infrastructure to support the additional demand for library services associated with population growth is estimated at $19m over 15 years (in 2011 dollars).

This is based on:

- Floorspace requirements of 9,125m^2, using a ratio of 23m^2 per 1,000 population (derived from DPCD, Annual Survey of Public Libraries 2009/10)
- Construction costs of $1,700 per m^2 (derived from Davis Langdon Blue Book 2011)
- Land requirements of 2ha (which assumes floorspace accounts for 50% of site coverage) at an average cost of $500,000 per ha
- 10% allocation applied to total construction and land costs to allow for carparking and external site works.

Public Transport Infrastructure

The cost of providing infrastructure and subsidies to support additional public transport usage of 121,225 persons is estimated at $6.00 billion over 15 years (in 2011 dollars).

This is based on:

- Average annual State Government subsidy of $1,200 per public transport user (based on research undertaken by the Public Transport Users Association – Common Urban Myths about Transport, 2010), which amounts to $1.77 billion over this period.
- $4.23 billion in capital investment based on allocating 50% of identified metropolitan public transport investment included in the Victorian Transport Plan 2008 (and adjusting to 2011 dollars). This includes investment for new trains, tracks, trams, buses and specific rail extensions and stations to service growth areas.

5.9 Conclusions

Significant infrastructure and resources – totalling the equivalent of $9.8 billion by 2026 (expressed in 2011 constant prices) – will be required to ensure Interface Council areas are adequately provided with facilities and services to assist in closing the gap with non-Interface Council areas, and to ensure improved economic, social and liveability outcomes are achieved. Table 5.10 provides a summary of estimated requirements and costs for the period 2011 to 2016.

Table 5.10: Estimated Costs Associated With Providing Key Infrastructure and Services, Interface Councils, 2011-2026

Component	Units Required	Ratios	Floorspace Required	Unit Cost ($ per/m2)	Estimated Construction Cost (by 2026)	Land Required	Unit Cost (per ha)	Estimated Land Costs	Sub-Total	10% Allocation for Carparking and external Works	Total
Kindergarten	7,440 places	$5m^2$ per child	$37,200m^2$	$1,450	$54 million	7ha	$500,000	$4 million	$58 million	$6 million	$64 million
Primary School	72,710 places	$5m^2$ per student	$363,550m^2$	$1,450	$527 million	73ha	$500,000	$36 million	$563 million	$56 million	$619 million
Secondary School	50,060 places	$5m^2$ per student	$250,300m^2$	$1,700	$426 million	50ha	$500,000	$25 million	$451 million	$45 million	$496 million
TAFE	61,370 places	$3m^2$ per student	$184,110m^2$	$1,700	$313 million	37ha	$500,000	$18 million	$331 million	$33 million	$364 million
Aged Care	8,595 beds	$45m^2$ per bed	$386,775m^2$	$2,600	$1,006 million	77ha	$500,000	$39 million	$1,045 million	$104 million	$1,149 million
Hospitals	2,560 beds	$100m^2$ per bed	$250,000\ m^2$	$3,780	$968 million	51ha	$500,000	$26 million	$994 million	$99 million	$1,093 million
Libraries	$9,125m^2$	$23m^2$ per 1,000 population	$9,125\ m^2$	$1,700	$16 million	2ha	$500,000	$1 million	$17 million	$2 million	$19 million
Sub-total					**$3,028 million**			**$149 million**	**$3,458 million**	**$345 million**	**$3,804 million**
Public Transport (Infrastructure provision)											$4,229 million
Public Transport (operational subsidy)	+121,225 users	Incremental increase from 5% to 9.5% of population using public transport	n/a	$1,200							$1,772 million
											Total $9,805 million (or $9.8 billion)

Source: Growth Area Framework Plans: Activity Centre and Employment Planning, Essential Economics 2010; Davis Langdon Blue Book 2011; Department of Human Services – Design Guidelines for Hospitals and Day Care Procedure Centres, 2004; from Department of Human Services – Aged Care Residential Services Generic Brief 1999DPCD, Annual Survey of Public Libraries 2010/11; Public Transport Users Association – Common Urban Myths about Transport; Victorian Transport Plan 2008; Oliver Hume Real Estate; Essential Economics

Note: Figures rounded to nearest $1 million.
* Increase public transport usage is modelled to increase gradually from 5% to 9.5% of the population over the period 2011-2026

6 STATE ECONOMIC BENEFITS OF INFRASTRUCTURE AND RESOURCE FUNDING

6.1 Introduction

This Chapter highlights socio-economic benefits associated with a greater level of infrastructure and service provision in Interface Council areas. The analysis identifies costs associated with congestion under a base case outcome, as well as highlighting community service employment benefits associated with the delivery of key infrastructure and services (especially higher-order services which are generally lacking in Interface Council areas).

6.2 Social Costs of Congestion

Significant social costs are associated with ever-increasing congestion levels in Australia's capital cities. These costs are especially relevant to growth areas, with the principal causes being:

- Inadequate public transport provision
- High car dependency
- Lack of sufficient local jobs (poor job self-sufficiency)
- Lack of local health, education and community services
- Lack of local recreation, cultural and leisure services

These factors lead to a situation of ever-increasing commuting by growth area residents to access employment and increased numbers of trips to meet other personal and household needs. This expanded number of journeys places increasing pressure on already-stretched road infrastructure and other resources.

The avoidable social costs of congestion for Australia were estimated at $9.4 billion in 2005, a figure which is forecast to increase to $20.4 billion in 2020, according to research undertaken by the Department of Transport and Regional Service - Bureau of Transport and Regional Economics (BTRE – *Estimating urban traffic congestion costs trends for Australian Cities, Working Paper No.712)*. Over this period, the avoidable social costs of congestion for Metropolitan Melbourne are expected to increase from $3.0 billion in 2005 to $6.1 billion in 2020 (in constant 2005 dollars).

These estimates are calculated with respect to detailed modelling of the following variables:

- Private time costs
- Business time costs
- Additional vehicle operating costs
- Additional air pollution costs

The social cost of congestion measures the cost difference between the estimated congestion outcome compared with the economic optimum outcome (ie free-flowing traffic situation).

Using the BTRE data to 2020, and adjusting for the period to 2021-26 (by applying the average growth rate for congestion over the 2005 to 2020 period), estimates have been prepared for the social costs of congestion in the Interface Council area. These calculations are based on distributing BTRE cost data on

a per capita basis using DPCD VIF 2008 population projections, but adjusting by 20% to recognise greater car reliance and commuting distances observed for Interface Council areas.

Table 6.1: Estimate of Avoidable Social Costs of Congestion, Interface Councils, 2011-2016

Year	MSD Estimated Social Cost of Congestion	Interface Councils Share Congestion (calculated on a per capita basis plus 20%)	Interface Councils Estimated Social Cost of Congestion
2011	$4,253 m	39.5%	$1,679 m
2012	$4,447 m	40.7%	$1,810 m
2013	$4,637 m	41.3%	$1,914 m
2014	$4,832 m	41.8%	$2,021 m
2015	$5,032 m	42.4%	$2,131 m
2016	$5,227 m	42.1%	$2,202 m
2017	$5,442 m	43.3%	$2,357 m
2018	$5,653 m	43.8%	$2,473 m
2019	$5,880 m	44.2%	$2,598 m
2020	$6,123 m	44.6%	$2,730 m
2021	$6,417 m	44.4%	$2,852 m
2022	$6,725 m	45.3%	$3,047 m
2023	$7,048 m	45.6%	$3,217 m
2024	$7,386 m	46.0%	$3,394 m
2025	$7,741 m	46.2%	$3,580 m
2026	$8,112 m	46.5%	$3,773 m
Total	**$94,955 m**	**44.0%**	**$41,778 m**

Source: Bureau of Transport and Regional Economics – Estimating urban traffic and congestion cost trends for Australian cities, 2007; Department of Planning and Community Development, Victoria in Future 2012; Essential Economics
Note: Figures rounded

An analysis by SGS Economics and Planning (submission into Enhancing Victoria's Liveability, 2008), highlights similar costs under current policy settings (relating to the situation in 2008).

The key findings derived from the SGS submission are as follows:

- Congestion costs associated with increased population growth in Melbourne are approximately $5,200 per person pa (or $6,000 when updated to 2011 dollars)
- By 2026, the congestion cost for the Interface would be $3.6 billion pa expressed in 2011 prices
- The creation of 'poly-centric' urban settlement patterns is required to improve economic efficiency and liveability.

Both the BTRE and SGS studies show a significant economic and social dividend is associated with reduced congestion costs, particularly compared to the cost of providing key infrastructure in strategic interface locations. Based on BTRE data, a 23% reduction in cumulative congestion costs over the coming 15 years would be the equivalent to providing essential infrastructure identified for the Interface Councils area over this period.

6.3 Community Service Employment Generation

To achieve a target of 245,000 additional jobs in the Interface Councils area over the coming 15 years, employment must be generated across a wide range of sectors, and a significant amount of new investment needs to be attracted.

A key cornerstone for investment attraction is the development of high amenity and liveable communities which provide a full range of higher-order services and a diverse housing stock that attract professionals, business owners and entrepreneurs and their families to live in the area. This recognises that while intervention can support investment and employment outcomes (such as relocation of State agencies or support for a particular local industry), a vibrant small and medium-enterprise sector is critical to sustainable employment growth in any particular location, especially as the SME sector is where most businesses and jobs are created.

The provision of infrastructure and services as outlined in this report will assist in bridging the liveability gap between Interface and non-Interface areas in Melbourne, and increase the attractiveness of migration to these areas, particularly if supported by investment in improved and affordable housing products.

In employment terms, provision of this level of infrastructure is estimated to generate approximately 36,000 new jobs in the Interface Councils area, representing 1 in 7 or 15% of the total job requirement between 2011 and 2026, as shown in Table 6.2.

In benchmarking terms, analyses undertaken by Essential Economics for the GAA show that across Metropolitan Melbourne 26% of all jobs are associated with the health, community and education sectors. When employment associated with private hospitals, child care facilities (which are generally privately provided), public administration, arts and culture, recreational services etc is added to the 36,000 new jobs identified by the selected services analysed in this report, the Interface Council area would be in a position to match, if not improve upon, the metropolitan benchmark.

In a broader employment context, important components in leveraging private sector investment and generating employment will be found in the setting of a good strategic planning base, ranging from Growth Area Structure Planning, Precinct Structure Planning, and Activity Centre Planning, to planning for industrial/employment land provision, local and regional economic development, and investment attraction and facilitation strategies.

Table 6.2: Community Service Employment Generation

	Employment Ratio	Direct Jobs	Employment Multiplier	Indirect Jobs	Indirect jobs supported in Interface (30% of indirect jobs)	Total Jobs
Kindergarten	1 job per 15 places	500	1.8	400	120	620
Primary School	1 job per 10 places	7,270	1.7	5,090	1,530	8,800
Secondary School	1 job per 10 places	5,010	1.7	3,500	1,050	6,060
TAFE	1 job per 25 places	2,450	1.7	1,720	520	2,970
Aged Care	1 job per 7.5 places	1,150	1.9	1,030	310	1,460
Hospitals	5 jobs per bed	12,800	1.9	11,520	3,460	16,260
Libraries	1 job per 75m^2	120	2.1	130	40	160
Total		**29,300 jobs**		**23,390 jobs**	**7,030 jobs**	**36,330 jobs**
Total additional jobs required						**245,000 jobs**
Share of total additional jobs						**14.8%**

Source: ABS Input-Output tables; Growth Area Framework Plans: Activity Centre and Employment Planning, Essential Economics 2010; DPCD, Annual Survey of Public Libraries 2009/10; Essential Economics
Note: Figures rounded

6.4 Other State Benefits

A range of other benefits are associated with improved infrastructure and service provision in the Interface, and these include at least the following:

- Development of more sustainable communities in terms of providing local jobs and services
- Contribution to providing better balance of white and blue collar jobs in the Interface
- Improved health and education outcomes for Interface residents through delivery of accessible higher-order medical and learning/training resources at a local level (ie benefits of early intervention)
- Reduction in pressure on middle-ring suburban areas in terms of reducing pressures on their provision of health, education and community services
- Reduction in pressure on road infrastructure as more services and jobs are provided in Interface areas
- Improved environmental outcomes due to reduced vehicle travel, higher public transport usage.

6.5 Conclusions

1 Significant socio-economic costs associated with congesting impacts on individuals, business, infrastructure and the environment have been identified by the BTRE.

2 Over the coming 15 years, cumulative congestion costs are estimated to be approximately $42 billion in the Interface Council area.

3 In contrast, the cost of providing key infrastructure over this period is estimated at $9.8 billion, or just 23% of the cumulative congestion costs. Importantly, the provision of greater numbers of local jobs, community services and public transport options in the Interface would be expected to

contribute significantly to reducing congestion and associated costs, as reliance on vehicle-based travel declines.

4 The provision of infrastructure and services outlined in this report would be expected to contribute to the delivery of approximately 36,000 additional jobs in the Interface in the next 15 years, and assist in meeting a share of the overall employment target of 245,000 jobs over the period 2011 to 2026.

5 The provision of higher-order services including major hospitals, further education facilities, schools and aged care facilities would considerably improve liveability in the Interface Councils area, making these localities more attractive for professional job-seekers and their families, and more attractive for investors and those establishing new or expanded businesses.

6 Other benefits associated with enhanced infrastructure and service provision in the Interface can be expected to include an improved balance of white- and blue-collar employment opportunities, improved health and education outcomes, reduced pressure on local and regional road infrastructure, and improved environmental outcomes.

7 KEY FINDINGS

The Interface Councils are a strategic grouping of outer local government areas (including all of Melbourne's growth areas) that have joined together to promote outer Melbourne and to ensure its future as a liveable location.

Role and Contribution of Interface Councils

1 Interface Councils play an important role in supporting Metropolitan Melbourne's economy, and this role will become more critical as Melbourne's population expands to 5 million persons and beyond.

2 The ongoing and future role of the Interface Councils includes at least the following:

- Accommodating approximately 65% of metropolitan population growth over the next 15 years
- Supporting Melbourne's labour force requirements by providing 55% (or more) of labour force growth between 2011 and 2026
- Responsible for management of 90% of Melbourne's Green Wedges
- Responsible for 98% of Melbourne's agricultural production and 11% of Victoria's agricultural production
- Responsible for 55% of Melbourne's local road network, including a considerable amount of non-sealed local roads

3 The Interface Councils have developed a set of Strategic Development Objectives aimed at ensuring living standards for Interface residents are comparable with those experienced in non-Interface Metropolitan areas. To achieve the desired outcomes, improved infrastructure and services provision (public transport, community services, etc) and expanded local employment opportunities will need to be delivered in a timely manner to overcome existing disadvantages and to ensure economic efficiency in the Interface areas.

4 This present study identifies key areas of disadvantage associated with the under-provision of infrastructure and services in the Interface Council areas. The study provides estimates of new or expanded infrastructure and services requirements in the Interface Councils area to 2026, as well as identifying costs associated with meeting population expansion needs and closing the infrastructure/services gap with non-interface Metropolitan provision.

Evaluation Framework

5 In conjunction with the Interface Council Group, an Evaluation Framework has been prepared to guide the analysis. The Framework includes two population scenarios, a benchmarking group to reference liveability standards, and a suite of indicators to identify future infrastructure and service needs in the Interface.

Population Outlook

6 The State Government (DPCD) and id Consulting have prepared long-term population, demographic and household projections for the Interface Councils. Due to different methodologies (and the timing of when the data was prepared), the datasets provide some contrasting outcomes in relation to the coming 15 years.

7 While both scenarios indicate an increase of approximately 245,000 households between 2011 and 2026, Forecast id data shows a higher population growth outcome (+645,000 persons)

compared with VIF 2012 (+625,000 persons) over the period (involving a difference of approximately 3%).

8 When demography is considered, the Forecast id data shows population growth is strongly underpinned by increases in families and working-age residents, whereas VIF 2012 anticipates a lesser focus on these cohorts, but strong growth in the 65+ years age group.

9 In view of these different outcomes, both datasets are referenced when assessing future infrastructure and service requirements for the Interface Councils.

Socio-Economic Benchmarking

10 The findings of this socio-economic profiling and benchmarking analysis show that compared to the Metropolitan Melbourne averages, the Interface Council area is characterised by:

- Relatively high level of socio-economic disadvantage as highlighted through SEIFA and VAMPIRE
- Relatively low average incomes
- Relatively low educational outcomes
- Evidence of poorer health outcomes
- Relatively high level of youth disengagement with regard to higher education and workforce participation
- Significant deficit in the provision of local employment opportunities
- Relatively low provision of professional jobs
- Relatively high unemployment rates
- Relatively low provision of higher order services (hospitals, TAFEs, Courts etc)
- Relatively low provision of arts and cultural services (libraries, arts centres etc)
- Poor provision of public transport options
- Heavy reliance on private vehicle-based travel

11 When five-year trends are considered, little progress has been made in closing the gap between Interface and non-Interface areas in terms of local job provision, educational outcomes and employment diversity – with the relative lack of professional and management jobs very apparent. Between 2006-2011 the jobs deficit in the Interface increased from approximately 240,000 jobs to 280,000 jobs, while unemployment rates have trended well above non-Interface levels.

Future Infrastructure Service Requirements and Costs

12 Significant infrastructure and other resources will be required to ensure Interface Council areas are adequately provided for in order to close the gap with non-Interface Council areas, and to ensure improved economic, social and liveability outcomes are achieved for the Interface Councils, as well as for the overall State. Costs of some $9.8 billion are estimated to be involved to 2026 (in constant 2011 prices) for the provision or upgrading of many infrastructure components and services in the Interface Councils area, as indicated in the Table below. This estimate is based on reducing the gap between the Interface Councils and the rest of Melbourne by 50%, which should be achievable in social equity terms.

Estimated Costs Associated With Providing Key Infrastructure and Services, Interface Councils, 2011-2026

Component	Units Required	New Buildings Required	Estimated Costs* (by 2026)
Kindergarten	7,440 places	74 buildings	$64 million
Primary School	72,710 places	290 buildings	$619 million
Secondary School	50,060 places	95 buildings	$496 million
TAFE	61,370 places	12 buildings	$364 million
Aged Care	8,595 beds	146 buildings	$1,149 million
Hospitals	2,560 beds	34 buildings	$1,093 million
Libraries	9,125m^2	18 buildings	$19 million
Sub-total			$3,804 million
Public Transport (Capital investment and annual operational subsidy)	+121,225 users		$6,000 million
Total			**$9,804 million (or $9.8 billion)**

*Costs include land purchase, building construction, carparking, landscaping and site works.

State Economic Benefits of Infrastructure and Resource Funding

13 Significant socio-economic costs associated with congestion impacts on individuals, businesses, infrastructure and the environment have been identified by the BTRE.

14 Over the coming 15 years to 2026, cumulative congestion costs are estimated to be approximately $42 billion in the Interface Councils.

15 In contrast, the cost of providing key infrastructure over this period is estimated at $9.8 billion, or just 23% of the cumulative congestion costs. Importantly, the provision of greater local jobs, community services and public transport options in the Interface Councils would be expected to contribute significantly to reducing congestion and associated costs, especially as reliance on vehicle-based travel would be expected to decline as infrastructure and services provision is improved to these areas.

16 The provision of infrastructure and services outlined in this report would be expected to contribute to the delivery of approximately 36,000 additional jobs in the Interface in the next 15 years, and would assist in meeting a share of the overall employment target of creating 245,000 jobs over the period 2011 to 2026.

17 Importantly, the provision of higher-order services – including major hospitals, facilities for further education, new schools and aged care facilities – will all considerably improve liveability in the Interface, thus making these localities more attractive as a residential and workplace location and attractive for investors and those establishing new or expanded businesses.

18 Other benefits associated with enhanced infrastructure and service provision in the Interface include an improved balance of white and blue-collar employment, improved health and education outcomes (through enhanced early intervention), reduced pressure on local and regional road infrastructure, and improved environmental outcomes.

APPENDIX: SUMMARY DATA BY LGA

Table A.1: Historical Population Growth, 2001-2010 – forgot to round numbers

Area	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Change 2001-2010	AAGR 2001-2010
Cardinia (S)	47,010	48,240	50,510	53,370	55,710	58,540	60,780	63,880	67,940	71,700	+24,690	+4.8%
Casey (C)	181,560	190,840	201,290	209,450	216,260	222,680	230,210	238,180	246,720	254,220	+72,650	+3.8%
Hume (C)	135,990	139,590	143,490	146,960	150,570	154,350	158,380	162,650	167,440	171,350	+35,370	+2.6%
Melton (S)	52,830	58,250	64,970	70,430	75,070	81,410	86,490	92,530	99,600	106,330	+53,500	+8.1%
Mitchell (S)	28,410	29,000	30,050	30,840	31,630	32,040	32,690	33,140	33,640	34,320	+5,910	+2.1%
Mornington Peninsula (S)	132,390	135,090	136,820	137,820	139,140	140,730	142,720	145,110	147,500	148,760	+16,370	+1.3%
Nillumbik (S)	60,820	61,010	60,910	61,110	61,640	62,140	62,300	62,630	62,910	62,790	+1,980	+0.4%
Whittlesea (C)	118,120	120,400	123,040	124,870	127,500	129,790	133,680	138,810	145,190	152,560	+34,450	+2.9%
Wyndham (C)	87,140	91,040	96,950	103,870	110,850	116,330	124,660	133,650	143,310	154,750	+67,610	+6.6%
Yarra Ranges (S)	142,550	143,700	144,260	144,180	144,290	144,850	145,570	146,600	148,010	148,510	+5,960	+0.5%
Interface Councils	**986,810**	**1,017,150**	**1,052,280**	**1,082,890**	**1,112,640**	**1,142,870**	**1,177,480**	**1,217,170**	**1,262,250**	**1,305,290**	**+318,480**	**+3.2%**
Greater Melbourne (ex Interface Councils)	**2,513,220**	**2,535,790**	**2,555,180**	**2,573,950**	**2,599,600**	**2,632,180**	**2,668,550**	**2,708,650**	**2,754,550**	**2,777,860**	**+264,640**	**+1.1%**
Melbourne Statistical Division	**3,471,630**	**3,523,950**	**3,577,410**	**3,626,000**	**3,680,610**	**3,743,020**	**3,813,340**	**3,892,690**	**3,983,160**	**4,048,840**	**+577,210**	**+1.7%**

Source: ABS Regional Population Growth, Australia, Cat. No. 3218.0
Note: AAGR - Annual Average Growth Rate

Table A.2: DPCD Victoria in Future 2012, Population Projections, 2011-2026

Area	2011	2016	2021	2026	Change 2011-2026	AAGR 2011-2026
Cardinia (S)	77,540	98,980	120,840	136,840	+64,840	+3.1%
Casey (C)	261,200	295,120	328,500	364,930	+143,300	+2.2%
Hume (C)	175,610	197,270	217,930	240,030	+88,390	+2.1%
Melton (S)	112,980	140,840	168,490	197,520	+112,790	+3.5%
Mitchell (S)	36,000	44,810	58,900	77,390	+59,260	+5.0%
Mornington Peninsula (S)	150,680	157,240	164,350	170,950	+26,910	+0.8%
Nillumbik (S)	64,220	65,940	68,120	70,280	+8,020	+0.6%
Whittlesea (C)	163,540	199,380	233,890	263,020	+124,030	+2.9%
Wyndham (C)	168,550	219,740	261,940	302,470	+172,170	+3.6%
Yarra Ranges (S)	150,600	154,500	158,090	160,870	+12,800	+0.4%
Interface Councils	**1,360,920**	**1,573,820**	**1,781,050**	**1,984,300**	**+812,510**	**+2.4%**
Greater Melbourne (ex Interface Councils)	**2,812,510**	**2,954,590**	**3,086,690**	**3,211,540**	**+521,260**	**+0.9%**
Melbourne Statistical Division	**4,137,430**	**4,483,600**	**4,808,840**	**5,118,450**	**+1,274,510**	**+1.4%**

Source: Department of Planning and Community Development, Victoria in Future 2012
Note: AAGR - Annual Average Growth Rate

Table A.3: Forecast id, Population Projections, 2011-2026

Area	2011	2016	2021	2026	Change 2011-2026	AAGR 2011-2026
Cardinia (S)	76,340	98,600	120,740	140,520	+64,180	+4.2%
Casey (C)	253,120	285,250	319,910	359,450	+106,330	+2.4%
Hume (C)	175,000	194,250	219,020	248,410	+73,410	+2.4%
Melton (S)	113,050	136,900	165,270	199,410	+86,360	+3.9%
Mitchell (S)	35,310	42,840	52,910	66,080	+30,770	+4.3%
Mornington Peninsula (S)	150,640	161,380	171,400	180,260	+29,620	+1.2%
Nillumbik (S)	63,680	66,730	69,150	71,440	+7,760	+0.8%
Whittlesea (C)	162,060	202,470	237,520	268,020	+105,960	+3.4%
Wyndham (C)	172,110	223,320	266,900	302,910	+130,800	+3.8%
Yarra Ranges (S)	148,770	150,690	154,020	158,160	+9,390	+0.4%
Interface Councils	**1,350,080**	**1,562,430**	**1,776,840**	**1,994,660**	**+644,580**	**+2.6%**
Metropolitan Melbourne (ex Interface Councils)	**2,822,660**	**2,964,010**	**3,084,910**	**3,189,870**	**+367,210**	**+0.8%**
***Melbourne Statistical Division**	**4,137,430**	**4,483,600**	**4,808,840**	**5,118,450**	**+981,020**	**+1.4%**

Source: Forecast id (various)
Note: *Data for Melbourne Statistical Division and Victoria is sourced from VIF 2012, as projections at metropolitan and State level are not prepared by id Consulting; AAGR - Annual Average Growth Rate; Figures rounded

Table A.4: DPCD Victoria in Future 2012, Demographic Analysis, 2011-2026

Area	Persons 0-4	Persons 5-9	Persons 10-14	Persons 15-19	Persons 20-24	Persons 25-29	Persons 30-34	Persons 35-39	Persons 40-44	Persons 45-49	Persons 50-54	Persons 55-59	Persons 60-64	Persons 65-69	Persons 70-74	Persons 75-79	Persons 80-84	Persons 85 and over
2011																		
Interface Councils	7.6%	7.1%	7.1%	7.2%	7.0%	7.2%	7.3%	7.6%	7.7%	7.1%	6.5%	5.6%	4.9%	3.5%	2.5%	1.8%	1.3%	1.1%
Greater Melbourne (ex Interface Councils)	5.9%	5.2%	5.1%	5.8%	8.6%	8.9%	7.8%	7.4%	7.2%	6.7%	6.3%	5.6%	5.2%	4.0%	3.3%	2.7%	2.2%	2.1%
Melbourne Statistical Division	6.5%	5.8%	5.7%	6.2%	8.1%	8.4%	7.7%	7.5%	7.3%	6.8%	6.3%	5.6%	5.1%	3.8%	3.0%	2.4%	1.9%	1.8%
2016																		
Interface Councils	7.4%	7.2%	6.7%	6.6%	6.9%	7.5%	7.6%	7.3%	7.1%	6.9%	6.2%	5.7%	4.8%	4.2%	3.0%	2.0%	1.4%	1.3%
Greater Melbourne (ex Interface Councils)	5.7%	5.4%	4.9%	5.4%	7.9%	9.1%	8.6%	7.2%	6.9%	6.7%	6.1%	5.7%	5.0%	4.6%	3.5%	2.8%	2.1%	2.4%
Melbourne Statistical Division	6.3%	6.1%	5.5%	5.8%	7.5%	8.6%	8.3%	7.3%	6.9%	6.7%	6.2%	5.7%	4.9%	4.5%	3.3%	2.5%	1.8%	2.0%
2021																		
Interface Councils	7.3%	7.1%	6.8%	6.3%	6.4%	7.2%	7.7%	7.5%	6.9%	6.5%	6.1%	5.6%	5.0%	4.3%	3.7%	2.5%	1.6%	1.5%
Greater Melbourne (ex Interface Councils)	5.5%	5.2%	5.2%	5.3%	7.4%	8.4%	8.8%	8.0%	6.7%	6.4%	6.2%	5.6%	5.1%	4.5%	4.1%	3.0%	2.2%	2.4%
Melbourne Statistical Division	6.2%	5.9%	5.8%	5.7%	7.0%	8.0%	8.4%	7.8%	6.8%	6.4%	6.2%	5.6%	5.1%	4.4%	3.9%	2.8%	2.0%	2.1%
2026																		
Interface Councils	7.0%	7.1%	6.8%	6.5%	6.1%	6.6%	7.4%	7.6%	7.1%	6.3%	5.8%	5.5%	5.0%	4.5%	3.7%	3.1%	2.0%	1.8%
Greater Melbourne (ex Interface Councils)	5.3%	5.1%	5.0%	5.5%	7.2%	7.9%	8.1%	8.2%	7.5%	6.3%	6.0%	5.6%	5.0%	4.6%	4.0%	3.6%	2.5%	2.6%
Melbourne Statistical Division	5.9%	5.8%	5.6%	5.9%	6.8%	7.5%	7.9%	7.9%	7.3%	6.3%	5.9%	5.6%	5.0%	4.6%	3.9%	3.4%	2.3%	2.3%

Source: Department of Planning and Community Development, Victoria in Future 2012

Table A.5: Forecast id, Demographic Analysis, 2011-2026

Area	Persons 0-4	Persons 5-9	Persons 10-14	Persons 15-19	Persons 20-24	Persons 25-29	Persons 30-34	Persons 35-39	Persons 40-44	Persons 45-49	Persons 50-54	Persons 55-59	Persons 60-64	Persons 65-69	Persons 70-74	Persons 75-79	Persons 80-84	Persons 85 and over
2011																		
Interface Councils	7.8%	7.4%	7.2%	7.1%	6.9%	6.9%	7.2%	7.6%	7.5%	7.1%	6.4%	5.6%	4.8%	3.5%	2.6%	1.9%	1.4%	1.1%
Greater Melbourne (ex Interface Councils)	5.8%	5.1%	5.0%	5.8%	8.7%	9.0%	7.9%	7.4%	7.2%	6.7%	6.3%	5.6%	5.2%	4.0%	3.2%	2.6%	2.1%	2.1%
***Melbourne Statistical Division**	6.5%	5.8%	5.7%	6.2%	8.1%	8.4%	7.7%	7.5%	7.3%	6.8%	6.3%	5.6%	5.1%	3.8%	3.0%	2.4%	1.9%	1.8%
2016																		
Interface Councils	7.8%	7.7%	7.1%	6.7%	6.6%	6.9%	7.4%	7.5%	7.4%	6.9%	6.3%	5.6%	4.8%	4.0%	2.9%	2.0%	1.4%	1.1%
Greater Melbourne (ex Interface Councils)	5.5%	5.2%	4.7%	5.4%	8.0%	9.5%	8.7%	7.1%	6.7%	6.7%	6.1%	5.7%	5.0%	4.7%	3.5%	2.8%	2.1%	2.5%
***Melbourne Statistical Division**	6.3%	6.1%	5.5%	5.8%	7.5%	8.6%	8.3%	7.3%	6.9%	6.7%	6.2%	5.7%	4.9%	4.5%	3.3%	2.5%	1.8%	2.0%
2021																		
Interface Councils	7.7%	7.7%	7.2%	6.6%	6.3%	6.7%	7.3%	7.5%	7.3%	6.8%	6.2%	5.5%	4.8%	4.1%	3.3%	2.3%	1.5%	1.1%
Greater Melbourne (ex Interface Councils)	5.3%	4.9%	4.9%	5.1%	7.4%	8.7%	9.0%	8.0%	6.5%	6.2%	6.1%	5.6%	5.2%	4.6%	4.3%	3.2%	2.3%	2.7%
***Melbourne Statistical Division**	6.2%	5.9%	5.8%	5.7%	7.0%	8.0%	8.4%	7.8%	6.8%	6.4%	6.2%	5.6%	5.1%	4.4%	3.9%	2.8%	2.0%	2.1%
2026																		
Interface Councils	7.6%	7.6%	7.2%	6.7%	6.3%	6.6%	7.2%	7.5%	7.3%	6.8%	6.1%	5.5%	4.8%	4.1%	3.4%	2.6%	1.6%	1.1%
Greater Melbourne (ex Interface Councils)	4.9%	4.8%	4.7%	5.4%	7.0%	8.0%	8.3%	8.3%	7.3%	6.0%	5.8%	5.7%	5.2%	4.8%	4.2%	3.9%	2.7%	3.0%
***Melbourne Statistical Division**	5.9%	5.8%	5.6%	5.9%	6.8%	7.5%	7.9%	7.9%	7.3%	6.3%	5.9%	5.6%	5.0%	4.6%	3.9%	3.4%	2.3%	2.3%

Source: Forecast id (various)
Note: Data for Melbourne Statistical Division and Victoria is sourced from VIF 2012, as projections at metropolitan and State level are not prepared by id Consulting

Table A.6: DPCD Victoria in Future 2012, Household Projections, 2011-2026

Area	2011	2016	2021	2026	Change 2011-2026	AAGR 2011-2026
Cardinia (S)	27,940	36,390	45,090	51,640	+23,700	+4.2%
Casey (C)	87,930	100,830	113,880	128,160	+40,230	+2.5%
Hume (C)	57,990	65,490	72,940	80,930	+22,940	+2.2%
Melton (S)	39,380	50,060	60,800	72,190	+32,810	+4.1%
Mitchell (S)	13,670	17,310	23,110	30,860	+17,190	+5.6%
Mornington Peninsula (S)	83,350	87,250	91,670	95,680	+12,330	+0.9%
Nillumbik (S)	20,680	21,440	22,370	23,280	+2,600	+0.8%
Whittlesea (C)	55,710	69,880	83,490	95,190	+39,480	+3.6%
Wyndham (C)	60,490	79,940	96,280	112,110	+51,620	+4.2%
Yarra Ranges (S)	55,420	57,470	59,420	61,000	+5,580	+0.6%
Interface Councils	**502,560**	**586,060**	**669,050**	**751,040**	**+248,480**	**+2.7%**
Greater Melbourne (ex Interface Councils)	**1,129,650**	**1,203,100**	**1,274,510**	**1,341,990**	**+212,340**	**+1.2%**
Melbourne Statistical Division	**1,618,540**	**1,771,850**	**1,920,450**	**2,062,170**	**+443,630**	**+1.6%**

Source: Department of Planning and Community Development, Victoria in Future 2012
Note: AAGR - Annual Average Growth Rate

Table A.7: Forecast id, Household Projections, 2011-2026

Area	2011	2016	2021	2026	Change 2011-2026	AAGR 2011-2026
Cardinia (S)	27,710	36,300	45,080	52,560	+24,850	+4.4%
Casey (C)	87,200	98,850	111,380	125,120	+37,920	+2.4%
Hume (C)	58,040	65,750	74,900	85,510	+27,470	+2.6%
Melton (S)	38,760	47,870	59,030	72,290	+33,530	+4.2%
Mitchell (S)	13,520	16,330	19,900	24,480	+10,960	+4.0%
Mornington Peninsula (S)	83,750	88,630	92,710	96,080	+12,330	+0.9%
Nillumbik (S)	21,220	22,470	23,580	24,470	+3,250	+1.0%
Whittlesea (C)	54,720	68,870	81,600	93,140	+38,420	+3.6%
Wyndham (C)	60,130	77,770	94,110	108,610	+48,480	+4.0%
Yarra Ranges (S)	57,140	59,700	62,050	64,260	+7,120	+0.8%
Interface Councils	**502,190**	**582,540**	**664,330**	**746,520**	**+244,330**	**+2.7%**
Metropolitan Melbourne (ex Interface Councils)	**1,129,870**	**1,205,640**	**1,276,020**	**1,340,130**	**+210,260**	**+1.1%**
***Melbourne Statistical Division**	**1,618,540**	**1,771,850**	**1,920,450**	**2,062,170**	**+443,630**	**+1.6%**

Source: Forecast id (various)
Note: *Data for Melbourne Statistical Division and Victoria is sourced from VIF 2012, as projections at metropolitan and State level are not prepared by id Consulting