Economic Development Strategy

Casey Cardinia

Final Report

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AECgroup
Outcome Driven

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Executive Summary

Background and Context

The Casey-Cardinia Region is situated in south eastern Melbourne and comprises of the local government areas of the City of Casey and the Cardinia Shire. The purpose of this report is to provide a strategy for the economic development of the region.

The Casey-Cardinia region operates within the context of the global, national and state economies. Trends occurring at these levels are likely to have an impact on the local economy including:

- Global economic growth conditions.
- Global sentiment conditions.
- National and State economic growth conditions.
- The level of the Australian dollar.

Each of these trends has been considered in the development of this *Casey-Cardinia Economic Development Strategy*.

A Region of Growing Popoulation That Needs Economic Diversification

The Casey-Cardinia region is a region of fast-growing population. The local economy has evolved and developed to service this growing population. Population growth has limited diversification into non-population dependent sectors, which makes the local economy dependent upon population expansion for future vibrancy and growth. By diversifying the economy, the region is likely to be able to support stronger economic outcomes, higher value adding activities and become more resilient to external economic shocks. Most importantly, the local economy can begin to generate more local jobs.

To date, the local economy has provided insufficient jobs for local employment. As a result, 67% (or over 100,000 people) of local residents who work, leave the region for their employment every day. Whist this is an improvement since 2006, it remains uncomfortably high, forcing many residents to spent considerable time travelling long distances, often in congestion. Over time, low employment self-containment rates can result in the region becoming a dormitory suburb and can place significant strain on local transport infrastructure.

Opportunities for Growth

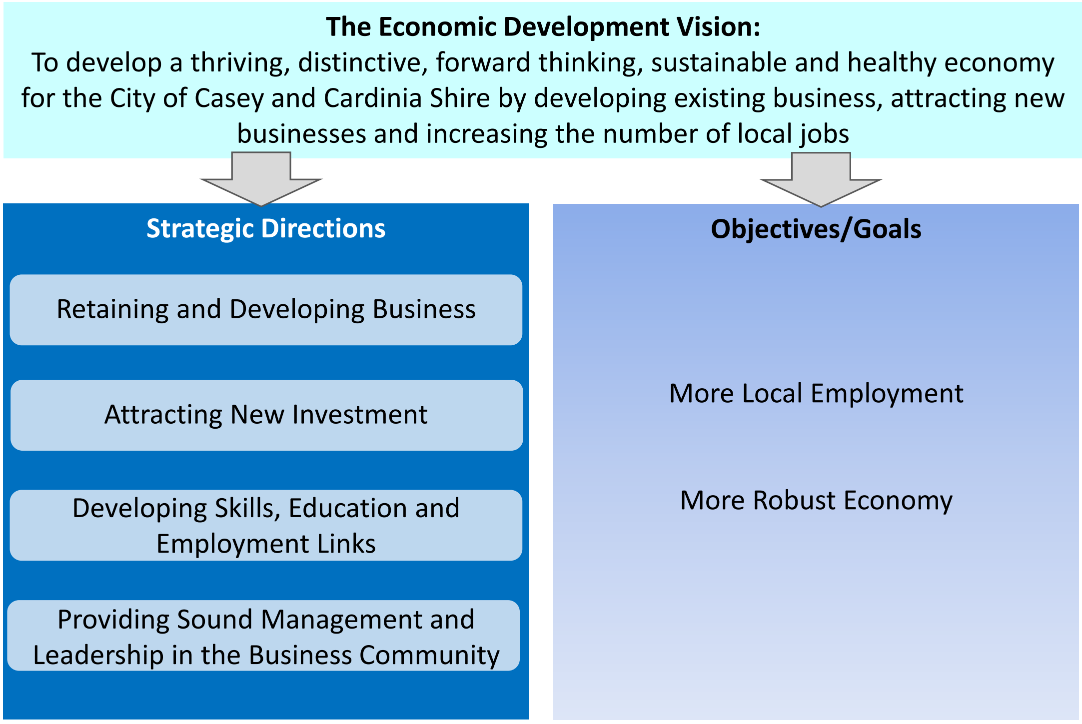
In order to develop greater economic diversity and support the local population in the Casey-Cardinia region, a number of future growth opportunities have been identified in the *Casey-Cardinia Economic Development Strategy*. These opportunities include:

- Manufacturing:
  - Food product manufacturing.
  - Machinery and equipment manufacturing.
- Professional and Business Services:
  - Professional, scientific and technical services.
  - Transport and logistics.
  - Building materials and construction services.

A Strategy for the Future

The following strategy has been developed to assist the Councils to deliver economic development to the Casey-Cardinia region. Each of the strategic directions has been informed by the economic development vision. It is envisaged that the activities supporting each of the strategic directions would assist in bringing about the objectives and goals for the *Casey-Cardinia Economic Development Strategy*.

Figure ES. 1: Casey-Cardinia Economic Development Strategy Overview



Source: AEC

A Continual Process

The *Casey-Cardinia Economic Development Strategy* will be implemented through a series of defined and discreet activities by the local governments. These activities have been assigned a target which will provide staff with an understanding of how often each activity should be undertaken.

On a regular basis - most likely quarterly - the implementation of the *Casey-Cardinia Economic Development Strategy* should be assessed against these targets. If activities become less relevant for the region, alterations to the implementation plan should be made.

Though the economic outcomes for the region are outside the control of local Council staff, a range of economic outcomes should be regularly monitored to understand how the economy is tracking. It is envisaged that through the delivery of the *Casey-Cardinia Economic Development Strategy*, economic outcomes for the Casey-Cardinia region should improve.

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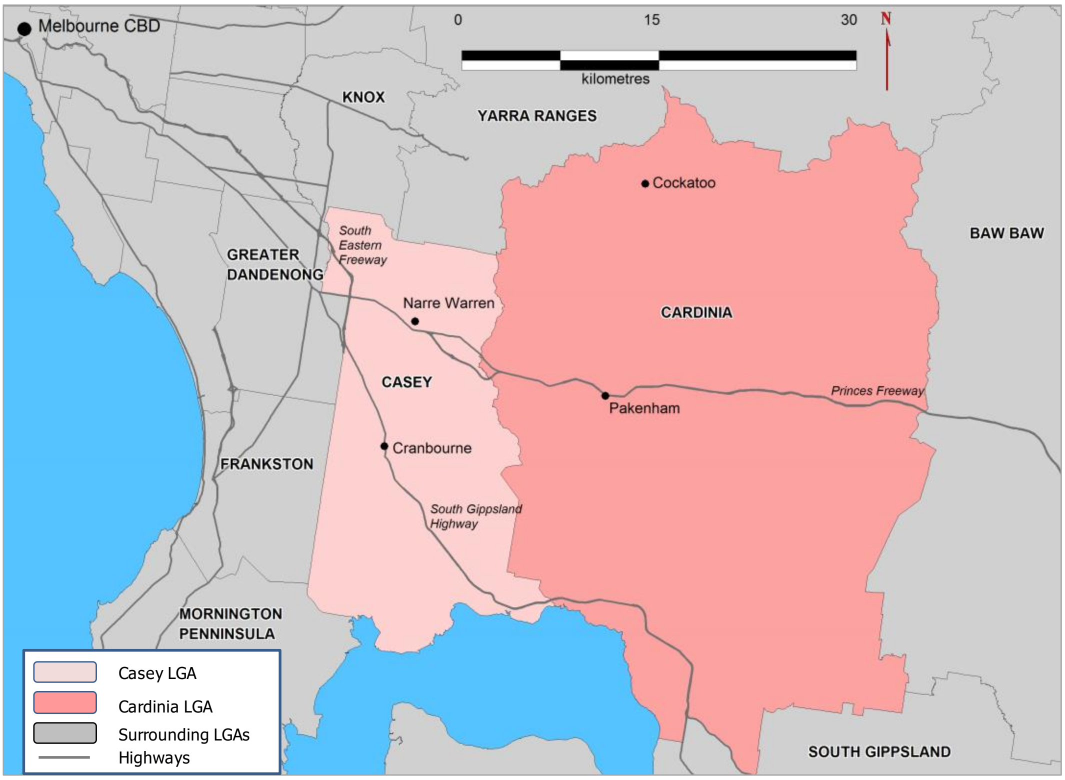
1. Introduction

1.1 Background

The local government areas of Casey and Cardinia (referred to together as the **Casey-Cardinia region**) are located in south eastern Melbourne. The Casey-Cardinia region is a high population growth area and is located along key transport corridors including the Princes Highway, Monash Freeway and the South Gippsland Highway.

Figure 1.1: Map of Casey-Cardinia and Surrounds



Source: ABS (2003)

1.2 Purpose of this Report

The purpose of this report is to provide guidance on the economic development activities that the local governments should undertake in the region over the coming years. This report will assist in establishing and updating the recommended opportunities to be pursued through business attraction and development, whilst also identifying other core strengths and weaknesses of the local economy.

2. Context

The Casey-Cardinia region is influenced by a broad range of factors. These macro and local factors will have an influence on local economic development actives. Whilst in many cases the Councils are unable to directly impact these influences, they can, to some degree manage the local community's (businesses and households) ability to overcome or leverage them.

2.1 The Global Context

Global economic outcomes continue to be uncertain in the wake of the Global Financial Crisis (GFC). Whilst global economic forecasters expect a continued recovery in global Gross Domestic Product (GDP) over the coming five years, the recovery is expected to be moderate and predominantly driven by economic growth in the emerging market and developing economies.

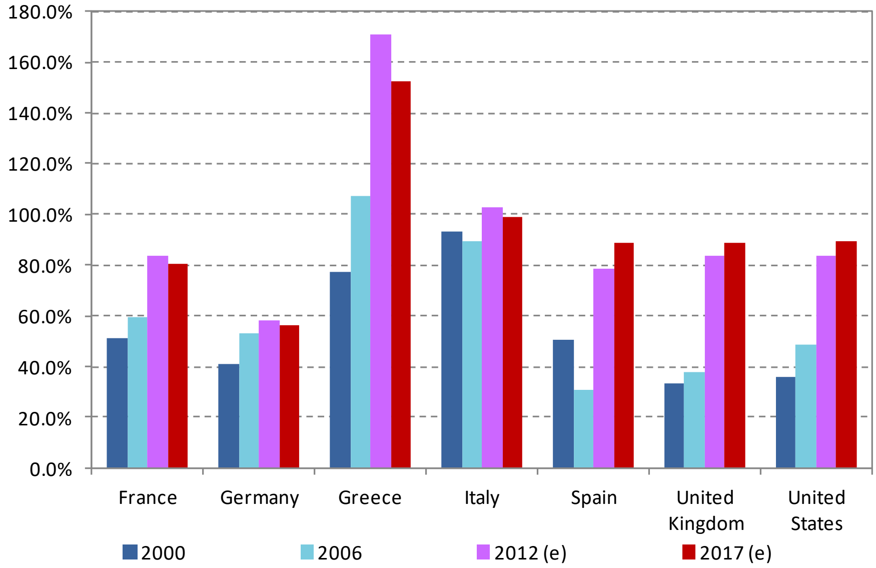
Figure 2.1: Historic and Projected (from 2013) GDP Growth

Source: International Monetary Fund (2014)

Partly underpinning these moderate growth expectations are concerns over government debt levels - particularly in Europe. As depicted in Figure 2.2, net government debt levels have become problematic in a number of European (and other) nations.

In response to these unsustainably high levels of debt, nations such as Greece, Italy and Spain are implementing austerity measures - which centre on reducing government expenditure and increasing taxation revenue. These activities are expected to dampen economic activity in these regions.

Figure 2.2: Net Government Debt, Selected Countries, Historic and Projected

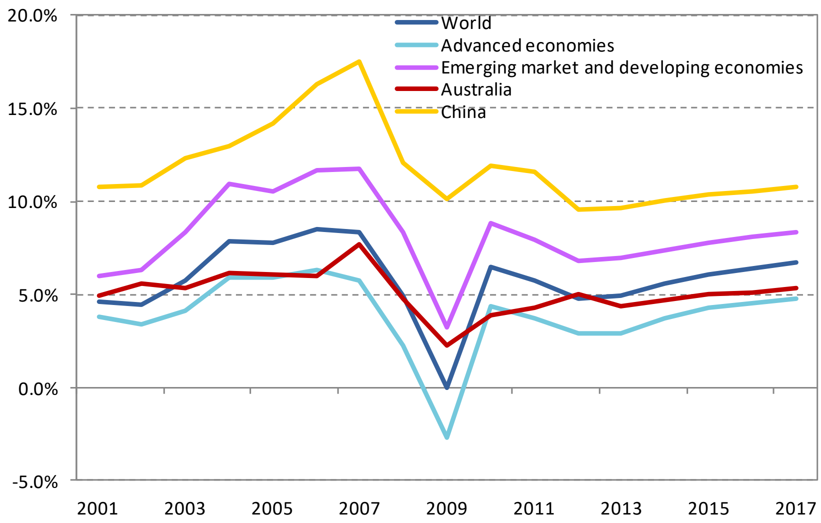


Source: International Monetary Fund (2012)

2.2 The National Context

An international comparison of Australia's economic outcomes are enviable. Australia managed to avoid a technical recession[1] during the Global Financial Crisis and is expected to experience a shallower slowdown in growth in the debt crisis. Much of this outperformance is likely attributable to Australia's strong trade connections with China.

Figure 2.3: Australia's GDP Growth - International Comparison (2001-2017)



Source: International Monetary Fund (2012)

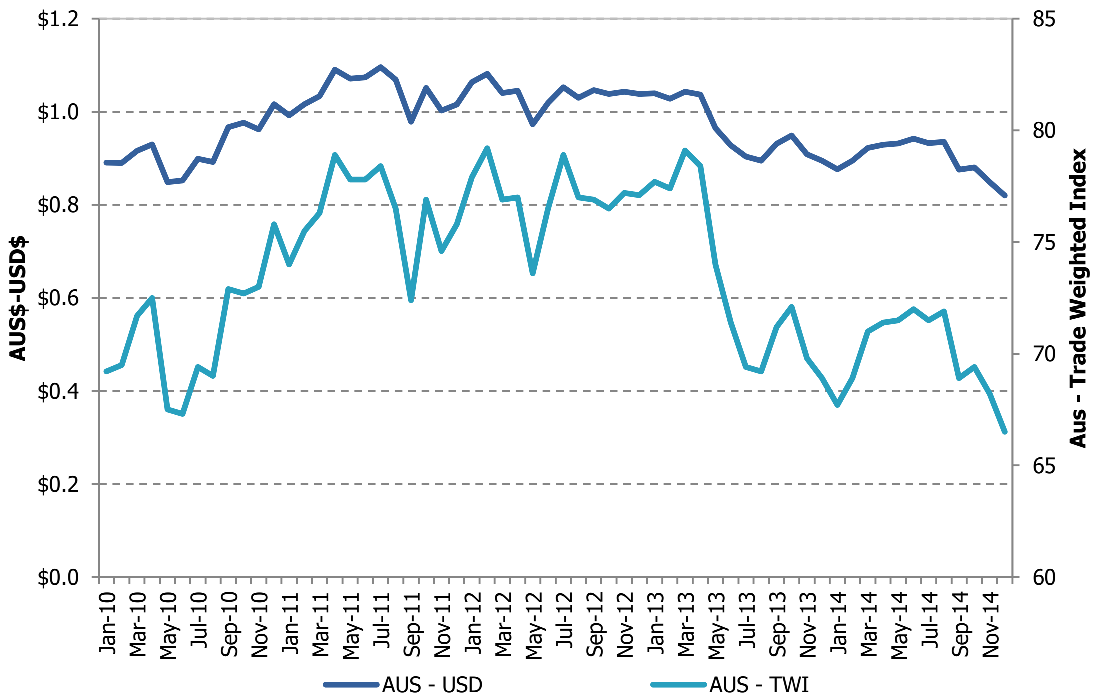
As a result of firmer economic outcomes, Australian unemployment rates have been lower than in most advanced economies since the beginning of the mining boom. This trend is expected to continue through to 2017 (IMF, 2012).

Australia's relative outperformance has been reflected in the Australian dollar which has pushed to post-float highs above parity with the US dollar (where the Australian dollar and the US dollar are equal). Against the currencies of major trading partners, the Australian dollar has reached its highest levels since 1985. Whist the strength of the

[1] defined as two consecutive quarters of negative GDP growth.

Australian dollar is beneficial for importers, it has a dampening impact on demand for Australia's exports (including tourism). The strength of the Australian dollar is also providing an incentive to Australian consumers' to purchase goods through overseas online shopping websites.

Figure 2.4: Australian Currency



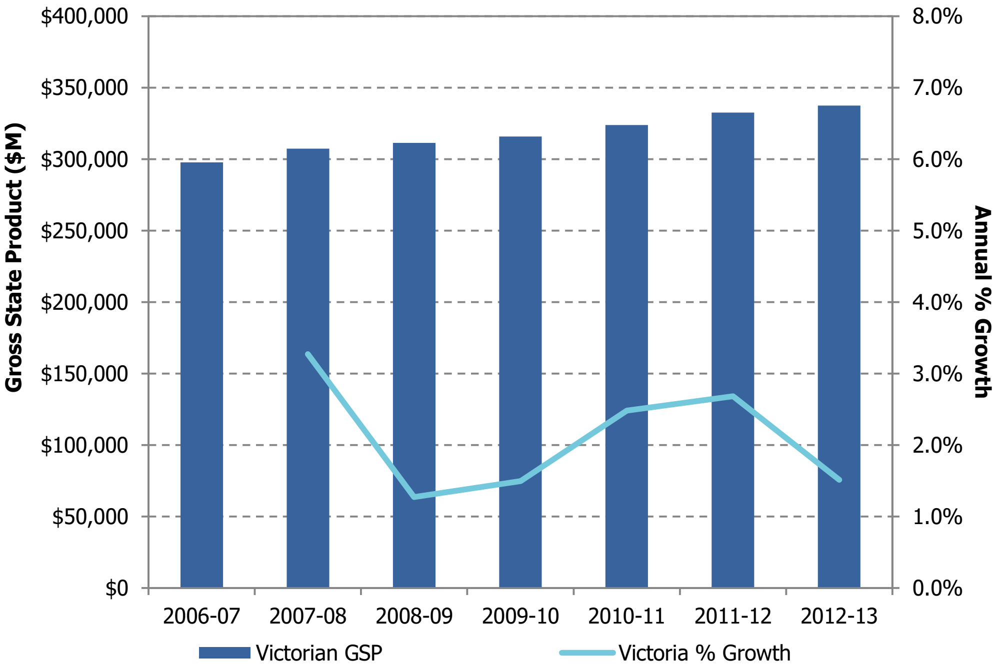
Source: RBA (2014)

2.3 The Victorian Context

The Victorian economy has expanded since 2006-07 to over $337 billion in 2012-13. Though economic growth slowed in 2008-09, economic growth has remained positive over this timeframe. 2012-13 saw another dip in growth to only 1.5%. While still positive, many of the State’s traditional sectors have struggled. Traditional industries such as manufacturing and transport provided very little growth, with finance, professional service and healthcare saw big gains.

Estimates from the Victorian Department of Treasury and Finance (2014) expect economic growth to pick up across the state from 2014-15 to 2017-18. Annual economic growth is expected to grow from 2.25% to 2.75%. Steady annual population growth of 1.9% is likely to support this expansion.

Figure 2.5: Victorian Gross State Product (GSP), 2006-07 to 2011-12



Source: ABS (2012)

2.4 The Casy-Cardinia Context

The Casey-Cardinia region has experienced strong population growth in recent years. The total number of persons coming to the area would place it as the 2nd fastest growing LGA in Australia (ABS, 2014a), growing faster than Melbourne and the Gold Coast and only behind Brisbane (which is considerably larger, geographically). The economy has rebounded significantly since a decline in 2010-11, growing 3.4% to $8.6 billion in 2012-13 (AEC, unpublished).

The region has a low number of jobs (by place of work) in comparison to the number of residents. This has resulted in a high proportion of local resident workers (67%, or over 100,000) who leave the region every day for work (ABS, 2012). Though this has improved marginally from 2006, continued job creation is required to improve employment self-containment in the region.

Areas with low self-containment have a tendency to become dormitory suburbs and suffer from congestion. The Casey-Cardinia region is no exception. Targeted economic development is required to assist in supporting economic expansion and resultant job creation.

2.5 The Strategic Context

There are numerous, regionally significant projects that have the potential to drastically change the economic structure and make-up of the region, contributing to its on-going future economic development.

- **Port of Hastings Development**: The Port of Hastings will be Melbourne's Second Container Port and help to alleviate current congestion and transport issues around the Port of Melbourne. According to a recent report, the development could include a total capital investment of $16 billion for port and related infrastructure (including $3.6 billion to be spent in Melbourne's South East and Gippsland.). Once constructed the Port has the potential to add $1 billion per year in Gross Regional Product (GRP) terms to Melbourne's South East economy in the mid-2030s, rising to $3 billion per year in the early 2050s. The region can expect an additional 5,700 jobs by the mid-2030s and upwards of 15,200 jobs by the early 2050s (GHD, 2013).
- **South East Airport**: In order to reduce congestion at the Melbourne International Airport and better service local residents in the South East region, a third major

airport is identified in the Plan Melbourne strategy document. The airport is estimated to have the capacity to handle 5.1 million passenger movements per year, which makes it of comparable size to the Gold Coast Airport or the Adelaide Airport. The airport is likely to generate $5 billion in capital expenditure and once operational support over 1,600 jobs and contribute $489 million to the economy (Cardinia, 2013).

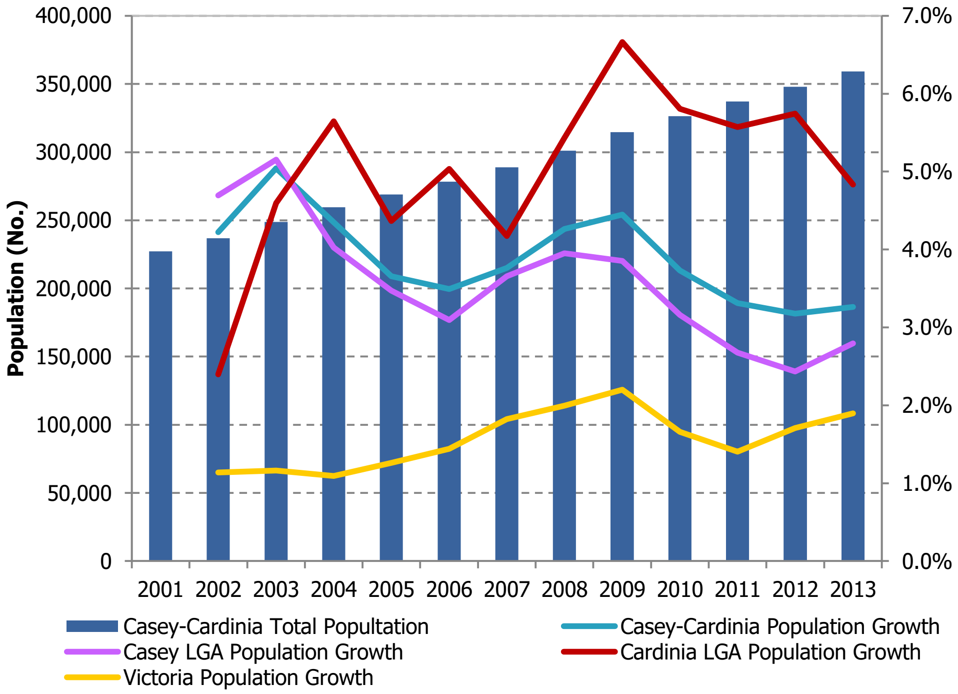
- **Bunyip Food Belt**: The Bunyip Food Belt is an investment initiative based on an irrigation scheme that has the potential to deliver 26 GL of water per annum (Access, 2010). The identified precinct has a total of almost 8,000 ha of suitable land for intensive irrigated horticulture. Projections suggest that the project could add approximately $250 million to the local economy per year (in terms of direct and indirect benefits) (Cardinia, 2014).
- **Agrifood Master Plan**: The Agrifood Master Plan reviews and outlines the strategic advantages of the City of Casey, Mornington Peninsula Shire and Cardinia Shire as well as outlines a general plan to progress with development of the agrifood sector.
- **Thompsons Road**: The duplication and extension of Thompsons road from Western Port Hwy in Casey through to Koo Wee Rup Road in Cardinia will provide a second East west link and promote an important freight route and open up employment land opportunities through the entire corridor.

3. Economics of the Casey-Cardinia Region

A summary of the key findings of the profile are presented below. For further details, please refer to **Appendix A**.

- The Casey-Cardinia region has experienced strong population growth (Figure 3.1). Over the last decade, the population of the region has increased by almost 100,000 people, or almost 40%. On average, over 11,000 people have moved to the area every year since 2003 (ABS, 2014a).
- Population growth is the key driver of local economic growth, with construction, retail trade, education and training and health care and social assistance all ranking as the top four industries in terms of employment (by place of work) and their contribution to the economy (in GRP terms).
- Population growth has come off the peak experienced in 2009 and had been slowing (albeit still in very positive growth). Population growth would appear to have leveled out, growing 3.3%, or over 11,350 people, from 2012 to 2013.
- Unemployment in Casey-Cardinia was recorded at 5.8% in December 2013 (DOE, 2014), an increase from 5.0% (the recent low) in December and March 2012 (Figure 3.3). The current unemployment rate is increasing, while the labour force stays relatively stable, translating to real job losses in the economy. The current unemployment rate seems to have plateaued and is still currently below the peak of 6.4%, experienced in June 2010 (and likely driven by the effects of the GFC).
- Local employment self-containment has improved slightly since 2006, from 31.7% to 32.9% (ABS, 2012). However, almost 70% of locals who work, are still leaving the area. Many of these workers head to Greater Dandenong and Melbourne CBD. Local workers fill 72% of local jobs. More local jobs are required.
- The strong population growth has provided support to the housing market in recent years. Residential building approvals have eased since the peak in 2009-10 (related to the peak of population growth). However, building approvals (both residential and non-residential) have increased 15.1% over the last year (in terms of value), compared to a decrease of 4.7% across the State. While residential building approvals increased 5.0% from 2011-12 to 2012-13, non-residential building approvals increased by 38.6%, signaling significant business investment, possibly to service the increases in population (ABS, 2014b).
- The population is culturally and linguistically diverse with over a third of residents born overseas (many from southern Asia) and over 16% speaking a language other than English at home (ABS, 2012b).
- Education rates in the Casey-Cardinia region underperform not only against the Melbourne South East region and Victoria, but also similar regions across Australia. This trend may be changing, as the Casey-Cardinia region recorded a high school containment rate (the proportion of 16 year olds still attending school) in 2011 of 91.8% (ABS, 2012b).

Figure 3.1: Historic Population Growth, Casey-Cardinia

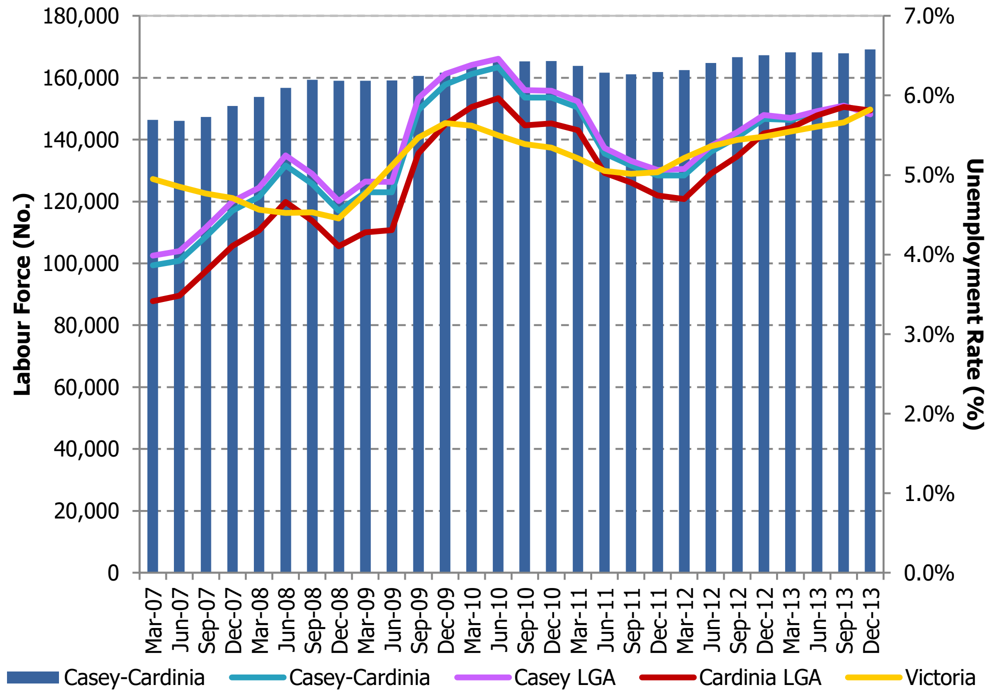


Source: ABS (2014)

Figure 3.2: Historic Gross Regional Product, Casey-Cardinia

Source: AEC (unpublished)

Figure 3.3: Labour Force and Unemployment, Casey-Cardinia



Source: DOE (2014)

4. Opportunity Assessment

This chapter provides an overview of the tools and methods used to identify key growth areas for the Casey-Cardinia region. This chapter also identifies these opportunities which will be pursued by the *Economic Development Strategy*.

4.1 Overview

Opportunity assessments provides an understanding of where existing services and infrastructure are short of estimated demand. This may be apparent in the high level of imports into a region or in the underperformance of a region against benchmarking regions. In order to develop an understanding of the gaps in the Casey-Cardinia region, the opportunity assessment undertaken involved:

- **Location Quotient Analysis:** Assesses the degree of labour specialisation in an economy (a competitive advantage) and is used to identify industry areas of relative strengths and weaknesses.
- **Cluster Mapping Analysis:** Allows for the identification of growth opportunities in specific industry sectors, and tourism, where a natural competitive advantage already exists.
- **Supply Chain Analysis:** Understanding where in the supply chain the Casey-Cardinia region lies and which local industries add significant value.
- **Import and Export Analysis:** Understanding which products and services are imported into the region (suggesting a lack of local supply) and which products or services are exported out of the region (after having met local supply).
- **Journey to Work:** analysis of the industries which attract workers to the region and industries which attract workers out of the region.

Details of the assessment are located in **Appendix A**.

4.2 Key Findings

Key industries identified through the desktop opportunity identification process for the Casey-Cardinia region Councils to explore further include:

Table 4.1: Opportunities for Future Growth

Growth Opportunity	Justification
Manufacturing	
Food product manufacturing	• Well-represented industry in the local economy (with an LQ of 1.2). Existing cluster of business in the Casey-Cardinia region. • Expected strong national employment growth to 2015-16 of 3.8%. Anticipated national IVA growth of 7.1% over the same time frame. • Well established local upstream and downstream supply chain with approximately two thirds of all inputs to production sourced locally. • Export sector for the region suggesting broad demand for products. • Good transport access to key export routes including the Melbourne Airport and Port of Melbourne. • Potential to participate in improving Australia's food security into the future. • Growth of this sector would likely assist in improving local employment self-containment rates as it would employ occupational categories which are prominent in the region - including technicians and trades workers.

Growth Opportunity	Justification
Machinery and equipment manufacturing	• Currently underrepresented industry in the Casey-Cardinia region (with an LQ of 0.7). However, key skills required by the industry are present in both place of work and place of usual resident labour markets. • Expected to be a growth sector in terms of employment (9.3%) and IVA (14.9%) between now and 2015-16. • Existing local supply chain, with 54.1% of existing local industry inputs sourced from the local region. In particular, good supply of motor vehicle parts and other transport equipment. • Currently a prominent export sector for the Casey-Cardinia region with approximately $164.5 million in exports in 2007-08. • Good transport access to key export routes including the Melbourne Airport and Port of Melbourne.
Professional & Business Services	
Professional, scientific and technical services	• Currently underrepresented industry in the Casey-Cardinia region with an LQ of 0.5. However, the region has a high proportion (25%) of residents who are in professional/management occupations and 4.8% of the workers living in the Casey-Cardinia region work in this industry. • Strong future growth prospects with estimates of employment growth at 10.8% and IVA growth at 19.3% between now and 2012-16. • Estimated to be the most prominent import into the region - represented approximately 11.3% of imports to the region. Existing local supply is in high demand (by the professional, scientific and technical services, retail trade, real estate and wholesale sectors) with over 87% of local output consumed in the region.
Transport and Logistics	• Excess demand currently existing in the region for road transport - it forms approximately 6.2% of all imports to the Casey-Cardinia region. • Existing local industry cluster which contributes 6.6% of IVA and 4.7% of local jobs. • Strong future growth prospects of 12.8% growth in IVA and 13.9% growth in employment over the coming 5 years. • Essential service for the growth of the manufacturing sector in the Casey-Cardinia region.
Building materials and Construction services	• High population growth area and potential to attract new business which will support construction activity in the region, supporting demand for construction services and building materials. • Iron and steel manufacturing is the fourth most prominent import into the region, representing 4.7% of total imports. • Ability to service surrounding growth regions which is already occurring - construction services are the primary export for the region representing approximately 15.3% of total exports and heavy and civil engineering construction represents 3.7% of all exports.
Administration and Support Services	• Currently underrepresented locally with an LQ of 0.9. • Strong existing demand for services with almost 84% of local output consumed within the region. • High representation of clerical and administrative occupations within the local resident workforce suggesting an ability to convert local residents to local workers. • Expected future growth sector with employment expected to increase by 6.4% and IVA by 8.0% to 2015-16.
Population & Household Services	
Education and Training	• High population growth centre with future estimates suggesting a population of over 530,000 by 2031. • A large cohort of youths with persons aged under 29 years forming 44.7% of the population. • Future growth sector with expected employment growth of 8.0% and IVA growth of 18.7% to 2015-16.
Health Care and Community Services	• Currently underrepresented in the region with an LQ of 0.9. • Will be increasingly in demand as the local population ages. • high growth sector nationally, with estimates of IVA growth at 16.1% and employment at 19.6% over the coming five years. • Future population growth in the region at an estimated average annual rate of 2.5% will provide support for this sector over the coming 20 years.

Source: AEC

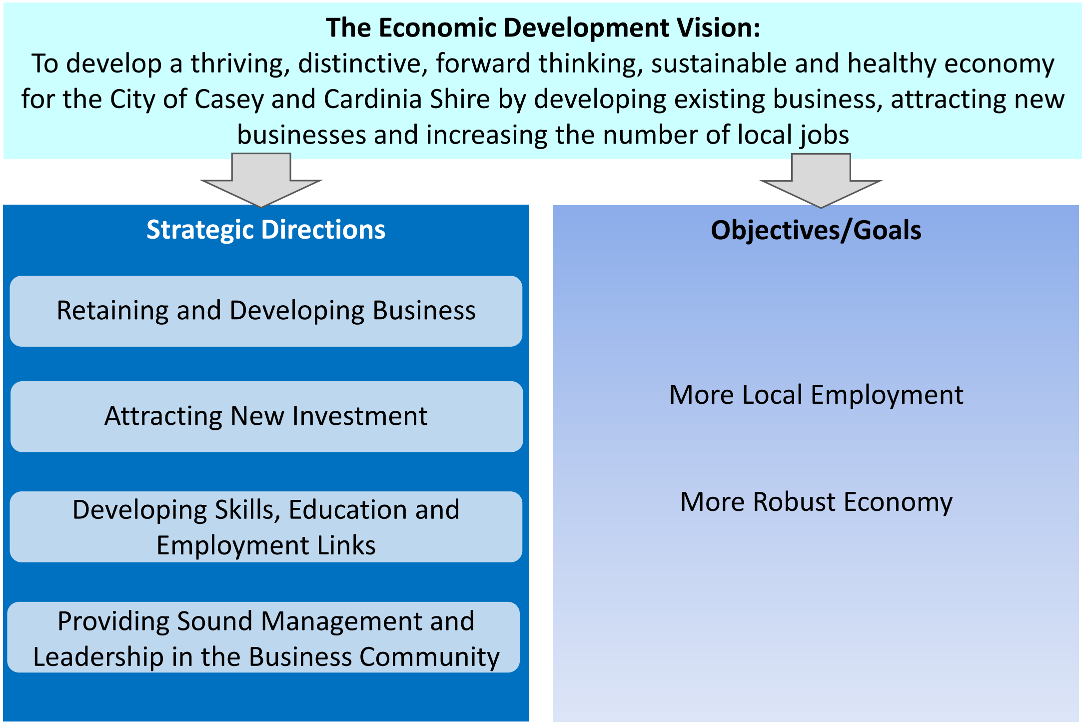
5. Strategy

This chapter outlines the recommended Economic Development strategy for the City of Casey and the Cardinia Shire Council.

5.1 Strategic Overview

The following diagram provides an overview of the interconnectivity between the two Council's vision for economic development, the recommended strategic directions and the desired outcomes and goals. Each of the strategic directions is discussed in greater detail below.

Figure 5.1: Economic Development Strategy Overview



Source: AEC

5.2 Retaining and Developing Business

5.2.1 Key Objective

To assist local business in order to retain them in the Casey-Cardinia region and assist them to expand.

5.2.2 Why?

Local business are already in operation in the Casey-Cardinia region. These businesses can be supported to continue local economic activities and growth into the future. Generally, between 60-80% of new economic activity, investment and jobs will come from existing businesses expanding.

5.2.3 Key actions

Actions undertaken for this component of the strategy should include:

- Providing an environment of networking and mentoring:
  - Providing a location where local members of the business community can meet to network, share ideas and discuss local matters will assist all businesses, but particularly small businesses (the lion's share of local businesses), to grow and develop under the guidance of more experienced business leaders in the area. These locations should also provide businesses with access to the Economic Development Units of each Council, meeting rooms and other relevant business advisory services (financial planning, business planning, internet support etc.). This network may prove catalytic in developing local partnerships and bringing about economic diversification in the region from the existing business pool.
  - Facilitating a formal mentoring program for small businesses in the area would provide small businesses with access to a wealth of knowledge and advice from successful business owners in the region. Learning from other businesses can assist small businesses to identify new methods which might work for them and new opportunities they can leverage.
  - Organise regular networking meetings for local businesses.
- Providing direct support to business owners by promoting education and awareness of sustainable business practices, business innovation and providing access to business grants to start-ups.
- Develop relationships and support growers together with manufacturers of food which will support local agriculture industries and potentially strengthen local supply chains.
- Make the most of the digital economy strategy, by providing training and support services to local businesses.

5.3 Attracting New Investment

5.3.1 Key Objective

To attract new business and investment to the Casey-Cardinia region and create new jobs.

5.3.2 Why?

Expanding the business base in the Casey-Cardinia region will assist in diversifying the local economy as well as building on existing industries of strength. By undertaking a targeted investment attraction program, the Casey-Cardinia region can bring new business in desired industries into the area which will increase the number of jobs available in the region.

5.3.3 Key actions

Key actions undertaken as part of this strategy should align cohesively with those currently being done under the existing Investment Attraction Framework. These activities are centred around three main categories:

- **Marketing**
  - Developing and maintaining marketing materials which are specifically tailored to attracting business investment from desired industries. An overall investment prospectus should also be developed and regularly updated.
  - Committing to attending specific conferences, trade shows and other events which will assist the Councils in meeting key participants in target sectors.
  - Developing a marketing and public relations program which will assist the Councils in understanding what needs to be done in order to attract new investment. This document should prescribe the number of meetings and with whom, and how often each marketing document needs to be updated.
- **Business Development**
  - Understanding the potential opportunities for the region through the implementation and analysis of market research activities.
  - Networking proactively with potential new business operators and industry leaders to assist in identifying new investment opportunities for the Casey-Cardinia region.
  - Implementing a business development program which prescribes an progressive plan for expanding and developing business in the Casey-Cardinia region.
  - Developing a tourism strategy which could assist in delivering increased tourism activity and investment into the area. Tourism strategies should be focused around building on the region's natural competitive advantages.
- **Investment Facilitation**
  - Providing excellent customer service will assist both Councils in ensuring they are known as being open for business. Potentially, this may include identifying a single contact point within each Council for business enquiries. This single contact point would become the liaison officer between the client and all departments within Council. In addition, ensuring that development approval activities are conducted effectively and efficiently would also assist in improving the customer service of Council.
  - Ensuring local land use planning and zoning is aligned with the needs and requirements of desired industry. Certain land parcels are more attractive to some industries due to their location, accessibility, neighbouring business and availability of services. Ensuring that land which is attractive to desired industry is appropriately zoned to accommodate their business activities is essential.

5.4 Developing Skills, Education and Employment Links

5.4.1 Key Objective

To assist in developing the skills of local residents as well as facilitating linkages between local education providers and the local businesses cohorts.

5.4.2 Why?

Supplying local businesses with an appropriately skilled pool of workers is essential to assisting local businesses to develop and expand and attracting new businesses to the region. In addition, improving the education levels of local residents can assist in improving their access to employment and higher income levels.

5.4.3 Key actions

Key activities the Councils should undertake in delivering this strategy include:

- Hosting a forum which will bring together representatives of key industries in the region and education providers. Over the longer term, these events could facilitate the development of formal linkages between these groups to enable idea-sharing, research and development partnerships, internship arrangements and other formalised agreements between business and education.
- Running informal training for local business and or community members. These trainings could potentially include use of the internet ahead of the National Broadband Network (NBN) rollout.
- Conducting regular assessments (potentially through an annual survey) of business in the region to identify skills needs and other relevant skills issues which can be met through increased formal or informal education provision in the region.

5.5 Providing Sound Management and Leadership in the Business Community

5.5.1 Key Objective

To promote a positive business environment within the Casey-Cardinia region in order to sustain and influence positive business and economic outcomes, including jobs creation.

5.5.2 Why?

Business confidence can be a self-fulfilling prophecy. By encouraging positivity within the region, greater economic outcomes can be achieved and opportunities for growth can be grasped.

5.5.3 Key actions

Key actions for this strategy include:

- Advocating on behalf of the local community:
    - Attracting infrastructure investment particularly in infrastructure developments. Improving the provision of local transport within the Casey-Cardinia region could assist in reducing local residents' (and likely workers') dependence on cars. Whilst also reducing congestion on local roads (and their resultant degradation), this would also improve local residents access to employment - potentially reducing the unemployment rate in the region. Improving East-West road connectivity could also improve this access. Formalising local advocacy activities through the creation of partnerships (such as the Casey Economic Development Partnership) can assist in this process.
    - Attracting support and investment for export/import infrastructure developments can improve local business' access to these services and, as a result, their access to the broader national and international markets. Identifying these infrastructure and understanding how the private and public sectors can support these developments can assist in bringing them to the marketplace.
- Promoting a positive business environment:
    - Hosting regular events for the business community. This can feed into increased enthusiasm and improved sentiment about the local region for local businesses.
    - Celebrating local business achievements whether through positive news stories in each Council's newsletter or through an annual awards night can support local business momentum and activity.
- Ensuring sufficient and appropriate employment land is available for business within both council areas to ensure that business is able to expand comfortably.

6. Action Plan

The following table outlines the specific actions which should be implemented by the local governments in delivering the strategy. These actions specifically align to each of the strategic directions and support the overall delivery of the Economic Development Strategy. Each target provides guidance on how often each task should be undertaken in each year. In some instances, tasks can be completed in unison. Some targets should change moving forward.

Table 6.1: Economic Development Strategy Implementation

Action	Target
1. Retaining and Developing Business	
1.1 Support an Environment of Networking and Mentoring	
1.1a Support the development of Business Hubs	Ongoing
1.1b Promote Council activities in each Business Hub	Ongoing
1.1c Facilitate a mentoring and business development program for small business	Ongoing
1.1d Host regular networking meetings for local businesses	12
1.2 Provide Direct support to Businesses	
1.2a Provide business support	Ongoing
1.2b Provide a link between Council, Businesses and other government assistance	Ongoing
1.2c Provide education sessions to business	8
1.2d Meet with small local businesses to identify innovation and collaboration opportunities	As identified
1.3 Assist Local Food Industry	
1.3a Advocate for the use and protection of important agricultural land	Ongoing
1.3b Provide a link between Council, Businesses and other government assistance	Ongoing
1.4 Support the delivery of a Digital Economy Strategy (Casey)	
1.4a Implement the actions from the Strategy	1
1.4b Review the efficacy of the Strategy	1
1.4c Advocate for the delivery of NBN to employment areas	3
2. Attract New Investment	
2.1 Marketing	
2.1a Develop (and maintain) a business location profile	1
2.1b Develop (and maintain) industry profiles for targeted areas	6
2.1c Develop (and maintain) a web portal for investment attraction	1
2.1d Develop and place advertisements for investment attraction in appropriate media avenues	4
2.1e Develop and place billboards along major thoroughfares	1
2.1f Attend industry trades shows and conferences in targeted areas (in Australia)	8
2.1g Attend an industry trade show and showcase the region	1
2.1h Develop e-newsletter promoting business	12
2.1i Release business announcements regarding expansion/investment	12
2.1j Encourage political announcements regarding business	12
2.1k Post all announcements and other business news items to web portal	36
2.1l Circulate regular emails regarding business articles in Casey-Cardinia	12
2.1m Conduct introductions and familiarisation tours of the region's employment lands for businesses/contacts/politicians	6
2.1n Place editorials in local and national newspapers and industry publications	12
2.2 Business Development	
2.2a Subscribe to and review industry publications for trends and prospective investors	ongoing
2.2b Conduct specific market research projects to identify prospective investors	6
2.2c Develop specific business case proposals for identified areas	6
2.2d Attend CEDA, PCA, EDA, PIA, AIG and other industry networking events	12
2.2e Attend local business events	24
2.2g Engage with prospective investors	200
2.2h Engage with commercial real estate agents	12

Action	Target
2.2i Conduct business development missions domestically	4
2.2j Conduct business development missions internationally	As needed
2.3 Investment Facilitation	
2.3a Provide customised information packages for prospective investors	50
2.3b Host prospective investors in region	25
2.3c Visit prospective investors to discuss project	25
2.3d Meet regularly with planning staff to discuss activity levels and current trends in requirements	25
2.3e Conduct pre-lodgement meetings with prospective investors and planning departments	50
2.3g Review planning provisions and systems to ensure flexibility/adaptability to market	ongoing
2.3h Develop (and or review) incentive policy	As needed
2.3i Provide facilitated application processes to prospective investors	10
2.3j Conduct review on facilitation process from the businesses perspective	2
3. Develop Skills, Education and Employment Links	
3.1 Host forums and events	
3.1a Host regular forums between business and education providers	2
3.1b Discuss education and training needs with all potential investors	50
3.1c Meet regularly with education and training providers	10
3.2 Hold Education and Training Sessions for Local Business	
3.2a Provide training sessions on key issues for business	8
3.2b Provide training and support to business surrounding the NBN	2
3.2c Identify Local Business Training Needs	ongoing
3.3 Run regular survey of local business owners	
3.3a Assess business, training and education needs	1
3.3b Develop training programs to meet these needs	1
4. Provide Sound Management and Leadership in the Business Community	
4.1 Advocate on behalf of the Local Community	
4.1a Meet with relevant State Government departments	20
4.1b Meet with relevant Federal Government departments	10
4.2 Promote a Positive Business Environment	
4.2a Host quarterly Business Breakfasts	12
4.2b Host an annual Business Awards program	1
4.2c Publish a regular e-magazine for business	4
4.3 Ensure Sufficient Employment Lands	
4.3a Assess the existing land zone	As needed
4.3b Conduct an Employment Land Demand Study	As needed

Source: AEC

7. Monitoring and Evaluation

Economic development activities should be regular monitored and assessed in order to check the ongoing relevance and validity of the *Casey-Cardinia Economic Development Strategy*.

The actual implementation of the strategy should be measured through the Councils' performance of each economic development target as outlined in Table 7.1. The Councils' performance should be compared to these targets on a quarterly basis. As specific activates become less relevant, the implementation plan should be adjusted accordingly.

All activities outlined in Table 7.1 are directly influenced by each Councils' staff. However, whilst staff are unable to directly influence formal economic outcomes, the implementation of the *Casey-Cardinia Economic Development Strategy* would tend to contribute to these outcomes. It is recommended that the local governments track economic outcomes as outlined in Table 7.1 to determine the performance of the *Casey-Cardinia Economic Development Strategy*, in addition to the delivery of the Implementation Plan.

Table 7.1: Economic Indicators

Data	What it Measures
Employment (number)	The number of persons employed
Unemployment Rate	The percentage of persons in the labour market who are unemployed
Employment by Occupation	The number of workers in specific occupational groupings
Gross Regional Product	The value of economic activity
Non-Commercial Building Approvals	The number and value of building approvals
Business Counts by Industry	The number of businesses in each industry
Employment (number)	The number of persons employed

Source: AEC

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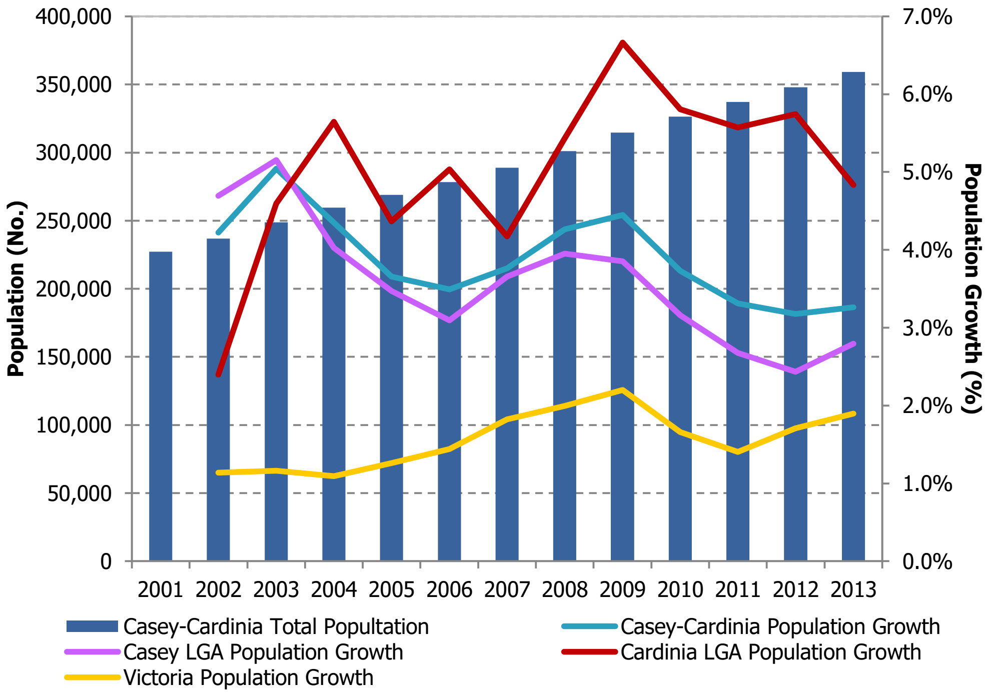
Appendix A: Economic Profile

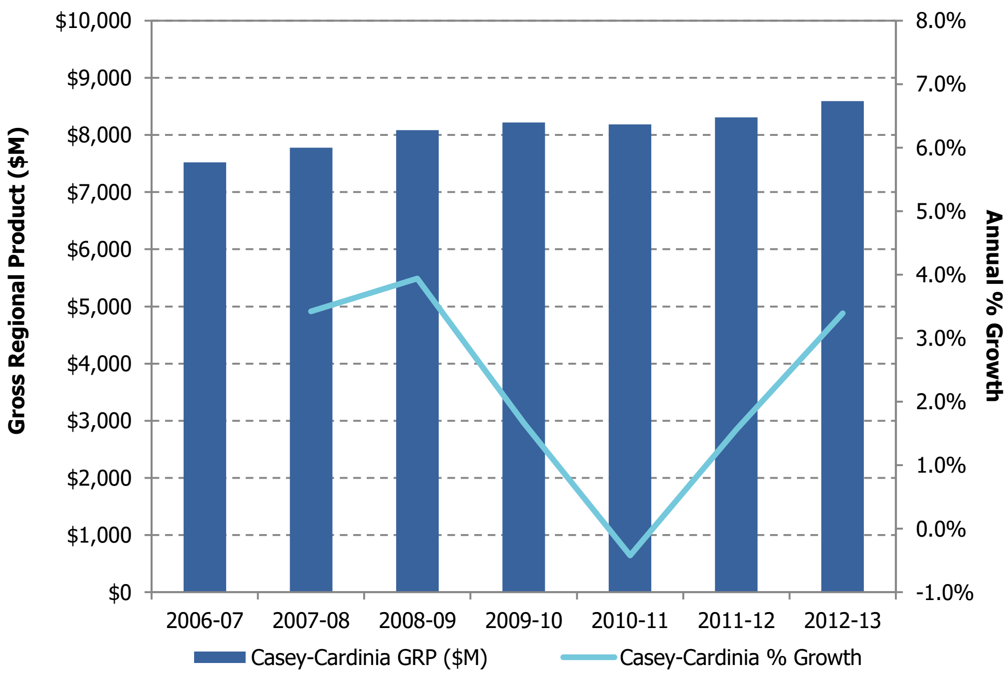
The following figures provide a comprehensive economic profile for the Casey-Cardinia region.

Figure A.1: Historic Population Growth, Casey-Cardinia



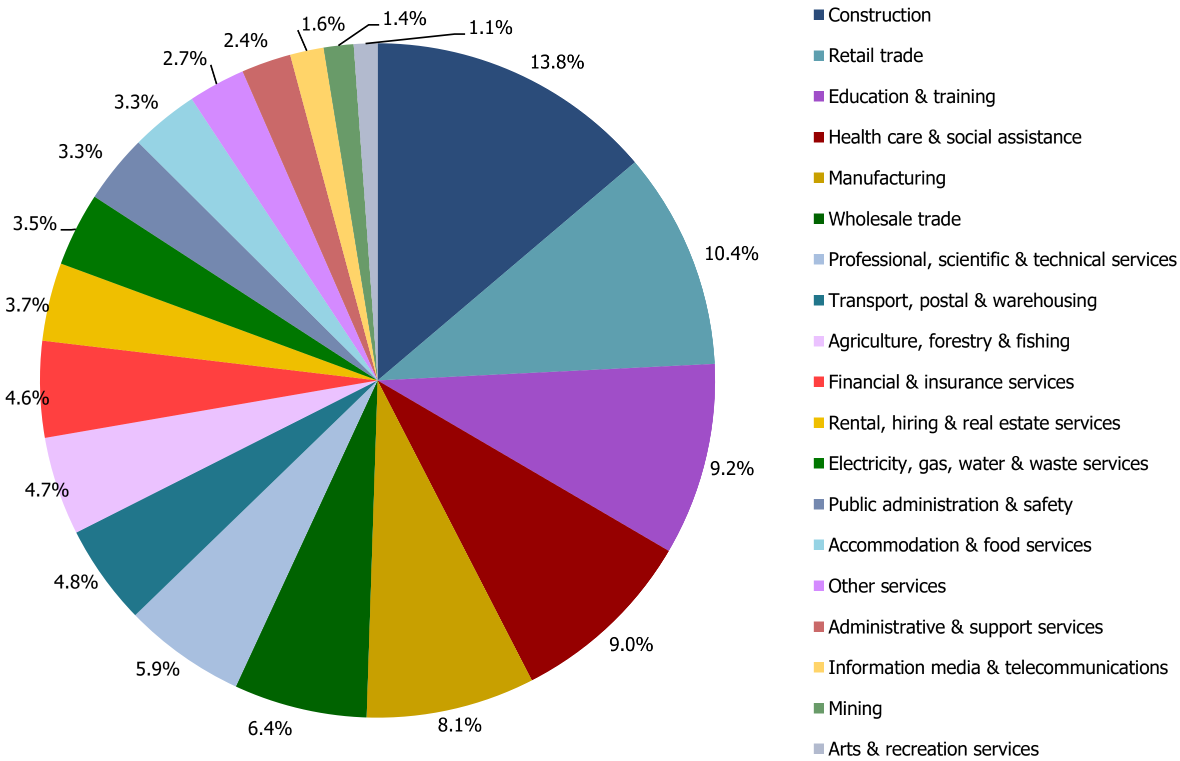
Source: ABS (2014)

Figure A.2: Historic Gross Regional Product, Casey-Cardinia



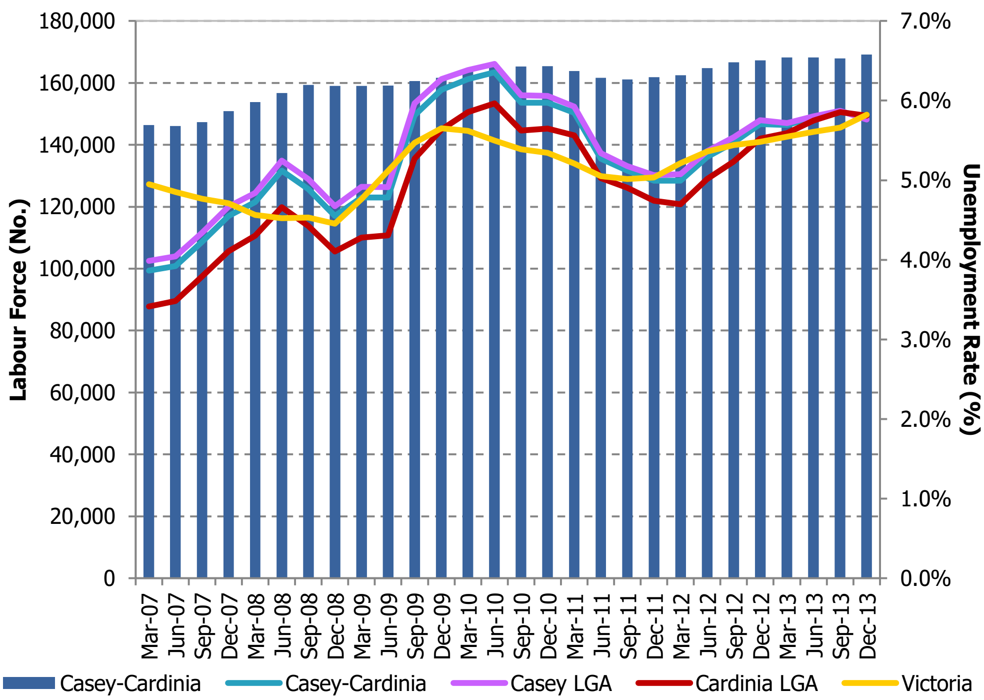
Source: AEC (unpublished)

Figure A.3: Gross Regional Product (Industry Value Added), Casey-Cardinia, 2012-13



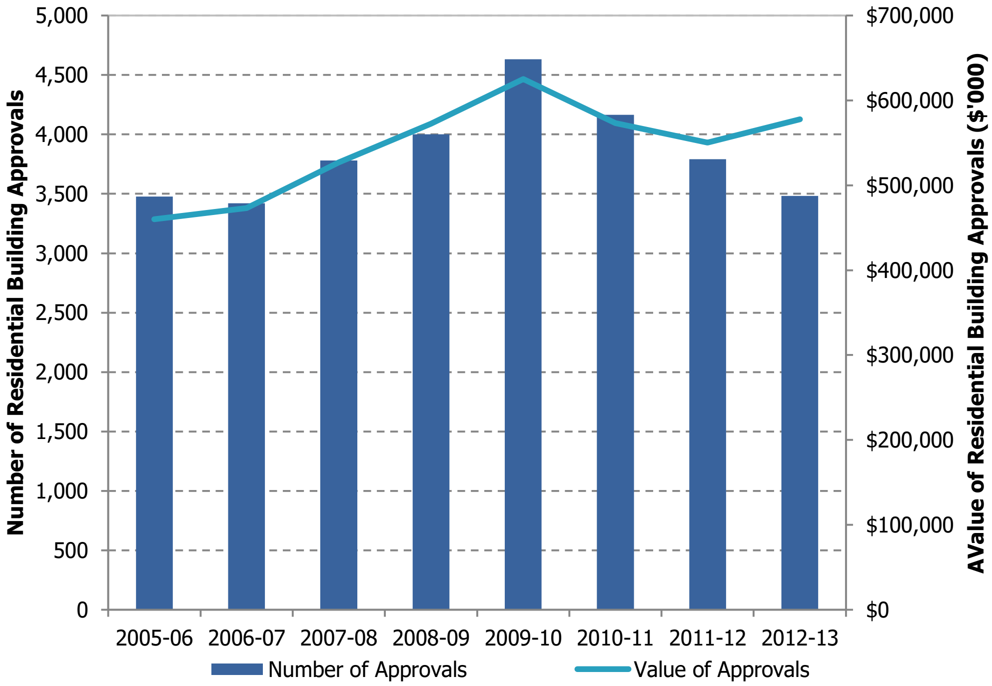
Source: AEC (unpublished)

Figure A.4: Labour Force and Unemployment, Casey-Cardinia



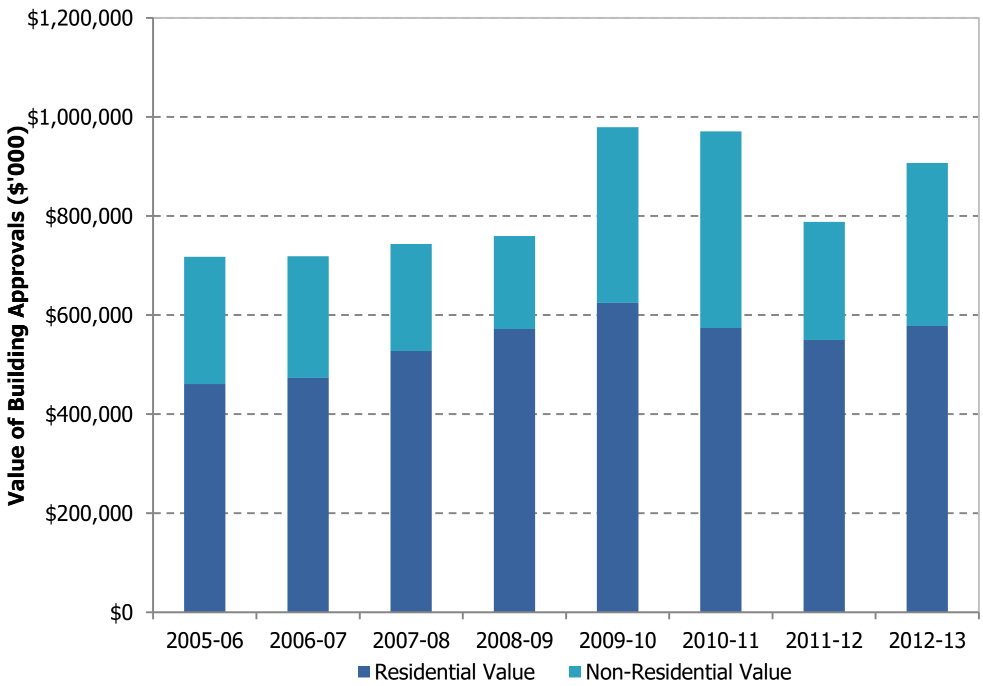
Source: DOE (2014)

Figure A.5: Residential Building Approvals, Casey-Cardinia



Source: ABS (2014b)

Figure A.6: Building Approvals, by Value, Casey-Cardinia



Source: ABS (2014b)

Appendix B: Opportunity Assessment

Industry growth opportunities for the Casey-Cardinia region have been identified by undertaking a desktop economic development opportunity assessment. This assessment employs a number of analytical tools to draw out the economic strengths, strategic assets and opportunities for a region in the context of national industry growth trends in order to determine specific industry sector targets for future economic development activities. Consultation with a variety of stakeholders will be used to further investigate the potential of these opportunities and to identify any additional opportunities.

The desktop assessment tools used include:

- **Location Quotient Analysis:** Assesses the degree of labour specialisation in an economy (a competitive advantage) and is used to identify industry areas of relative strengths and weaknesses.
- **Cluster Mapping Analysis:** Allows for the identification of growth opportunities in specific industry sectors, where a natural competitive advantage already exists.
- **Journey to Work assessment**: provides details on which industries draw labour into the area and which industries draw labour out of the area. Details of the journey to work assessment are contained in the *Casey-Cardinia Economic Profile*.

When identifying key industry sectors for growth, it is important to keep in mind the need for high value development (i.e. business activities that bring a high degree of knowledge and generate products and services of a high value). At the same time, it is important that future development results in sustainable business, both in terms of their environmental responsibilities but also in terms of the competitiveness and feasibility of their operations in the long term. By focusing on these areas, economic development can generate greater economic returns for the community.

Location Quotient Analysis

In order to demonstrate the specialisation of the economy, location quotients based on employment have been calculated. The location quotients demonstrate the degree to which a local or regional economy is specialised by examining the proportion of employment (by industry sub-sector) compared to a larger economy (Australian economy). Location quotients can be used to indicate the relative strengths or weaknesses of a local or regional economy (i.e., a natural competitive advantage or disadvantage).

For the analysis, the Casey-Cardinia region, Melbourne's South East and Victoria were compared against employment for Australia in 2011 (using the ABS Census). A location quotient of "1" means that the economies being compared have an equal share of employment (compared to Australia) for a specific industry sector, thus no potential advantage or disadvantage. A location quotient above "1" indicates a specialisation of labour and therefore an area of potential competitive advantage. If the location quotient is below "1", the area is under-represented compared to the national economic structure in this particular industry sector.

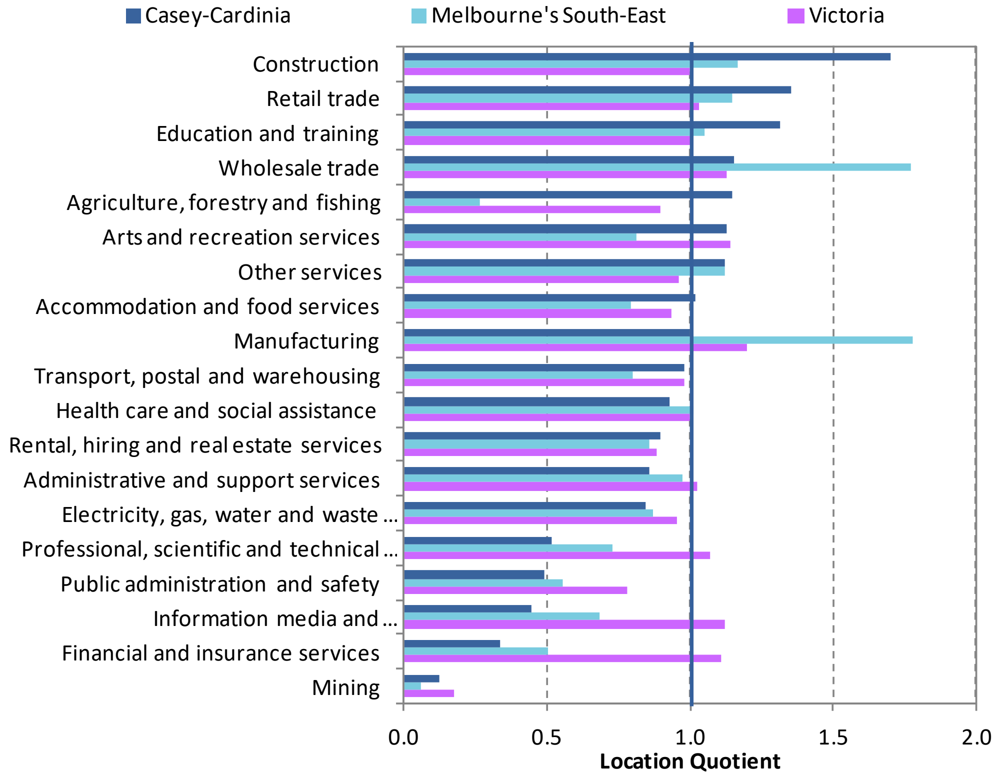
Key findings of this are analysis are that the Casey-Cardinia region has labour specialisation in:

- Key services industries including construction, retail trade, education and training and wholesale trade.
- manufacturing sectors including furniture manufacturing, polymer product and rubber manufacturing, transport equipment manufacturing and food product manufacturing.

In contrast, the Casey-Cardinia region has labour deficiencies in:

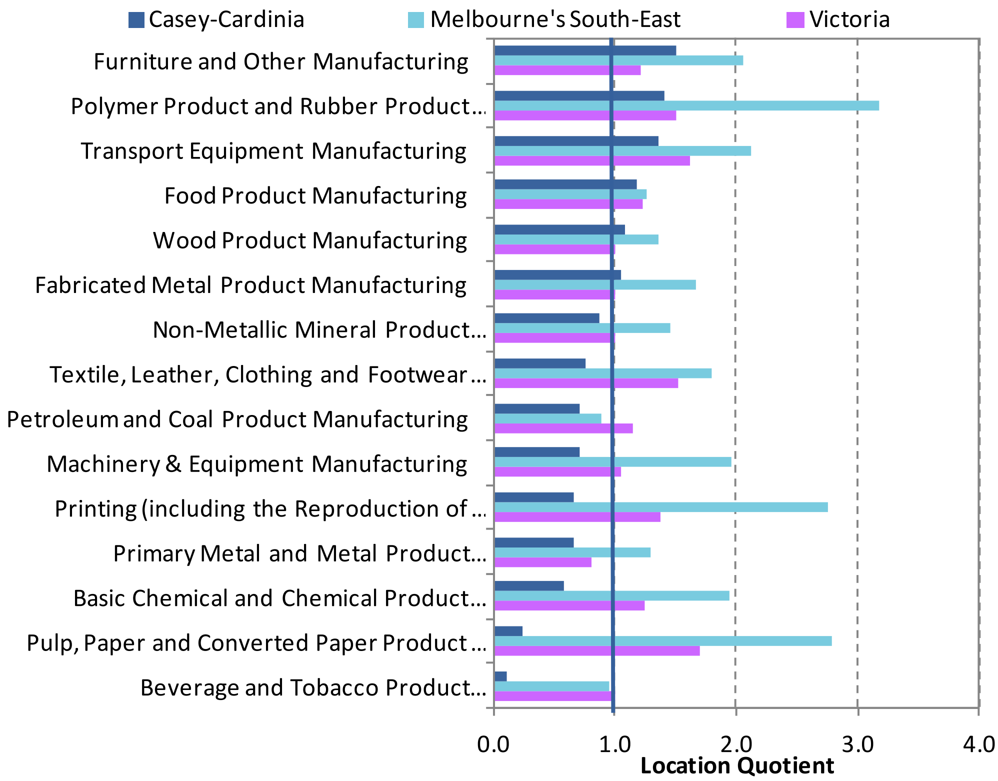
- Mining industries (though has some labour specialisation in quarrying).
- Finance and insurance services and information media and telecommunications.

Figure A. 1: LQ Comparison, 1 Digit ANZSIC, 2011



Source: ABS (2012b), AEC

Figure A. 2: LQ Comparison, 2 Digit ANZSIC Manufacturing, 2011



Source: ABS (2012b), AEC

Cluster Mapping Analysis

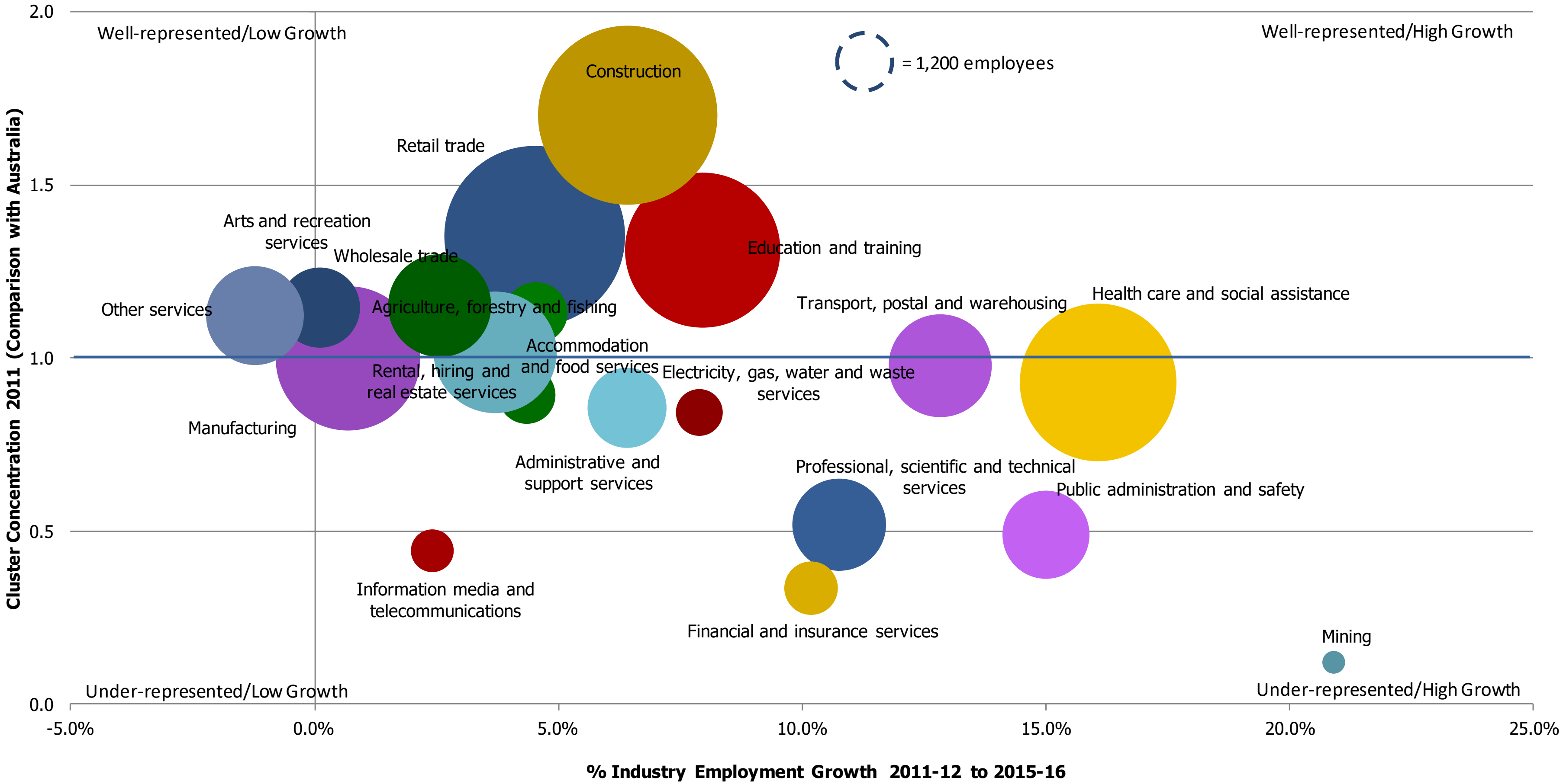
Cluster mapping builds on the location quotient analysis by portraying the regional location quotients against anticipation national industry employment growth over time (2011-12 to 2015-16). By incorporating industry growth, cluster mapping allows for the identification of growth opportunities in specific industry sectors, where a natural competitive advantage already exists against a backdrop of an expanding sector nationally.

Industry clusters located above the "1" on the vertical axis indicate an existing industry concentration (strength or competitive advantage, as discussed previously) within the region being examined. The national industry employment growth estimates (2011-12 to 2015-16) are plotted along the horizontal axis, with 0% growth over the period creating a midline. The further to the right of this central horizontal axis, the faster the industry is anticipated to expand. Similarly, the farther to the left of the zero percent midline, the faster it is expected to contract. The size of the cluster in the map demonstrates the size of the local workforce in that industry sector.

Key findings of this analysis are:

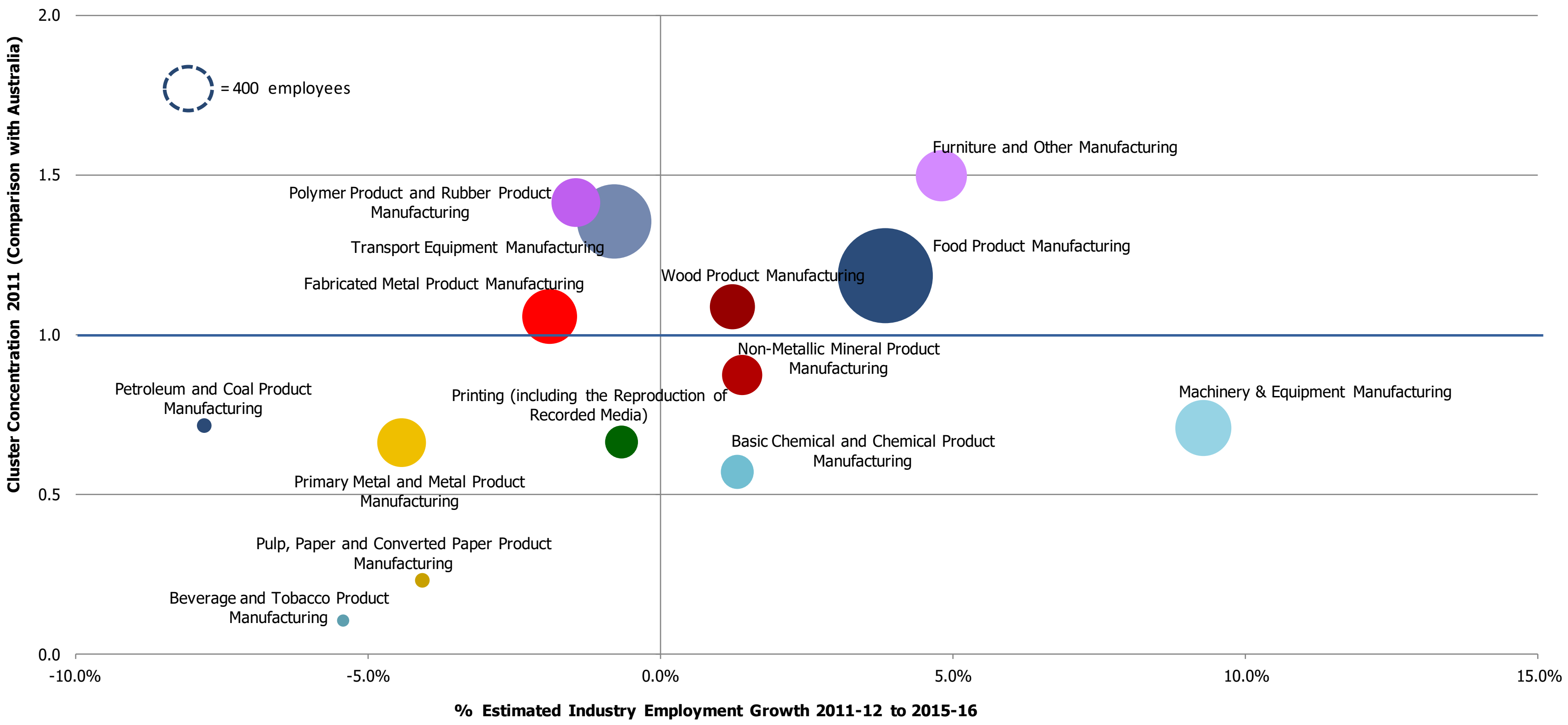
- Industries with positive growth expectations and well represented within the Casey-Cardinia region include:
    - Construction.
    - Education and training.
    - Retail trade.
    - Furniture and other manufacturing.
    - Food product manufacturing.
    - Wood product manufacturing.
- Industries with positive growth expectations and lower local representation include:
    - Public administration and safety.
    - Health care and social assistance.
    - Transport, postal and warehousing.
    - Professional, scientific and technical services.
    - Financial and insurance services.
    - Machinery and equipment manufacturing.
    - Non-metallic mineral product manufacturing.
    - Basic chemical and chemical product manufacturing.

Figure A. 3: Cluster Map, 1 Digit ANZIC



Source: ABS (2012b), IBIS World (Various), AEC

Figure A. 4: Cluster Map, 2 Digit ANZIC - Manufacturing



Source: ABS (2012b), IBIS World (Various), AEC

Supply Chain Assessment

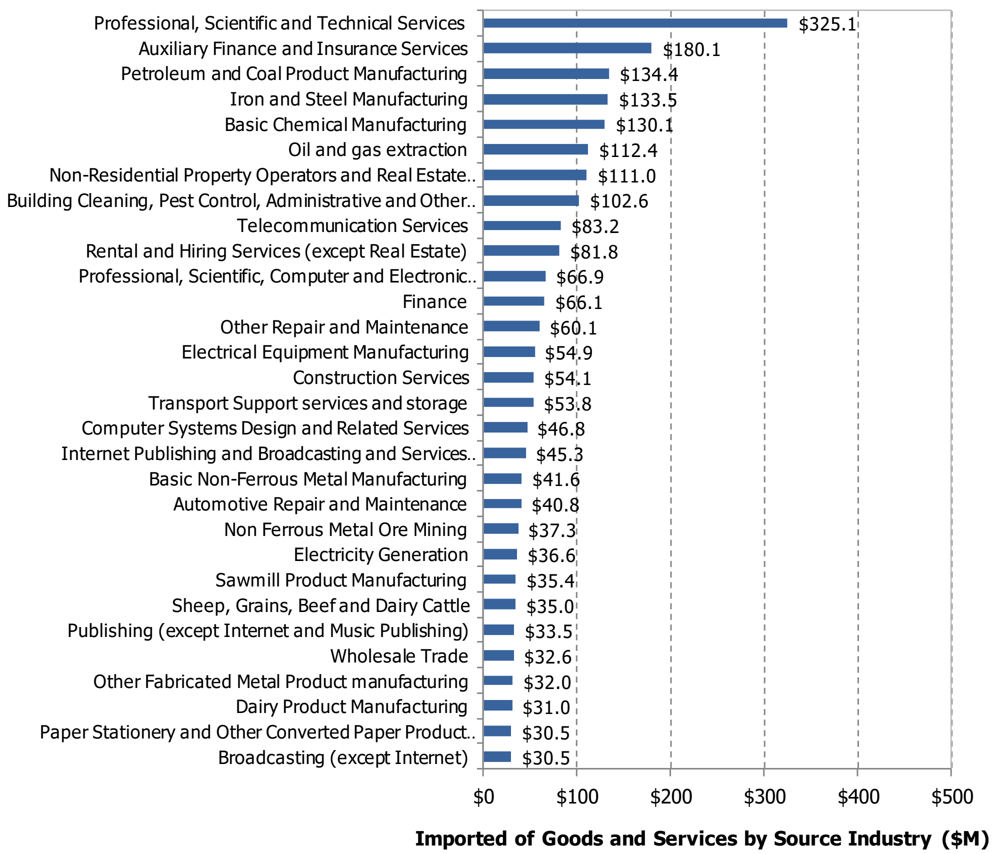
Imports and Exports

Prominent imports into a region can represent opportunities, where skills and labour can be easily sourced. This could improve local industry supply chains and provide additional job opportunities for locals. Prominent imports into the Casey-Cardinia region include:

- Professional, scientific and technical services ($325.1 million, or 11.3% of all imports).
- Auxiliary finance and insurance services ($180.1 million, or 6.3%).
- Petroleum and coal product manufacturing ($134.4 million, or 4.7%).
- Iron and steel manufacturing ($133.5 million, or 4.7%).

Key imports into the area reflect the demands from key industries in the region, particularly the construction, wholesale trade and retail trade industries (who import over a quarter of the region's imports). Import replacement for heavy manufacturing may not be appropriate for the region, however, attraction of professional, scientific and technical services as well as finance and insurance services could assist local business.

Figure C.1: Key Imports into the Casey-Cardinia Region, 2007-08



Source: AEC

Key exports out of a region tend to be reflective of its competitive advantage and can represent opportunities for further growth and expansion.

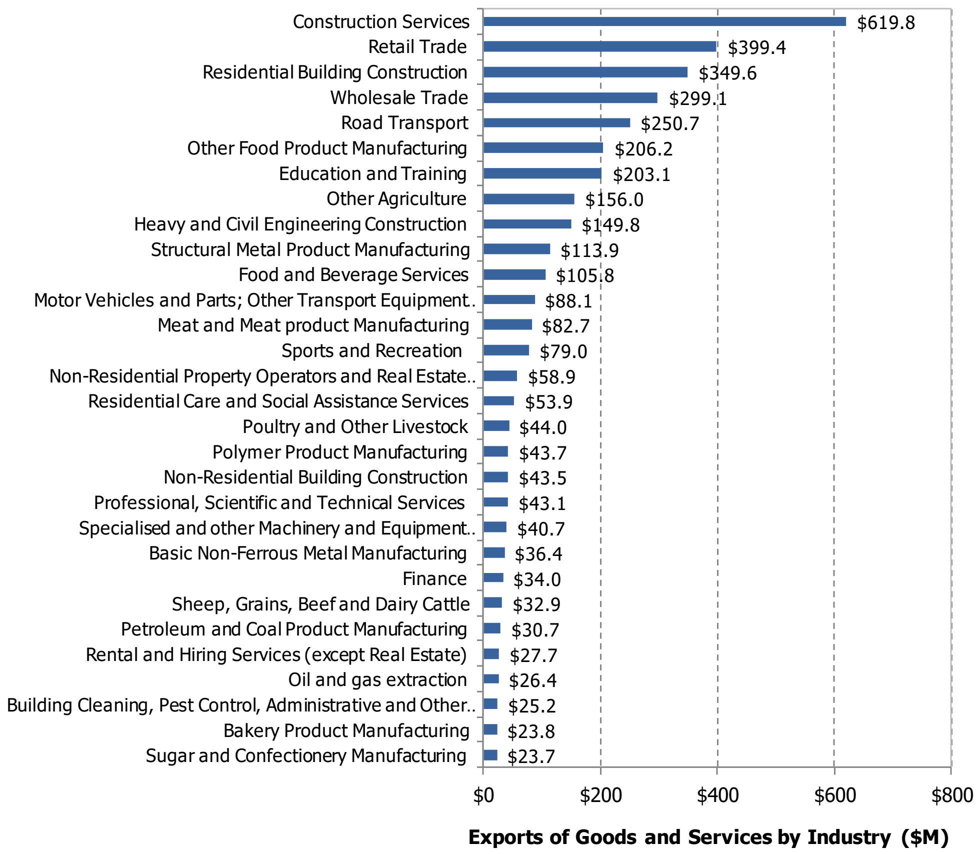
Prominent exports from the Casey-Cardinia Region include:

- Construction services ($619.8 million, or $15.3% of total exports).
- Retail trade ($399.4 million, or 9.8%).
- Residential building construction ($349.6 million, or 8.6%).

- Wholesale trade ($299.1 million, 7.4%).

Key exports from the Casey-Cardinia region reflect its position as a population services centre for the broader region. Construction services, retail trade and residential building construction are all population-based industries. The prominence of exports from the wholesale trade, road transport and other food product manufacturing are reflective of the business activity in the region. These industries may represent future growth areas for the Casey-Cardinia region.

Figure C.2: Key Exports out of the Casey-Cardinia Region, 2007-08



Source: AEC

Upstream and Downstream Markets Assessment

The following tables provide a summary of the key upstream (imports and local purchases) and downstream (local sales to industry and consumption, as well as exports) markets for each industry in the Casey-Cardinia region. ***Care should be taken in interpreting these results as the values presented in the tables are indicative estimates only***, and are designed to broadly identify the key inputs for each industry and potential targets for regional development rather than the specific quantum of each component.

The supply chain assessment has been conducted using Input Output transaction tables developed specifically for the Casey-Cardinia region, based on the 2007-08 National Input Output Tables developed by the Australian Bureau of Statistics (2011) and employment by industry estimates provided by the Australian Bureau of Statistics (2012b). The method used for regionalising the national tables to the Casey-Cardinia region's economy is consistent with the approach outlined in West (1993).

Key points of note:

- The food and beverage manufacturing sector uses a high proportion of local purchases - particularly from agricultural sectors and the local logistics sector. A high proportion of the total output from this sector is exported, though almost $200 million worth is used within other local industries.

- Most industries source the majority of their inputs locally. The sector with the highest proportion of imports in the arts and recreation services industry which sources 44.3% of its inputs from elsewhere. The most prominent import for this sector was professional, scientific and technical services.
- Business support services provided locally are in high demand with over 50% (and in many cases over 80%) of each of the local finance and insurance services, rental, hiring and real-estate services, professional scientific and technical services, information media and telecommunications and administrative and support services' outputs being consumed locally. This may suggest (prima facie) that there is room in these sectors for new entrants.

Interpreting the Supply Chain Assessment Flow Diagram

The supply chain assessment identifies both the upstream and downstream activities engaged in by an industry, which can be classified as:

- **Upstream inputs to production:**
  - Sourced locally, or
  - Imported to the region.
- **Downstream sales of product:**
  - Sold direct to local industry (and used elsewhere in value adding production),
  - Consumed by the local economy (population based consumption), or
  - Exported from the region.

The following diagrams show the supply chain for the following sectors:

- Food and beverage manufacturing (key local manufacturing sub-sector).
- Broad economy overview (ex-manufacturing).

For each of the manufacturing supply chains, the supply chain for the sector is presented first (with a dark gray box) followed by details on the sub-components of each sector.

Figure A. 5: Supply Chain - Food and Beverage Manufacturing, 2007-08 (Part A)

UPSTREAM INPUTS TO PRODUCTION				SECTOR OF INTEREST	DOWNSTREAM SALES OF PRODUCT			
IMPORTS		LOCAL PURCHASES			SALES TO LOCAL INDUSTRY		LOCAL CONSUMPTION	EXPORTS
Industry	$M	Industry	$M		Industry	$M	$M	$M
Sheep, Grains, Beef and Dairy Cattle	$27.2	Sheep, Grains, Beef and Dairy Cattle	$72.0	**FOOD AND BEVERAGE MANUFACTURING**	Food and Beverage Services	$46.1	**$127.2**	**$346.4**
Oils and Fats Manufacturing	$12.7	Other Agriculture	$43.6		Other Food Product Manufacturing	$33.2		
Dairy Product Manufacturing	$10.2	Poultry and Other Livestock	$33.5		Retail Trade	$29.6		
Other Agriculture	$8.4	Meat and Meat product Manufacturing	$26.9		Bakery Product Manufacturing	$17.0		
Meat and Meat product Manufacturing	$8.3	Road Transport	$25.2		Meat and Meat product Manufacturing	$10.3		
Other industries	*$97.6*	*Other industries*	*$128.6*		*Other industries*	*$55.6*		
Total	**$164.3**	**Total**	**$329.9**		**Total**	**$191.8**		
Sheep, Grains, Beef and Dairy Cattle	$23.6	Sheep, Grains, Beef and Dairy Cattle	$59.9	**Meat and Meat product Manufacturing**	Retail Trade	$22.5	**$35.3**	**$82.7**
Non-Residential Property Operators and Real Estate Services	$1.1	Poultry and Other Livestock	$30.3		Food and Beverage Services	$15.6		
Paper Stationery and Other Converted Paper Product Manufacturing	$0.8	Road Transport	$11.4		Other Food Product Manufacturing	$11.8		
Electricity Generation	$0.6	Meat and Meat product Manufacturing	$9.8		Meat and Meat product Manufacturing	$9.8		
Other industries	*$4.1*	*Other industries*	*$8.8*		*Other industries*	*$18.2*		
Total	**$30.2**	**Total**	**$120.2**		**Total**	**$77.9**		
Dairy Product Manufacturing	$0.2	Sheep, Grains, Beef and Dairy Cattle	$1.1	**Dairy Product Manufacturing**	Food and Beverage Services	$0.6	**$1.2**	**$1.0**
Paper Stationery and Other Converted Paper Product Manufacturing	$0.0	Polymer Product Manufacturing	$0.2		Other Food Product Manufacturing	$0.3		
Professional, Scientific and Technical Services	$0.0	Dairy Product Manufacturing	$0.1		Residential Care and Social Assistance Services	$0.2		
Non-Residential Property Operators and Real Estate Services	$0.0	Road Transport	$0.1		Sugar and Confectionery Manufacturing	$0.2		
Other industries	*$0.1*	*Other industries*	*$0.6*		*Other industries*	*$0.9*		
Total	**$0.3**	**Total**	**$2.3**		**Total**	**$2.1**		
Oils and Fats Manufacturing	$1.4	Sheep, Grains, Beef and Dairy Cattle	$1.9	**Oils and Fats Manufacturing**	Other Food Product Manufacturing	$1.4	**$3.7**	**$2.6**
Sheep, Grains, Beef and Dairy Cattle	$0.5	Oils and Fats Manufacturing	$0.9		Oils and Fats Manufacturing	$0.9		
Dairy Product Manufacturing	$0.5	Wholesale Trade	$0.7		Food and Beverage Services	$0.8		
Paper Stationery and Other Converted Paper Product Manufacturing	$0.1	Road Transport	$0.5		Bakery Product Manufacturing	$0.4		
Other industries	*$0.5*	*Other industries*	*$1.8*		*Other industries*	*$1.1*		
Total	**$2.9**	**Total**	**$5.8**		**Total**	**$4.6**		
Grain Mill and Cereal Product Manufacturing	$5.0	Meat and Meat product Manufacturing	$4.9	**Bakery Product Manufacturing**	Food and Beverage Services	$7.1	**$34.2**	**$23.8**
Dairy Product Manufacturing	$1.6	Other Food Product Manufacturing	$4.3		Residential Care and Social Assistance Services	$1.1		
Fruit and Vegetable Product Manufacturing	$1.3	Sugar and Confectionery Manufacturing	$3.7		Bakery Product Manufacturing	$0.6		
Non-Residential Property Operators and Real Estate Services	$0.7	Wholesale Trade	$2.9		Sugar and Confectionery Manufacturing	$0.6		
Other industries	*$5.9*	*Other industries*	*$13.0*		*Other industries*	*$3.2*		
Total	**$14.6**	**Total**	**$28.8**		**Total**	**$12.5**		

Source: AEC

Figure A. 6: Supply Chain - Food and Beverage Manufacturing, 2007-08 (Part A)

UPSTREAM INPUTS TO PRODUCTION				SECTOR OF INTEREST	DOWNSTREAM SALES OF PRODUCT			
IMPORTS		LOCAL PURCHASES			SALES TO LOCAL INDUSTRY		LOCAL CONSUMPTION	EXPORTS
Industry	**$M**	**Industry**	**$M**		**Industry**	**$M**	**$M**	**$M**
Dairy Product Manufacturing	$2.6	Other Agriculture	$12.9	**Sugar and Confectionery Manufacturing**	Other Food Product Manufacturing	$9.2	**$12.1**	**$23.7**
Sugar and Confectionery Manufacturing	$1.1	Sugar and Confectionery Manufacturing	$4.9		Sugar and Confectionery Manufacturing	$4.9		
Professional, Scientific and Technical Services	$0.7	Wholesale Trade	$3.0		Food and Beverage Services	$4.3		
Wholesale Trade	$0.7	Other Food Product Manufacturing	$1.7		Bakery Product Manufacturing	$3.7		
Other industries	*$5.8*	*Other industries*	*$8.2*		*Other industries*	*$3.0*		
Total	**$10.9**	**Total**	**$30.7**		**Total**	**$24.9**		
Soft Drinks, Cordials and Syrup Manufacturing	$0.1	Polymer Product Manufacturing	$0.2	**Soft Drinks, Cordials and Syrup Manufacturing**	Food and Beverage Services	$0.6	**$1.4**	**$0.1**
Paper Stationery and Other Converted Paper Product Manufacturing	$0.0	Food and Beverage Services	$0.2		Retail Trade	$0.2		
Glass and Glass Product Manufacturing	$0.0	Wholesale Trade	$0.1		Wine, Spirits and Tobacco	$0.1		
Rental and Hiring Services (except Real Estate)	$0.0	Glass and Glass Product Manufacturing	$0.1		Soft Drinks, Cordials and Syrup Manufacturing	$0.1		
Other industries	*$0.1*	*Other industries*	*$0.9*		*Other industries*	*$0.3*		
Total	**$0.3**	**Total**	**$1.5**		**Total**	**$1.3**		
Paper Stationery and Other Converted Paper Product Manufacturing	$0.1	Sheep, Grains, Beef and Dairy Cattle	$1.4	**Beer Manufacturing**	Food and Beverage Services	$3.6	**$3.3**	**$0.3**
Grain Mill and Cereal Product Manufacturing	$0.1	Finance	$0.5		Accommodation	$0.3		
Transport Support services and storage	$0.0	Transport Support services and storage	$0.4		Publishing (except Internet and Music Publishing)	$0.2		
Water Supply, Sewerage and Drainage Services	$0.0	Road Transport	$0.4		Gambling	$0.0		
Other industries	*$0.3*	*Other industries*	*$2.0*		*Other industries*	*$0.1*		
Total	**$0.5**	**Total**	**$4.6**		**Total**	**$4.3**		
Soft Drinks, Cordials and Syrup Manufacturing	$0.4	Other Agriculture	$1.5	**Wine, Spirits and Tobacco**	Food and Beverage Services	$2.7	**$2.8**	**$2.5**
Wine, Spirits and Tobacco	$0.2	Professional, Scientific and Technical Services	$0.3		Accommodation	$0.2		
Professional, Scientific and Technical Services	$0.1	Food and Beverage Services	$0.3		Wine, Spirits and Tobacco	$0.1		
Paper Stationery and Other Converted Paper Product Manufacturing	$0.1	Sheep, Grains, Beef and Dairy Cattle	$0.2		Public Administration and Regulatory Services	$0.1		
Other industries	*$0.3*	*Other industries*	*$1.7*		*Other industries*	*$0.6*		
Total	**$1.0**	**Total**	**$4.1**		**Total**	**$3.7**		

Source: AEC

Figure A. 7: Supply Chain - Food and Beverage Manufacturing, 2007-08 (Part B)

UPSTREAM INPUTS TO PRODUCTION				SECTOR OF INTEREST	DOWNSTREAM SALES OF PRODUCT			
IMPORTS		LOCAL PURCHASES			SALES TO LOCAL INDUSTRY		LOCAL CONSUMPTION	EXPORTS
Industry	$M	Industry	$M		Industry	$M	$M	$M
Dairy Product Manufacturing	$2.6	Other Agriculture	$12.9	**Sugar and Confectionery Manufacturing**	Other Food Product Manufacturing	$9.2	**$12.1**	**$23.7**
Sugar and Confectionery Manufacturing	$1.1	Sugar and Confectionery Manufacturing	$4.9		Sugar and Confectionery Manufacturing	$4.9		
Professional, Scientific and Technical Services	$0.7	Wholesale Trade	$3.0		Food and Beverage Services	$4.3		
Wholesale Trade	$0.7	Other Food Product Manufacturing	$1.7		Bakery Product Manufacturing	$3.7		
Other industries	*$5.8*	*Other industries*	*$8.2*		*Other industries*	*$3.0*		
Total	**$10.9**	**Total**	**$30.7**		**Total**	**$24.9**		
Soft Drinks, Cordials and Syrup Manufacturing	$0.1	Polymer Product Manufacturing	$0.2	**Soft Drinks, Cordials and Syrup Manufacturing**	Food and Beverage Services	$0.6	**$1.4**	**$0.1**
Paper Stationery and Other Converted Paper Product Manufacturing	$0.0	Food and Beverage Services	$0.2		Retail Trade	$0.2		
Glass and Glass Product Manufacturing	$0.0	Wholesale Trade	$0.1		Wine, Spirits and Tobacco	$0.1		
Rental and Hiring Services (except Real Estate)	$0.0	Glass and Glass Product Manufacturing	$0.1		Soft Drinks, Cordials and Syrup Manufacturing	$0.1		
Other industries	*$0.1*	*Other industries*	*$0.9*		*Other industries*	*$0.3*		
Total	**$0.3**	**Total**	**$1.5**		**Total**	**$1.3**		
Paper Stationery and Other Converted Paper Product Manufacturing	$0.1	Sheep, Grains, Beef and Dairy Cattle	$1.4	**Beer Manufacturing**	Food and Beverage Services	$3.6	**$3.3**	**$0.3**
Grain Mill and Cereal Product Manufacturing	$0.1	Finance	$0.5		Accommodation	$0.3		
Transport Support services and storage	$0.0	Transport Support services and storage	$0.4		Publishing (except Internet and Music Publishing)	$0.2		
Water Supply, Sewerage and Drainage Services	$0.0	Road Transport	$0.4		Gambling	$0.0		
Other industries	*$0.3*	*Other industries*	*$2.0*		*Other industries*	*$0.1*		
Total	**$0.5**	**Total**	**$4.6**		**Total**	**$4.3**		
Soft Drinks, Cordials and Syrup Manufacturing	$0.4	Other Agriculture	$1.5	**Wine, Spirits and Tobacco**	Food and Beverage Services	$2.7	**$2.8**	**$2.5**
Wine, Spirits and Tobacco	$0.2	Professional, Scientific and Technical Services	$0.3		Accommodation	$0.2		
Professional, Scientific and Technical Services	$0.1	Food and Beverage Services	$0.3		Wine, Spirits and Tobacco	$0.1		
Paper Stationery and Other Converted Paper Product Manufacturing	$0.1	Sheep, Grains, Beef and Dairy Cattle	$0.2		Public Administration and Regulatory Services	$0.1		
Other industries	*$0.3*	*Other industries*	*$1.7*		*Other industries*	*$0.6*		
Total	**$1.0**	**Total**	**$4.1**		**Total**	**$3.7**		

Source: AEC

Figure A. 8: Supply Chain - 1 Digit ANZIC (ex-Manufacturing) Part A, 2007-08

UPSTREAM INPUTS TO PRODUCTION				SECTOR OF INTEREST	DOWNSTREAM SALES OF PRODUCT			
IMPORTS		LOCAL PURCHASES			SALES TO LOCAL INDUSTRY		LOCAL CONSUMPTION	EXPORTS
Industry	$M	Industry	$M		Industry	$M	$M	$M
Agriculture, Forestry and Fishing Support Services	$23.5	Other Agriculture	$26.6	**Agriculture, Forestry and Fishing**	Meat and Meat product Manufacturing	$90.4	**$43.3**	**$236.2**
Basic Chemical Manufacturing	$22.3	Agriculture, Forestry and Fishing Support Services	$21.7		Other Food Product Manufacturing	$30.8		
Petroleum and Coal Product Manufacturing	$17.8	Sheep, Grains, Beef and Dairy Cattle	$19.1		Other Agriculture	$30.1		
Professional, Scientific and Technical Services	$7.7	Wholesale Trade	$15.4		Sheep, Grains, Beef and Dairy Cattle	$28.2		
Finance	$6.9	Other Food Product Manufacturing	$11.8		Sugar and Confectionery Manufacturing	$13.3		
Other industries	*$47.3*	*Other industries*	*$87.2*		*Other industries*	*$77.3*		
Total	**$125.3**	**Total**	**$181.9**		**Total**	**$270.1**		
Exploration and Mining Support Services	$5.2	Construction Services	$4.8	**Mining**	Basic Non-Ferrous Metal Manufacturing	$13.6	**$2.5**	**$56.5**
Petroleum and Coal Product Manufacturing	$3.6	Finance	$2.1		Petroleum and Coal Product Manufacturing	$10.1		
Oil and gas extraction	$1.2	Petroleum and Coal Product Manufacturing	$1.9		Cement, Lime and Ready-Mixed Concrete Manufacturing	$4.4		
Basic Chemical Manufacturing	$1.0	Specialised and other Machinery and Equipment Manufacturing	$1.9		Other Food Product Manufacturing	$2.9		
Rental and Hiring Services (except Real Estate)	$1.0	Oil and gas extraction	$1.8		Construction Services	$2.5		
Other industries	*$7.4*	*Other industries*	*$15.7*		*Other industries*	*$18.6*		
Total	**$19.4**	**Total**	**$28.2**		**Total**	**$52.1**		
Electricity Generation	$4.7	Electricity Transmission, Distribution, On Selling and Electricity Market Operation	$30.3	**Electricity, Gas, Water and Waste Services**	Electricity Transmission, Distribution, On Selling and Electricity Market Operation	$29.9	**$36.6**	**$22.5**
Coal mining	$3.6	Construction Services	$5.5		Construction Services	$11.4		
Professional, Scientific and Technical Services	$2.0	Finance	$5.0		Residential Building Construction	$5.8		
Electricity Transmission, Distribution, On Selling and Electricity Market Operation	$1.9	Professional, Scientific and Technical Services	$3.1		Retail Trade	$3.6		
Electrical Equipment Manufacturing	$1.2	Electricity Generation	$2.1		Heavy and Civil Engineering Construction	$3.4		
Other industries	*$9.4*	*Other industries*	*$14.4*		*Other industries*	*$43.2*		
Total	**$22.9**	**Total**	**$60.4**		**Total**	**$97.3**		
Auxiliary Finance and Insurance Services	$145.2	Construction Services	$800.5	**Construction**	Construction Services	$484.5	**$5.8**	**$1,162.8**
Professional, Scientific and Technical Services	$82.3	Structural Metal Product Manufacturing	$90.0		Residential Building Construction	$170.9		
Construction Services	$53.0	Professional, Scientific and Technical Services	$80.6		Heavy and Civil Engineering Construction	$84.4		
Iron and Steel Manufacturing	$45.7	Wholesale Trade	$57.0		Non-Residential Building Construction	$60.8		
Petroleum and Coal Product Manufacturing	$40.9	Building Cleaning, Pest Control, Administrative and Other Support Services	$47.2		Wholesale Trade	$17.4		
Other industries	*$343.7*	*Other industries*	*$465.0*		*Other industries*	*$88.5*		
Total	**$710.8**	**Total**	**$1,540.3**		**Total**	**$906.6**		
Professional, Scientific and Technical Services	$28.1	Transport Support services and storage	$52.0	**Wholesale Trade**	Construction Services	$27.6	**$204.0**	**$299.1**
Transport Support services and storage	$23.5	Professional, Scientific and Technical Services	$29.9		Wholesale Trade	$18.5		
Oil and gas extraction	$20.1	Non-Residential Property Operators and Real Estate Services	$21.1		Residential Building Construction	$15.1		
Non-Residential Property Operators and Real Estate Services	$13.9	Wholesale Trade	$18.5		Food and Beverage Services	$14.8		
Telecommunication Services	$11.8	Construction Services	$17.0		Motor Vehicles and Parts; Other Transport Equipment manufacturing	$14.3		
Other industries	*$96.0*	*Other industries*	*$135.4*		*Other industries*	*$191.9*		
Total	**$193.4**	**Total**	**$273.9**		**Total**	**$282.2**		

Source: AEC

Figure A. 9: Supply Chain - 1 Digit ANZIC (ex-Manufacturing) Part B, 2007-08

UPSTREAM INPUTS TO PRODUCTION					DOWNSTREAM SALES OF PRODUCT			
IMPORTS		LOCAL PURCHASES		SECTOR OF INTEREST	SALES TO LOCAL INDUSTRY		LOCAL CONSUMPTION	EXPORTS
Industry	**$M**	**Industry**	**$M**		**Industry**	**$M**	**$M**	**$M**
Professional, Scientific and Technical Services	$33.8	Professional, Scientific and Technical Services	$36.4	**Retail Trade**	Wholesale Trade	$5.3	**$488.3**	**$399.4**
Telecommunication Services	$12.0	Building Cleaning, Pest Control, Administrative and Other Support Services	$23.5		Retail Trade	$4.8		
Building Cleaning, Pest Control, Administrative and Other Support Services	$12.0	Meat and Meat product Manufacturing	$22.5		Construction Services	$3.1		
Non-Residential Property Operators and Real Estate Services	$10.9	Non-Residential Property Operators and Real Estate Services	$15.5		Residential Building Construction	$2.1		
Other Repair and Maintenance	$8.0	Wholesale Trade	$10.6		Residential Care and Social Assistance Services	$1.7		
Other industries	*$82.1*	*Other industries*	*$117.0*		*Other industries*	*$22.0*		
Total	**$158.7**	**Total**	**$225.5**		**Total**	**$39.0**		
Wine, Spirits and Tobacco	$10.8	Meat and Meat product Manufacturing	$16.3	**Accommodation and Food Services**	Professional, Scientific and Technical Services	$8.1	**$276.9**	**$109.5**
Beer Manufacturing	$10.8	Wholesale Trade	$15.4		Wholesale Trade	$7.4		
Dairy Product Manufacturing	$9.6	Building Cleaning, Pest Control, Administrative and Other Support Services	$9.4		Building Cleaning, Pest Control, Administrative and Other Support Services	$5.4		
Broadcasting (except Internet)	$8.4	Other Food Product Manufacturing	$7.7		Retail Trade	$3.4		
Soft Drinks, Cordials and Syrup Manufacturing	$6.7	Non-Residential Property Operators and Real Estate Services	$7.6		Education and Training	$2.1		
Other industries	*$53.9*	*Other industries*	*$80.8*		*Other industries*	*$26.1*		
Total	**$100.3**	**Total**	**$137.3**		**Total**	**$52.5**		
Building Cleaning, Pest Control, Administrative and Other Support Services	$2.6	Building Cleaning, Pest Control, Administrative and Other Support Services	$6.9	**Information, Media and Telecommunications**	Professional, Scientific and Technical Services	$11.8	**$56.1**	**$23.8**
Professional, Scientific, Computer and Electronic Equipment Manufacturing	$2.6	Professional, Scientific and Technical Services	$5.7		Retail Trade	$10.6		
Rental and Hiring Services (except Real Estate)	$1.5	Construction Services	$4.7		Wholesale Trade	$9.4		
Pulp, Paper and Paperboard Manufacturing	$1.4	Non-Residential Property Operators and Real Estate Services	$4.5		Education and Training	$6.8		
Professional, Scientific and Technical Services	$1.4	Motion Picture and Sound Recording	$3.9		Public Administration and Regulatory Services	$5.1		
Other industries	*$12.9*	*Other industries*	*$38.7*		*Other industries*	*$51.4*		
Total	**$22.5**	**Total**	**$64.5**		**Total**	**$95.2**		
Auxiliary Finance and Insurance Services	$14.2	Finance	$44.2	**Financial and Insurance Services**	Finance	$37.7	**$130.5**	**$43.5**
Computer Systems Design and Related Services	$3.2	Auxiliary Finance and Insurance Services	$21.0		Construction Services	$34.1		
Finance	$3.0	Non-Residential Property Operators and Real Estate Services	$7.9		Ownership of Dwellings	$21.9		
Non-Residential Property Operators and Real Estate Services	$1.4	Computer Systems Design and Related Services	$7.7		Insurance and Superannuation Funds	$18.7		
Insurance and Superannuation Funds	$1.2	Building Cleaning, Pest Control, Administrative and Other Support Services	$5.1		Professional, Scientific and Technical Services	$16.7		
Other industries	*$3.9*	*Other industries*	*$13.1*		*Other industries*	*$145.7*		
Total	**$26.8**	**Total**	**$99.0**		**Total**	**$274.8**		

Source: AEC

Figure A. 10: Supply Chain - 1 Digit ANZIC (ex-Manufacturing) Part C, 2007-08

UPSTREAM INPUTS TO PRODUCTION				SECTOR OF INTEREST	DOWNSTREAM SALES OF PRODUCT			
IMPORTS		LOCAL PURCHASES			SALES TO LOCAL INDUSTRY		LOCAL CONSUMPTION	EXPORTS
Industry	$M	Industry	$M		Industry	$M	$M	$M
Professional, Scientific and Technical Services	$31.8	Professional, Scientific and Technical Services	$43.1	Rental, Hiring and Real Estate Services	Non-Residential Property Operators and Real Estate Services	$31.3	$10.7	$86.6
Building Cleaning, Pest Control, Administrative and Other Support Services	$10.8	Building Cleaning, Pest Control, Administrative and Other Support Services	$34.9		Wholesale Trade	$23.8		
Finance	$7.6	Non-Residential Property Operators and Real Estate Services	$34.3		Construction Services	$19.0		
Rental and Hiring Services (except Real Estate)	$5.3	Finance	$15.4		Retail Trade	$17.2		
Non-Residential Property Operators and Real Estate Services	$5.1	Construction Services	$12.8		Professional, Scientific and Technical Services	$17.0		
Other industries	*$30.6*	*Other industries*	*$43.0*		*Other industries*	*$213.5*		
Total	**$91.3**	**Total**	**$183.5**		**Total**	**$321.8**		
Professional, Scientific and Technical Services	$35.6	Professional, Scientific and Technical Services	$89.3	Professional, Scientific and Technical Services	Professional, Scientific and Technical Services	$85.6	$24.7	$45.9
Broadcasting (except Internet)	$17.5	Building Cleaning, Pest Control, Administrative and Other Support Services	$18.1		Retail Trade	$37.9		
Computer Systems Design and Related Services	$7.4	Non-Residential Property Operators and Real Estate Services	$15.6		Non-Residential Property Operators and Real Estate Services	$37.0		
Telecommunication Services	$5.4	Finance	$14.8		Wholesale Trade	$34.9		
Rental and Hiring Services (except Real Estate)	$4.1	Computer Systems Design and Related Services	$13.3		Construction Services	$30.7		
Other industries	*$41.8*	*Other industries*	*$79.4*		*Other industries*	*$265.6*		
Total	**$111.8**	**Total**	**$230.6**		**Total**	**$491.7**		
Professional, Scientific and Technical Services	$11.3	Building Cleaning, Pest Control, Administrative and Other Support Services	$14.3	Administrative and Support Services	Construction Services	$24.0	$24.3	$25.2
Rental and Hiring Services (except Real Estate)	$5.2	Professional, Scientific and Technical Services	$13.9		Retail Trade	$23.5		
Computer Systems Design and Related Services	$4.1	Non-Residential Property Operators and Real Estate Services	$11.7		Non-Residential Property Operators and Real Estate Services	$23.4		
Building Cleaning, Pest Control, Administrative and Other Support Services	$3.6	Finance	$5.1		Professional, Scientific and Technical Services	$16.4		
Other Repair and Maintenance	$2.8	Transport Support services and storage	$5.1		Transport Support services and storage	$14.9		
Other industries	*$25.6*	*Other industries*	*$53.3*		*Other industries*	*$155.5*		
Total	**$52.6**	**Total**	**$103.5**		**Total**	**$257.7**		
Computer Systems Design and Related Services	$6.1	Professional, Scientific and Technical Services	$13.7	Public Administration and Safety	Public Administration and Regulatory Services	$7.4	$247.4	$3.1
Auxiliary Finance and Insurance Services	$3.8	Computer Systems Design and Related Services	$11.1		Professional, Scientific and Technical Services	$4.8		
Professional, Scientific and Technical Services	$3.4	Non-Residential Property Operators and Real Estate Services	$7.9		Road Transport	$4.0		
Telecommunication Services	$2.8	Public Administration and Regulatory Services	$6.9		Transport Support services and storage	$2.2		
Internet Publishing and Broadcasting and Services Providers, Websearch Portals and Data Processing Services	$1.8	Building Cleaning, Pest Control, Administrative and Other Support Services	$6.6		Education and Training	$2.2		
Other industries	*$14.7*	*Other industries*	*$51.5*		*Other industries*	*$24.4*		
Total	**$32.7**	**Total**	**$97.7**		**Total**	**$45.0**		

Source: AEC

Figure A. 11: Supply Chain - 1 Digit ANZIC (ex-Manufacturing) Part D, 2007-08

UPSTREAM INPUTS TO PRODUCTION				SECTOR OF INTEREST	DOWNSTREAM SALES OF PRODUCT			
IMPORTS		LOCAL PURCHASES			SALES TO LOCAL INDUSTRY		LOCAL CONSUMPTION	EXPORTS
Industry	$M	Industry	$M		Industry	$M	$M	$M
Non-Residential Property Operators and Real Estate Services	$7.5	Non-Residential Property Operators and Real Estate Services	$13.0	Education and Training	Education and Training	$7.3	$418.9	$203.1
Professional, Scientific, Computer and Electronic Equipment Manufacturing	$7.3	Building Cleaning, Pest Control, Administrative and Other Support Services	$8.7		Professional, Scientific and Technical Services	$3.6		
Computer Systems Design and Related Services	$6.0	Wholesale Trade	$7.4		Building Cleaning, Pest Control, Administrative and Other Support Services	$2.8		
Publishing (except Internet and Music Publishing)	$5.4	Education and Training	$7.3		Non-Residential Property Operators and Real Estate Services	$1.1		
Telecommunication Services	$4.8	Professional, Scientific and Technical Services	$4.6		Finance	$0.9		
Other industries	*$45.0*	*Other industries*	*$56.4*		*Other industries*	*$15.6*		
Total	**$76.0**	**Total**	**$97.3**		**Total**	**$31.2**		
Professional, Scientific, Computer and Electronic Equipment Manufacturing	$12.4	Wholesale Trade	$18.5	Health Care and Social Assistance	Health Care Services	$1.9	$548.9	$58.7
Dairy Product Manufacturing	$5.7	Professional, Scientific and Technical Services	$10.8		Education and Training	$0.4		
Professional, Scientific and Technical Services	$5.5	Building Cleaning, Pest Control, Administrative and Other Support Services	$8.6		Residential Care and Social Assistance Services	$0.4		
Basic Chemical Manufacturing	$4.2	Non-Residential Property Operators and Real Estate Services	$7.9		Building Cleaning, Pest Control, Administrative and Other Support Services	$0.2		
Human Pharmaceutical and Medicinal Product Manufacturing	$3.8	Finance	$5.1		Insurance and Superannuation Funds	$0.2		
Other industries	*$43.8*	*Other industries*	*$65.7*		*Other industries*	*$1.7*		
Total	**$75.4**	**Total**	**$116.5**		**Total**	**$4.9**		
Professional, Scientific and Technical Services	$6.6	Building Cleaning, Pest Control, Administrative and Other Support Services	$7.8	Arts and Recreation Services	Sports and Recreation	$5.1	$103.2	$82.3
Veterinary Pharmaceutical and Medicinal Product Manufacturing	$5.5	Professional, Scientific and Technical Services	$7.7		Education and Training	$3.8		
Other Manufactured Products	$5.5	Wholesale Trade	$6.7		Professional, Scientific and Technical Services	$3.1		
Building Cleaning, Pest Control, Administrative and Other Support Services	$5.4	Sports and Recreation	$5.0		Residential Care and Social Assistance Services	$1.3		
Professional, Scientific, Computer and Electronic Equipment Manufacturing	$3.8	Other Food Product Manufacturing	$3.8		Heritage, Creative and Performing Arts	$1.2		
Other industries	*$26.4*	*Other industries*	*$35.9*		*Other industries*	*$9.2*		
Total	**$53.2**	**Total**	**$67.0**		**Total**	**$23.6**		
Professional, Scientific and Technical Services	$8.4	Wholesale Trade	$15.4	Other Services	Road Transport	$35.2	$131.1	$47.1
Professional, Scientific, Computer and Electronic Equipment Manufacturing	$5.4	Motor Vehicles and Parts; Other Transport Equipment manufacturing	$13.9		Retail Trade	$14.0		
Motor Vehicles and Parts; Other Transport Equipment manufacturing	$4.4	Professional, Scientific and Technical Services	$11.3		Construction Services	$11.0		
Rental and Hiring Services (except Real Estate)	$4.3	Specialised and other Machinery and Equipment Manufacturing	$6.5		Wholesale Trade	$10.9		
Telecommunication Services	$4.1	Non-Residential Property Operators and Real Estate Services	$6.3		Building Cleaning, Pest Control, Administrative and Other Support Services	$6.0		
Other industries	*$40.4*	*Other industries*	*$49.6*		*Other industries*	*$66.4*		
Total	**$66.9**	**Total**	**$102.9**		**Total**	**$143.5**		

Source: AEC

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