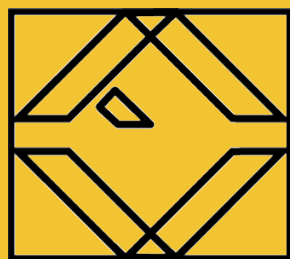


Bassendean Local Economic Overview

Town of Bassendean

March 2018



FAR lane



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1 PURPOSE OF OVERVIEW

1.1 SCOPE OF WORKS

The Bassendean Local Economic Overview (the Overview) provides a profile of key demographic and economic characteristic of the Town of Bassendean. This work is required to inform future town planning and economic development initiatives undertaken by the Town of Bassendean including the preparation of the Town's Economic Development Plan 2017-2022 and Local Planning Strategy 2017-2030.

The Overview focuses on three aspects of activity within the Town of Bassendean:

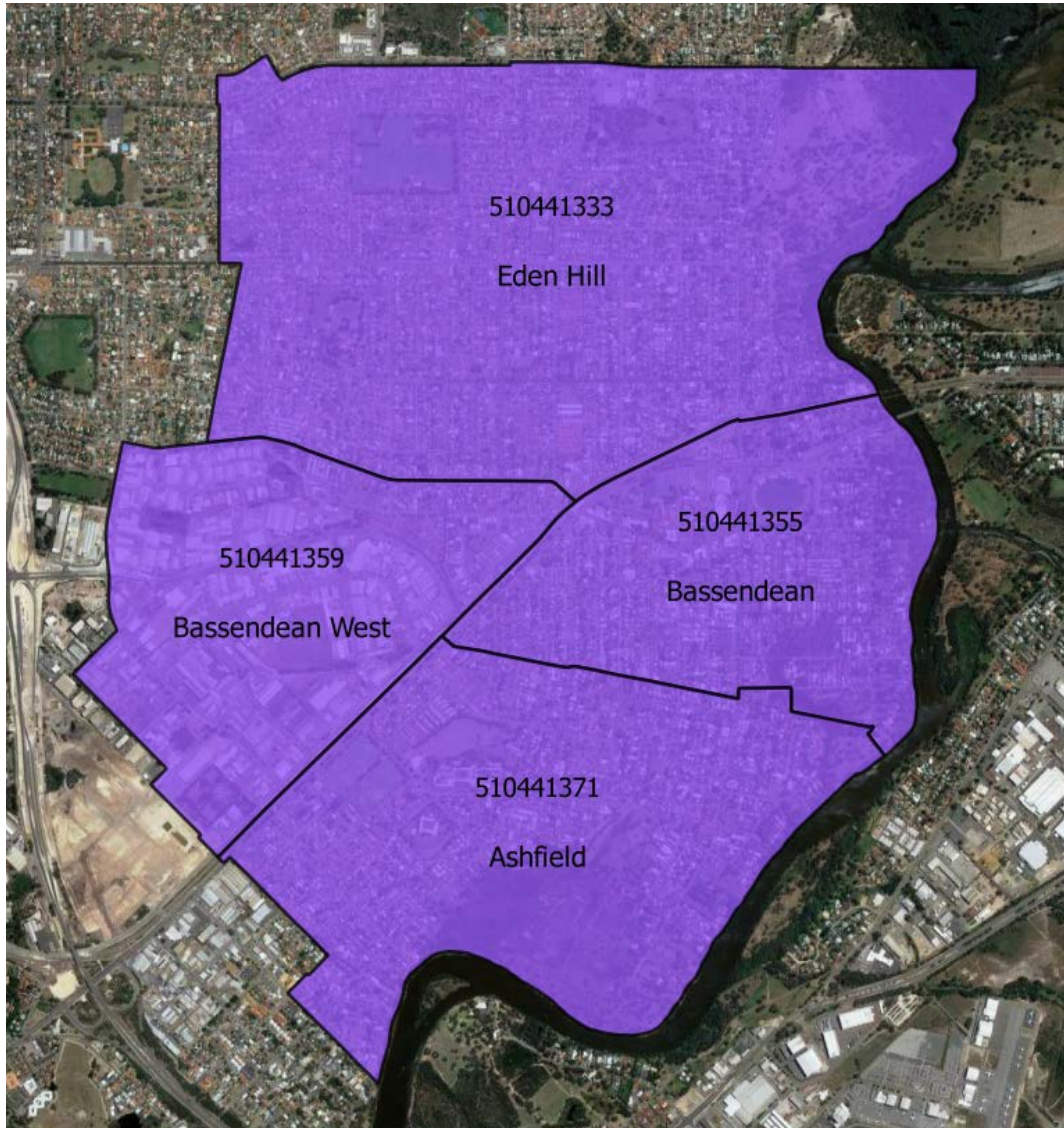
- Demographics
- Economy
- Real estate market

Characteristics and trends are summarised in each area, with key implications identified and discussed.

1.2 THE STUDY AREA

Data for this document is drawn from ABS Census and from REIWA. The ABS population and housing density destination zones divide the Town of Bassendean into four spatial areas: Eden Hill, Ashfield, Bassendean and Bassendean West. Data drawn from REIWA utilise the three geographical suburb boundaries Eden Hill, Ashfield and Bassendean. In the interest of consistency and accuracy, the same spatial areas as the source of the data (ABS or REIWA) are retained in the graphs and analysis of this overview (Figure 1).

Figure 1- Bassendean Project Map



Source: ABS Census of Population and Housing Destination Zones 2016

2 LOCAL DEMOGRAPHIC PROFILE

2.1 INTRODUCTION

Demographic analysis undertaken as part of the Profile considered the characteristics, trends and implications of the following metrics and indicators:

- Resident population and cultural background;
- Households and cultural background;
- Tenure and landlord type;
- Housing market;
- Income; and
- Socio-Economic Indexes for Areas (SEIFA).

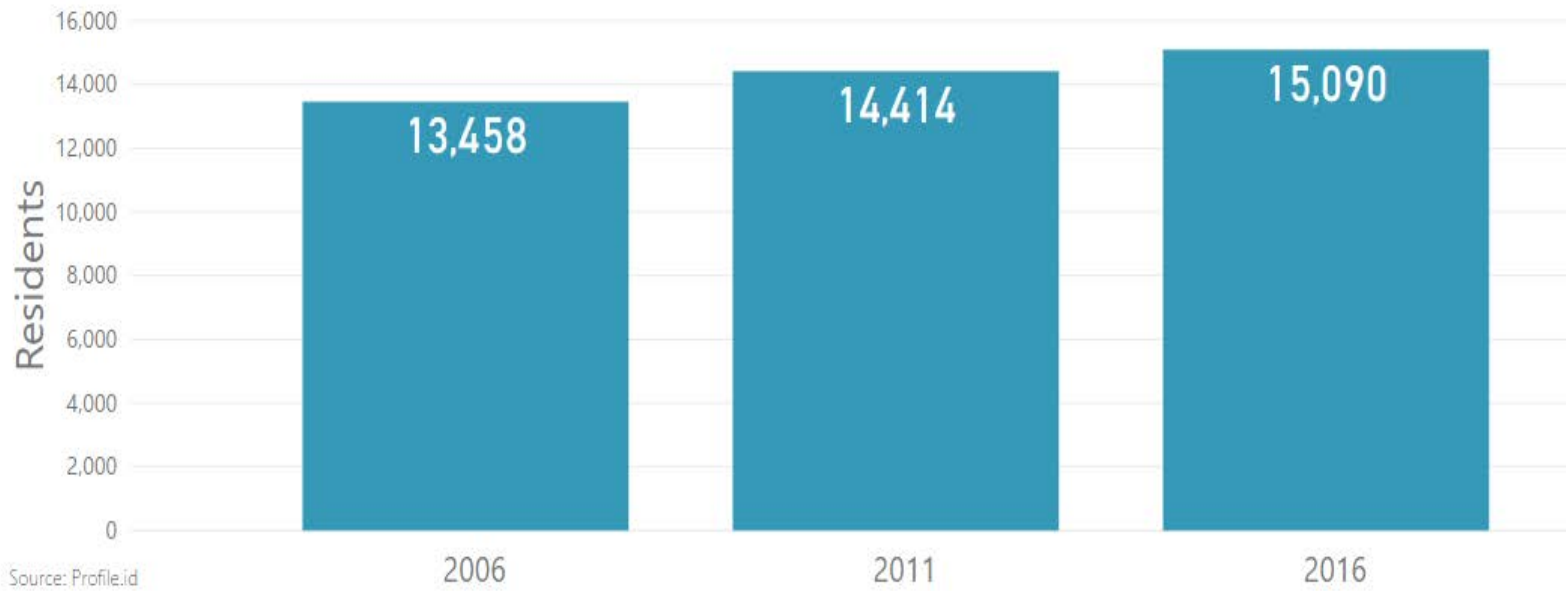
Analysis sourced ABS Census 2011 and 2016, Profile.id and REIWA data to summarise and provide snapshots of the demographic profile.

2.2 RESIDENTIAL POPULATION

The Town of Bassendean has a residential population of 15,090¹. Since 2006, the population has grown by 12% (Figure 2).

¹ *Population and Housing Census 2016*

Figure 2- Bassendean Resident Population

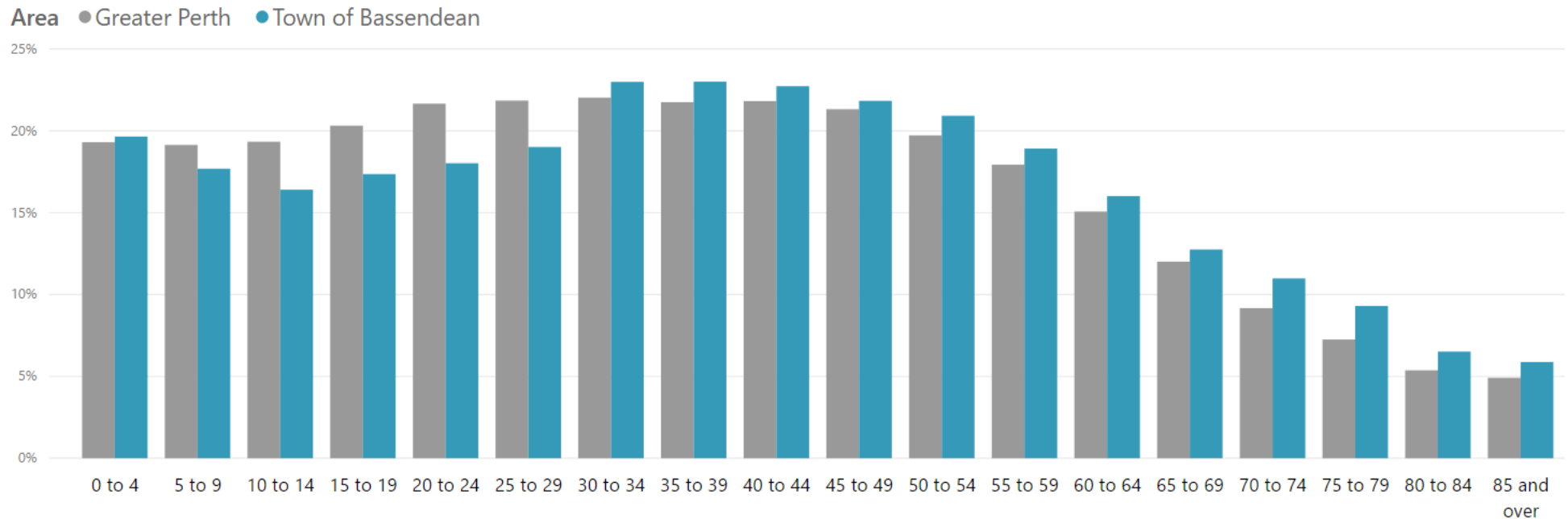


Source: Profile.id

Source: Profile.id, ABS Census 2006, 2011, 2016, FAR lane 2017

The median age of residents in Bassendean is 39 years, 3 years older than the median age of Greater Perth and Western Australia (Profile.id 2017). An age profile comparison between Bassendean and Greater Perth is illustrated in Figure 3.

Figure 3- Bassendean and Greater Perth Population Profile

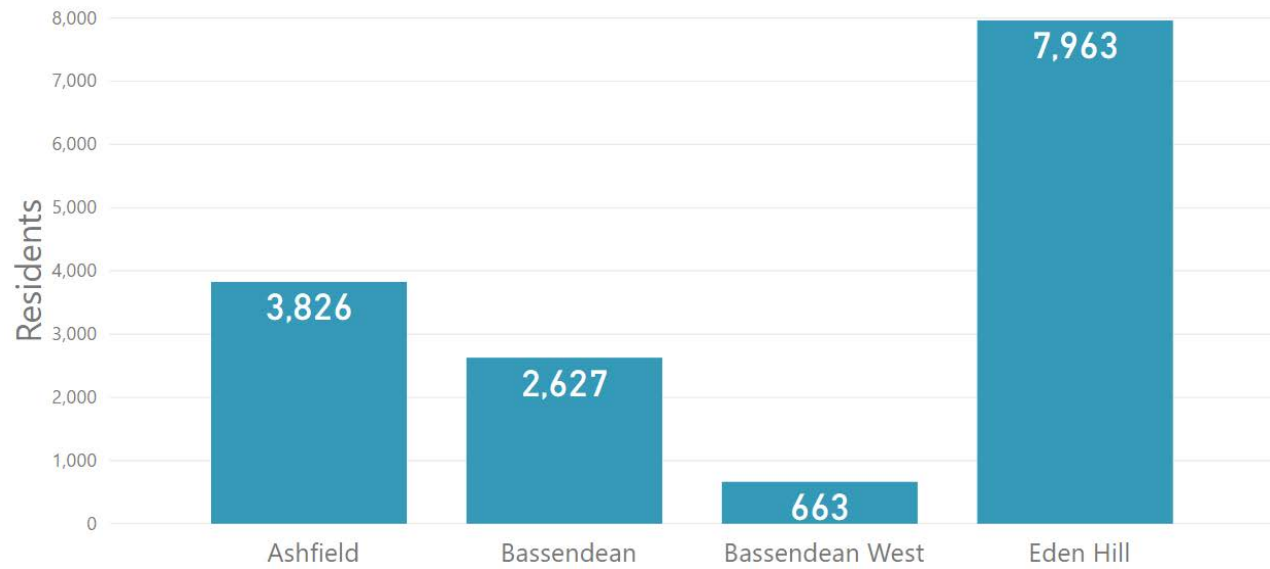


Source: Profile.id, ABS Census 2006, 2011, 2016, FAR lane 2017

Compared to Greater Perth, Bassendean has an older age profile, with significantly less residents between the ages of 5 to 29, and significantly more residents over the age of 50 years. Continuation of this characteristic will result in higher demand for aged care services in Bassendean into the future, with slower growth in residential employment and local consumption due to decreased local labour force participation.

53% of the Town of Bassendean’s residential population resides in Eden Hill, with 25% in Ashfield, 17.42% in Bassendean and 4% in Bassendean West (Figure 4).

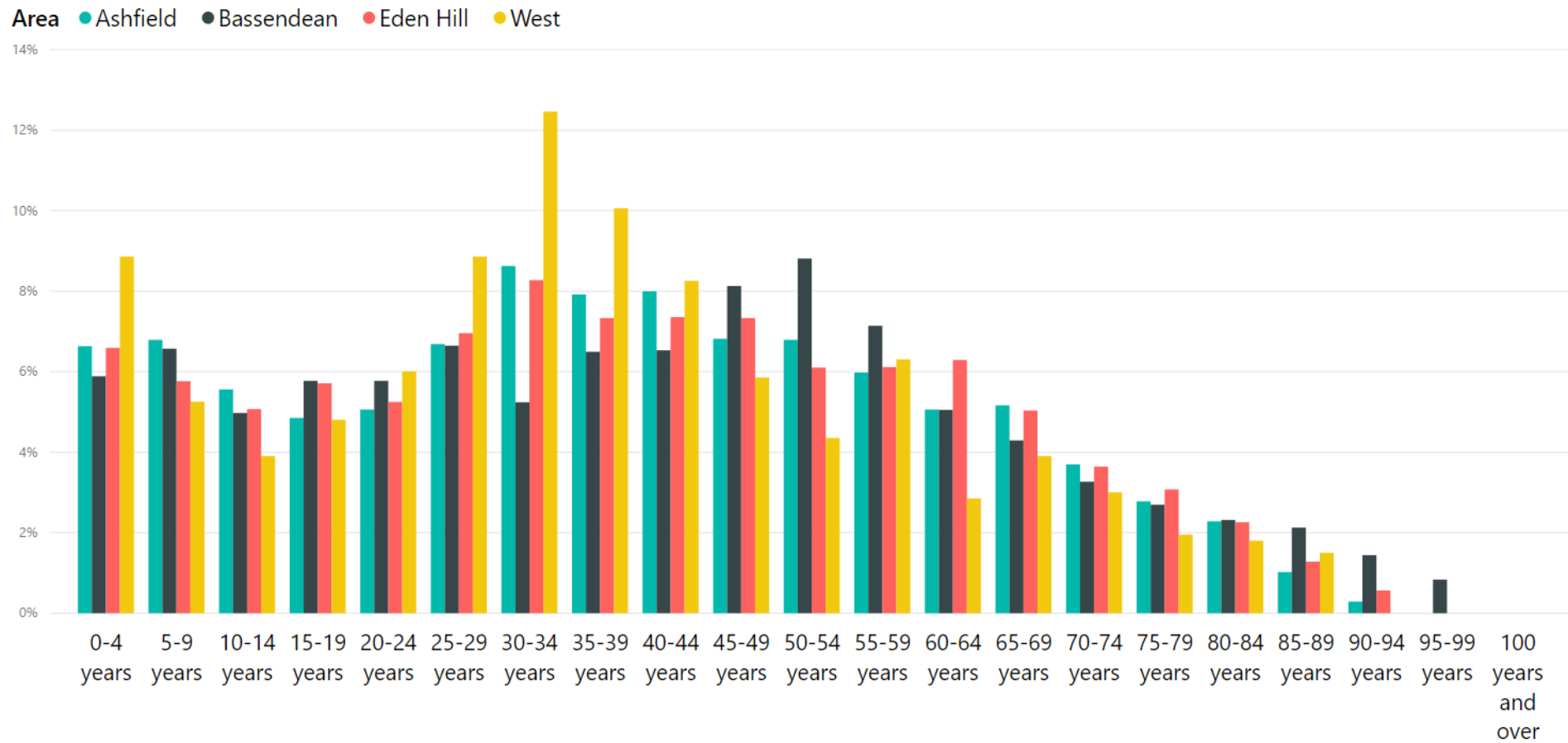
Figure 4- Population by Destination Zone



Source: 2016 Census - Counting Persons, Place of Usual Residence, FAR lane 2017

Proportionally, Ashfield and Eden Hill have more residents aged between 0 to 14 and 30 to 45, suggesting these areas are populated with families. Conversely, more residents over the age of 50 to 60 live in Bassendean and Eden Hill.

Figure 5-Bassendean Population Proportions by Spatial Area

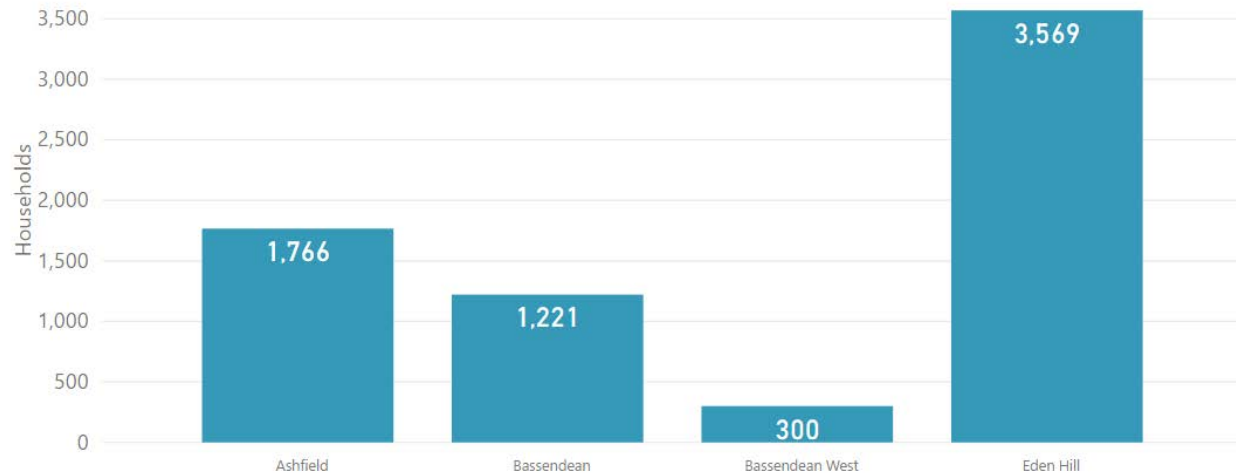


Source: Profile.id, ABS Census 2006, 2011, 2016, FAR lane 2017

2.3 HOUSEHOLD CHARACTERISTICS

There are a total of 6,856 dwellings within the Town of Bassendean, 6,189 (90.27%) of which are occupied with a household². Approximately 52% of the households within the Town of Bassendean are located in Eden Hill, with the remaining households in Ashfield and Bassendean (Figure 6).

Figure 6- Town of Bassendean Household Distribution



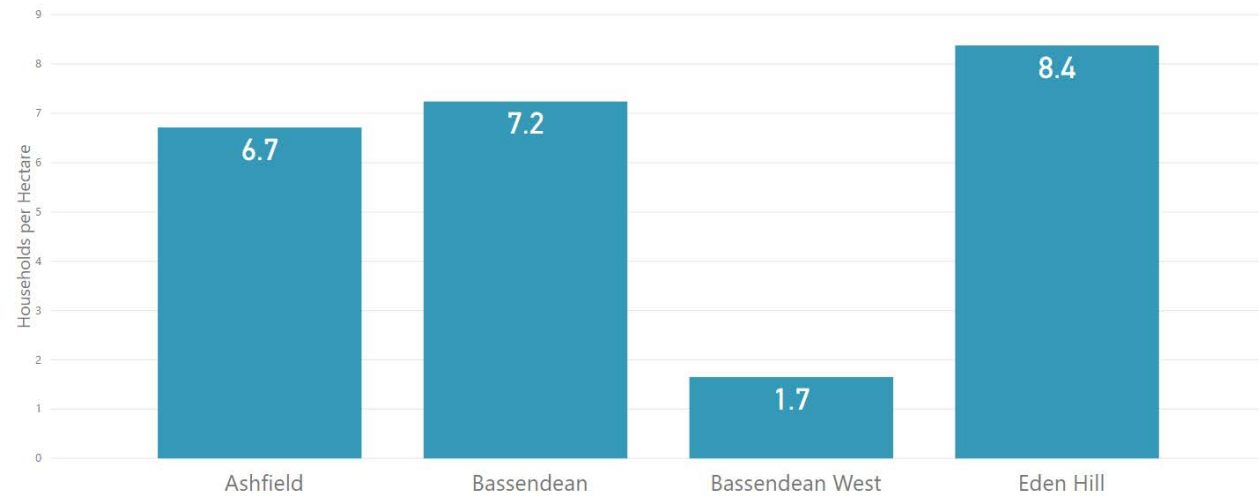
Source: Profile.id, ABS Census 2006, 2011, 2016, FAR lane 2017

² The ABS defines households as “one or more persons, at least one of whom is at least 15 years of age, usually resident in the same private dwelling”

The average density of housing within the Town of Bassendean is 6.49 dwellings (households) per hectare, with Eden Hill having the highest density of 8.4 dwellings per hectare (Figure 7).

Source: Profile.id, ABS Census 2006, 2011, 2016, FAR lane 2017

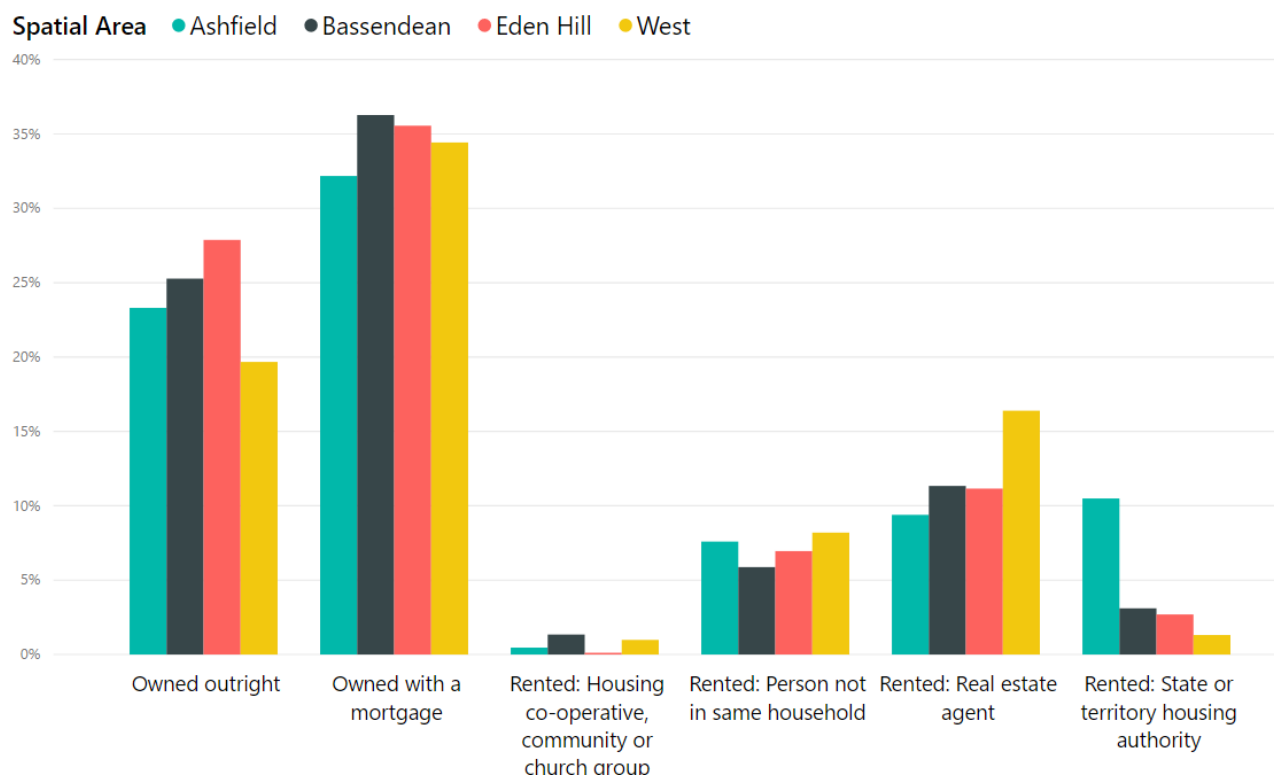
Figure 7- Households per Hectare



2.4 HOUSING TENURE

Of the 6,856 dwellings within the Town of Bassendean, 27% are rental and 73% are owned (31% are owned outright and 42% are under mortgage). As Figure 8 shows, Eden Hill has the largest proportion of houses owned, whereas Bassendean has the largest number of houses under a mortgage. This may be due to the larger proportion of people older than 60 in Eden Hill, who have already serviced their mortgage.

Figure 8- Town of Bassendean Households by Tenure Type



Source: ABS Census 2006, 2011, 2016, FAR lane 2017

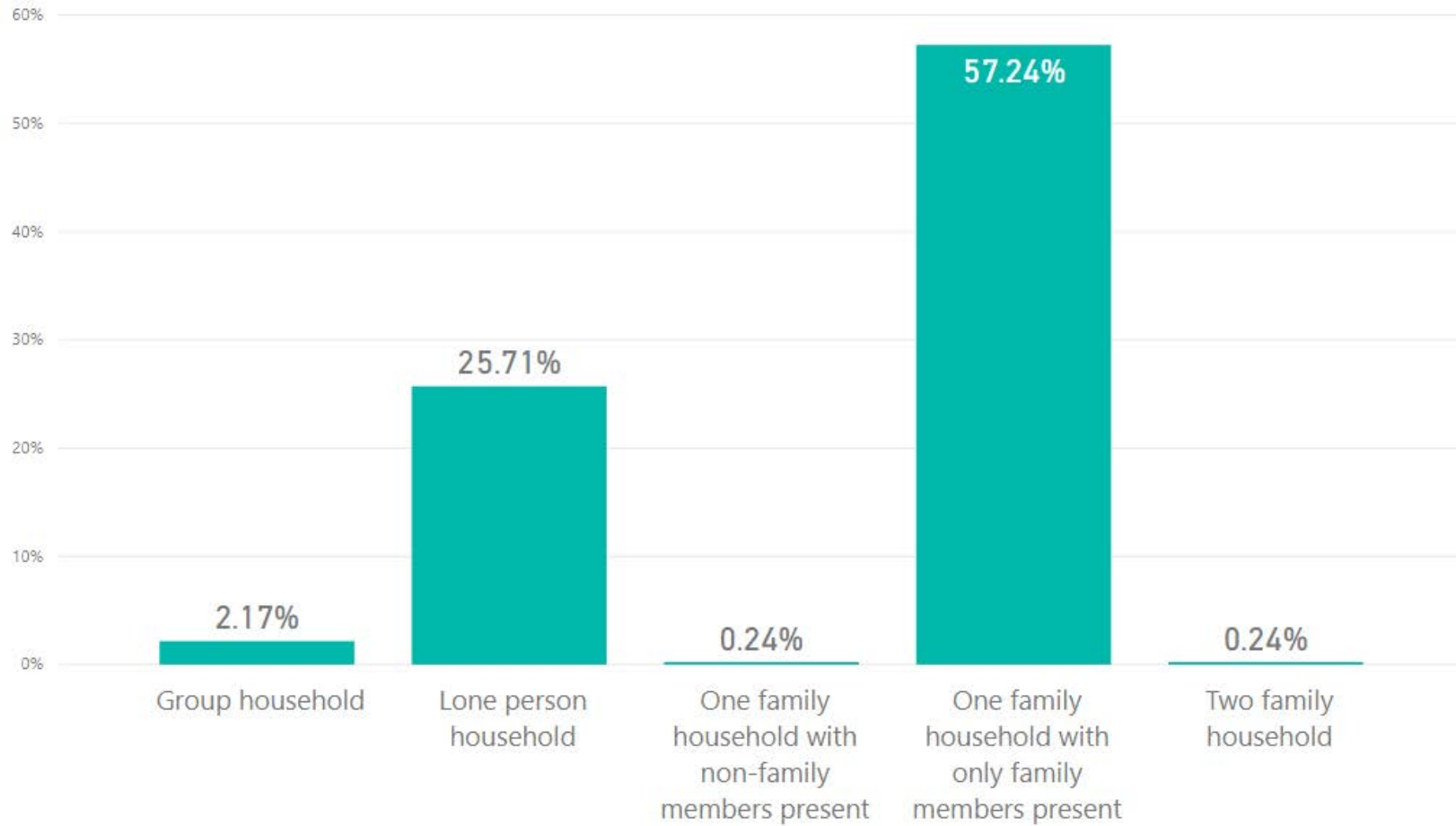
12.58% of households in Ashfield are renting from state or housing authorities (e.g. state housing). As Figure 8 shows, this is more than four times higher than the proportion of State housing in the other areas. This proportion of public housing suggests that Ashfield has a low household income profile than the other areas and may contribute to the Town of Bassendean’s overall low median household income.

2.5 HOUSEHOLD STRUCTURE

The average Town of Bassendean household contains two people. Figure 9 illustrates that Bassendean has the highest proportion of lone person households, which may be attributed by its older age profile (widowed people). Approximately 58% of households in the Town of Bassendean are

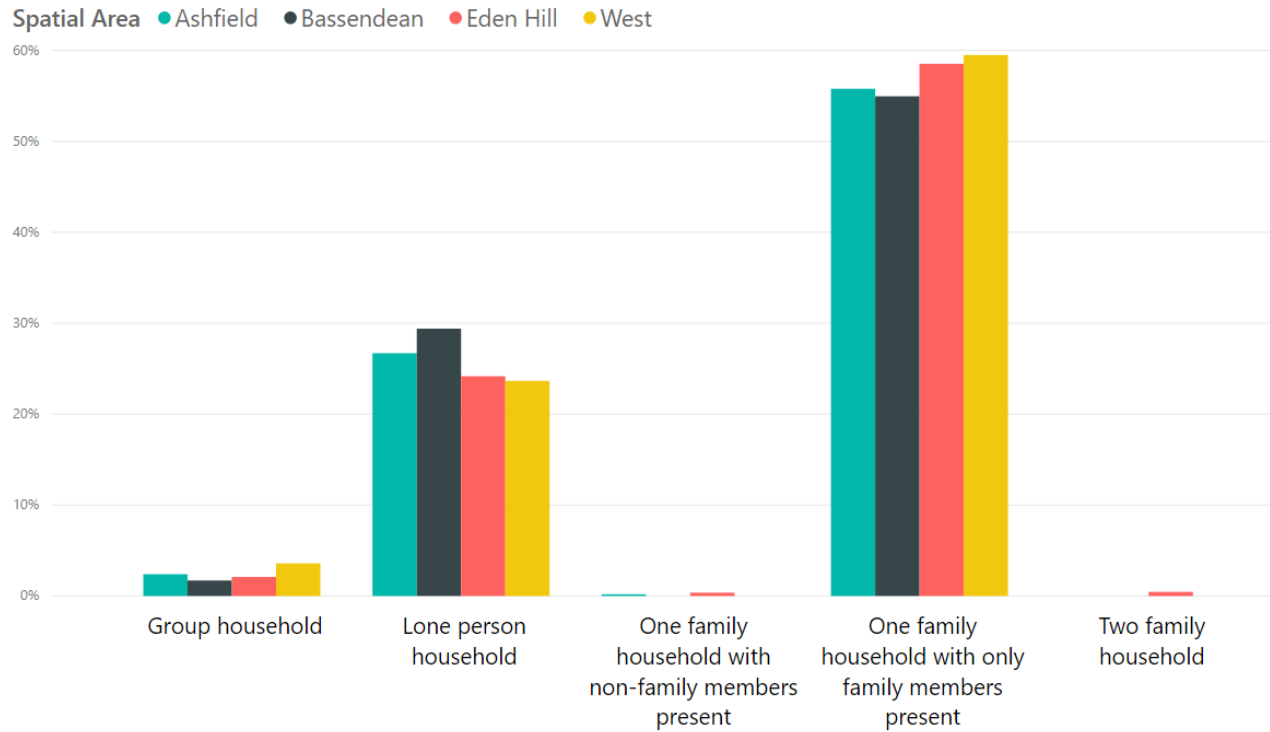
“one family households with only family members present” and 25% being “lone person households”. The higher proportion of family households in Ashfield, Eden Hill and Bassendean West suggest that it is more suitable and affordable for young families (Figure 10).

Figure 9- Town of Bassendean Household Consumption



Source: ABS Census 2016, FAR lane 2017

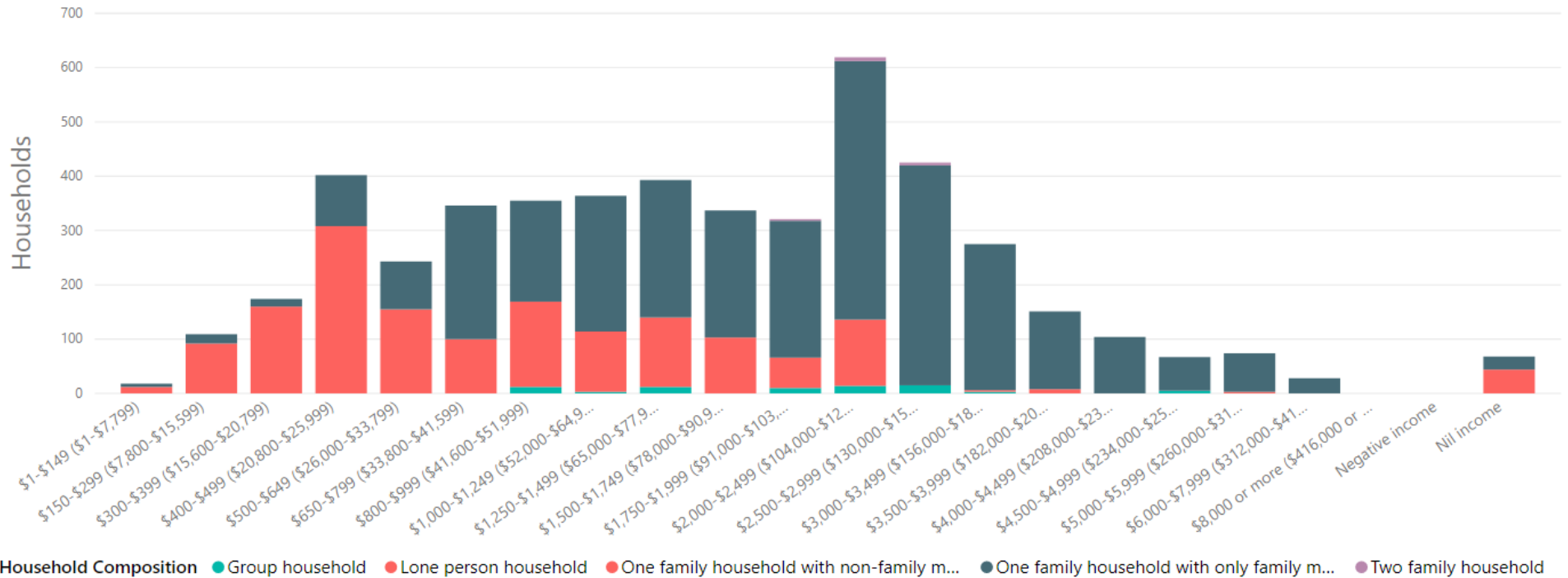
Figure 10- Household Structure by Town of Bassendean Spatial Area



Source: Profile.id, ABS Census 2006, 2011, 2016, FAR lane 2017

Figure 11 suggests that lone person households are the household types that most make up lower income ranges, in terms of weekly household income. This is attributed to an older age profile (widows), and younger people living by themselves. Family households are strongly represented in higher income ranges, due to dual income households.

Figure 11- Household Income by Household Composition

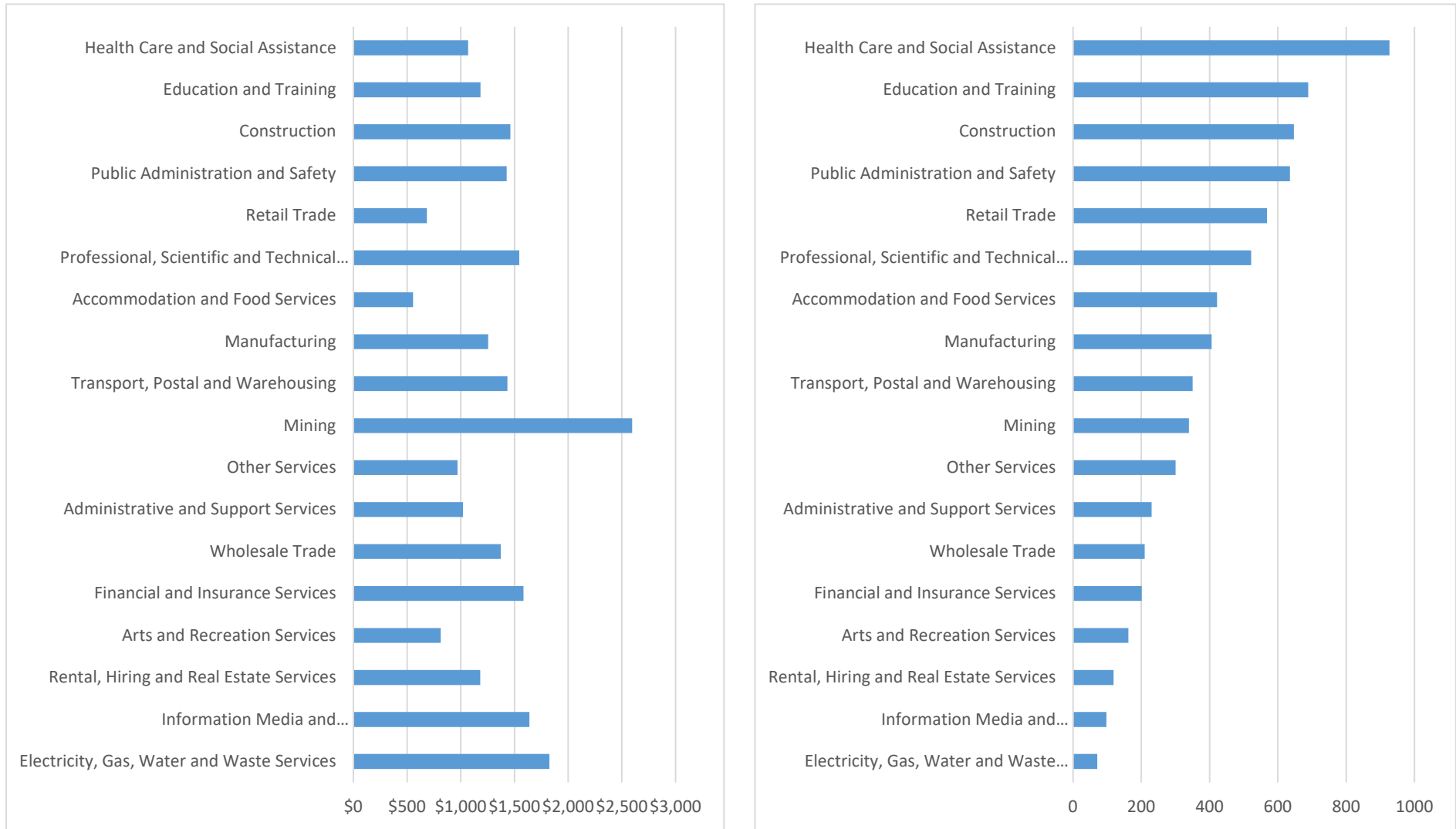


Source: Profile.id, ABS Census 2006, 2011, 2016, FAR lane 2017

2.6 HOUSEHOLD INCOME

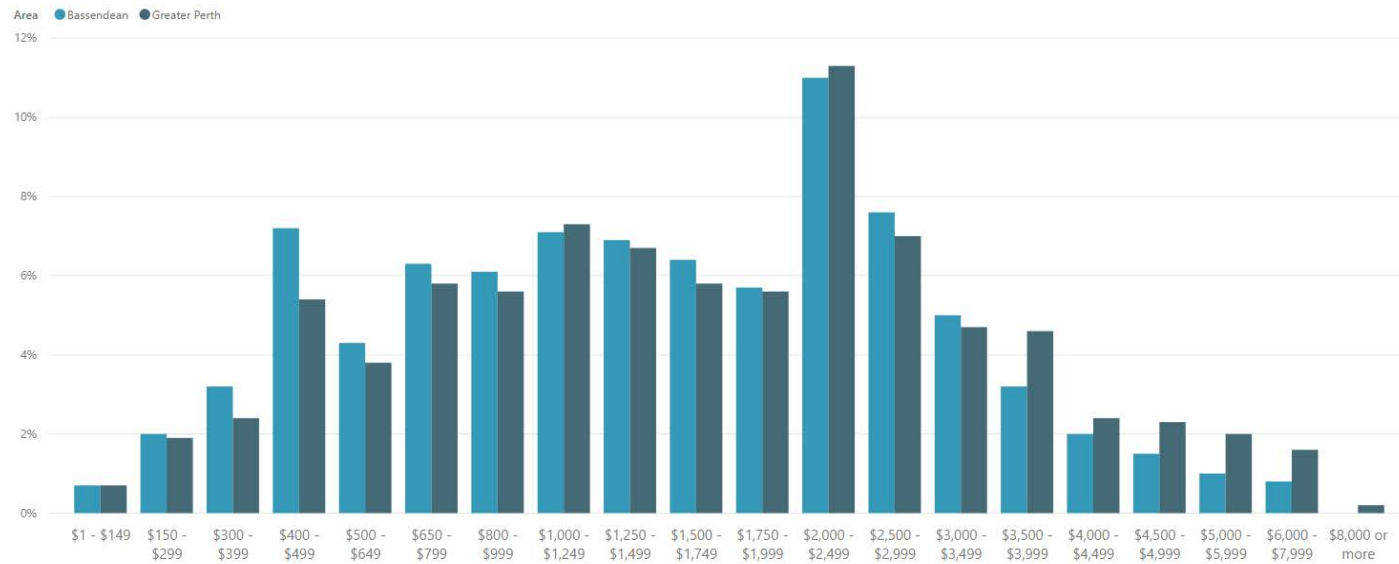
The median household income in Bassendean is \$1,503 (increase of 18% since 2011) which is 8% lower than the Greater Perth median household income. As Figure 13 shows, Bassendean has a higher amount of low income households and lower amount of higher income households. A contributing factor may be an older age profile and lone person households, and considerable number of resident workers in lower-income industries such as health care and social assistance (Figure 12)

Figure 12- Town Bassendean Residents Industry of Employment and Average Weekly Earnings of Industry



Source: ABS census 2016, ABS average Weekly Earnings, Australia, May 2017

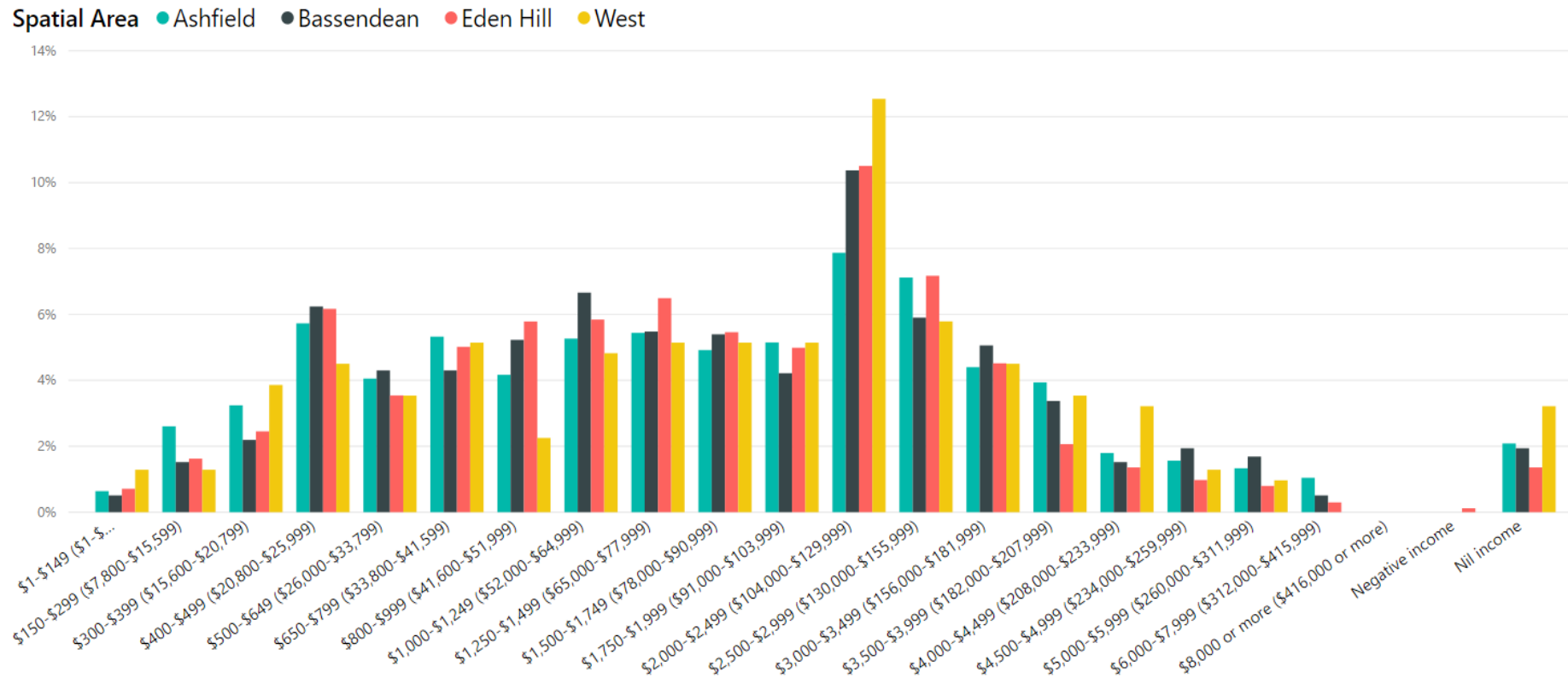
Figure 13-Town of Bassendean and Greater Perth Household Income Profile



Source: Profile.id, ABS Census 2006, 2011, 2016, FAR lane 2017

As Figure 12 illustrates, Ashfield is characterised by more low-income households (\$1 to \$400 per week), and less high-income households than other areas in the Town of Bassendean. A contributing factor to this may be the higher proportion of State housing in Ashfield.

Figure 14- Town of Bassendean Household Income Distribution



Source: Profile.id, ABS Census 2006, 2011, 2016, FAR lane 2017

2.7 HOUSING SUITABILITY

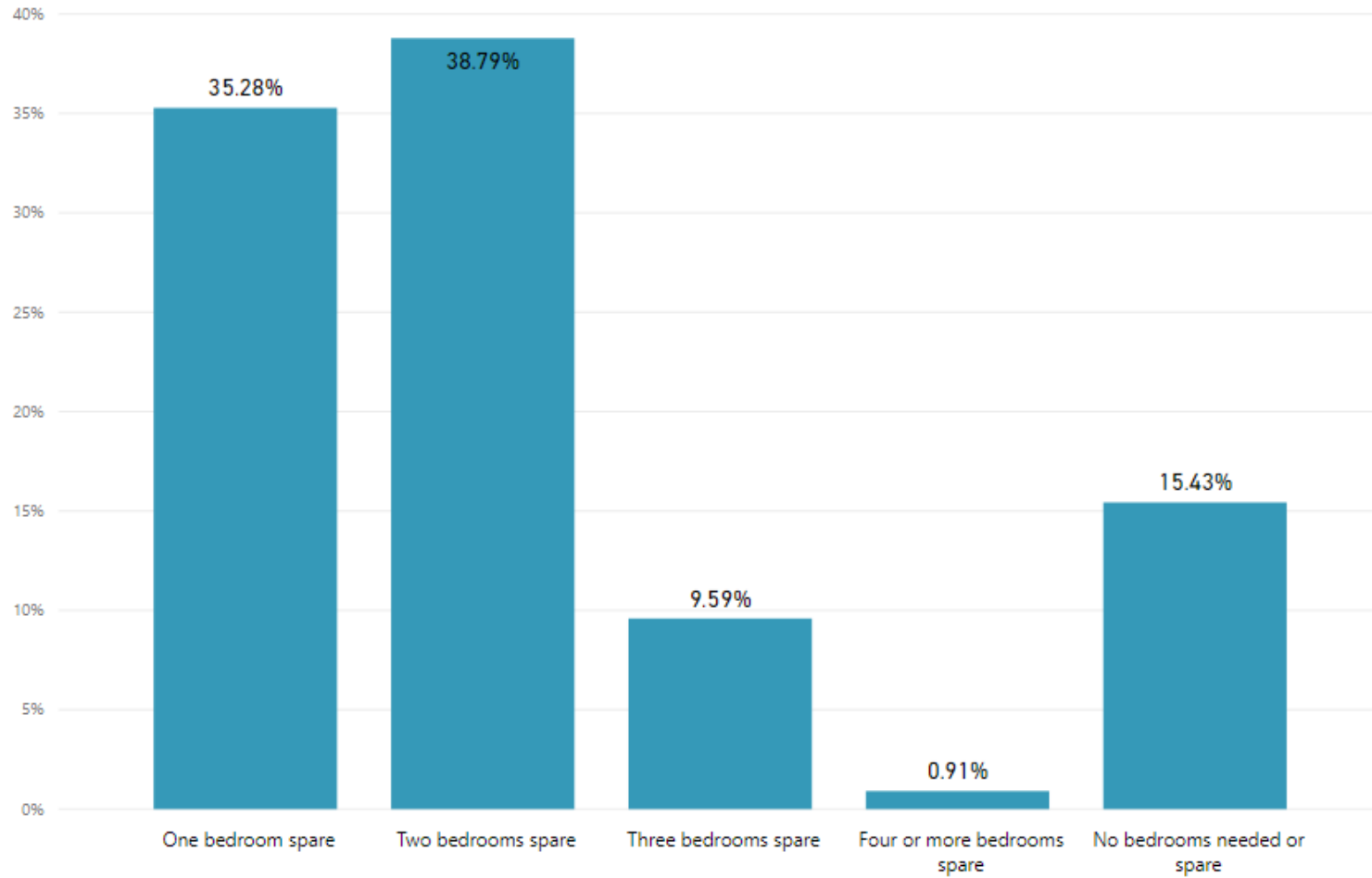
Housing suitability is a measure used by the ABS to analyse the under or over utilisation of dwellings and the dwelling's suitability for the resident households. This is based on a comparison of the number of bedrooms in a dwelling together with a series of household demographics, such as the number of usual residents, their relationship to one another, age and gender.

It is based upon the assumptions specified by the ABS:

- There should be no more than two persons per bedroom
- Children less than five years of age of different sexes may reasonably share a bedroom
- Children less than 18 years of age and of the same sex may reasonably share a bedroom
- Single household members 18 years and over should have a separate bedroom, as should parents or couples and;
- A lone person household may reasonably occupy a bed sitter.

As Figure 15 illustrates, 99% of households in the Town of Bassendean do not require an extra bedroom, with 78% having spare bedrooms. This suggests a potential mismatch between housing stock and household requirements, due a large-proportion of lone person households (possible elderly and widowed) who are living dwellings larger than they require. This suggests that there an opportunity to both free up underutilised housing stock and meet the needs of local households by increasing the stock of smaller dwellings.

Figure 15- Town of Bassendean Housing Suitability

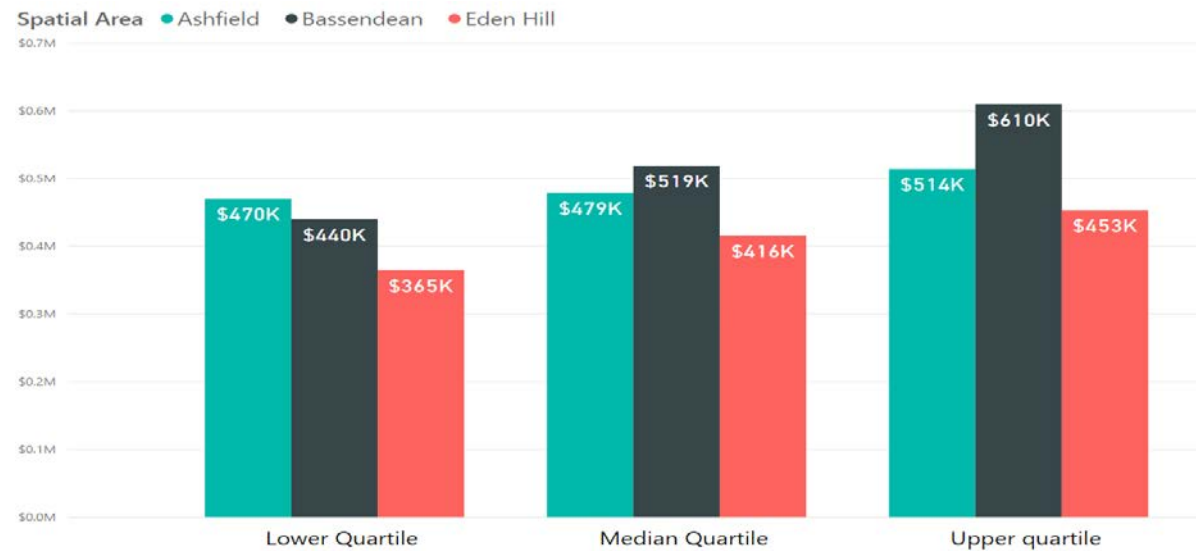


Source: Profile.id, ABS Census 2006, 2011, 2016, FAR lane 2017

2.8 HOUSING COSTS

The median value of housing within the Town of Bassendean is summarised in Figure 16. The value of housing in Bassendean³ is higher than both Ashfield and Eden Hill which could reflect an area with a higher level of wealth and the propensity to attract higher income earners relative to the other areas, as well as the amenity of housing products in close proximity to the river.

Figure 16- Town of Bassendean Median House Price

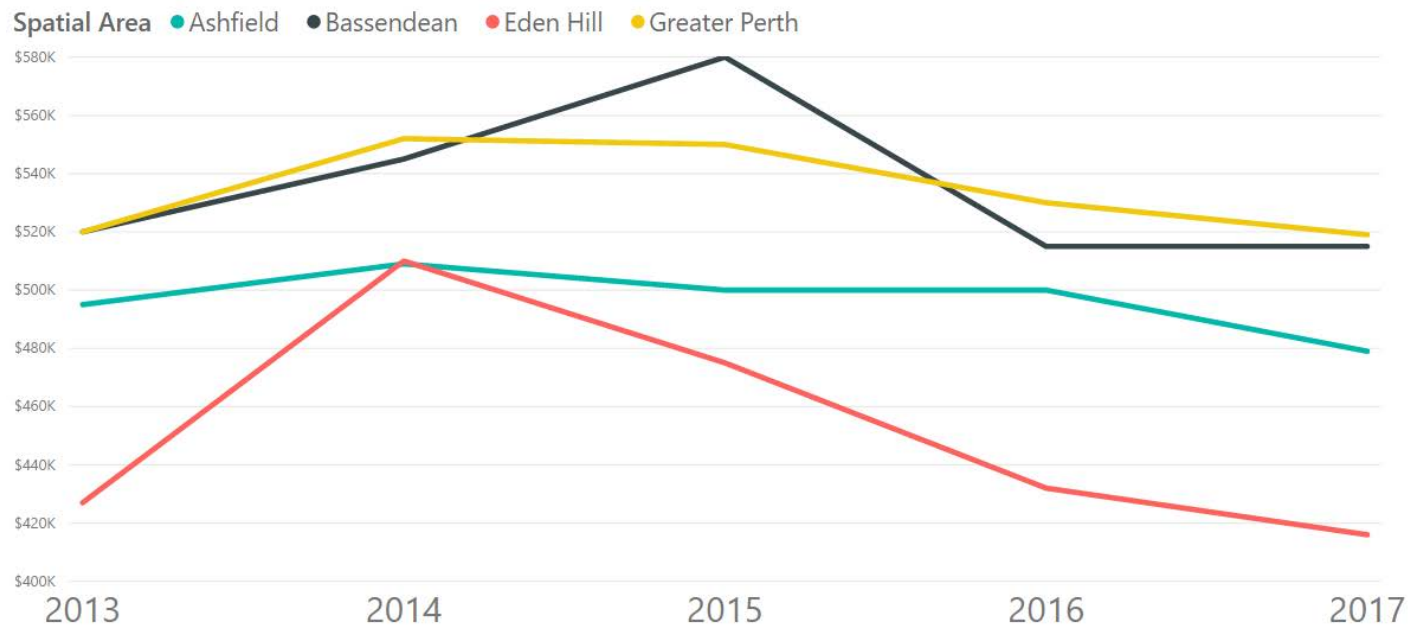


Source: REIWA Suburb Profiles as of October 2017, FAR lane 2017

³ Note: Bassendean refers to Bassendean West and Bassendean combined due to the structure of real estate data.

Median price history is illustrated in Figure 17. Since 2015, all the areas show a trend of declining house prices consistent with the movement of Greater Perth house prices. After the continuous rise in prices which began in 2009 -2010 and peaked in 2014, 2015, the sale price of housing in Bassendean have fallen to 2013 prices. Bassendean house prices appear to be stabilising but the other spatial areas continue to decline.

Figure 17- Median House Price Timeline

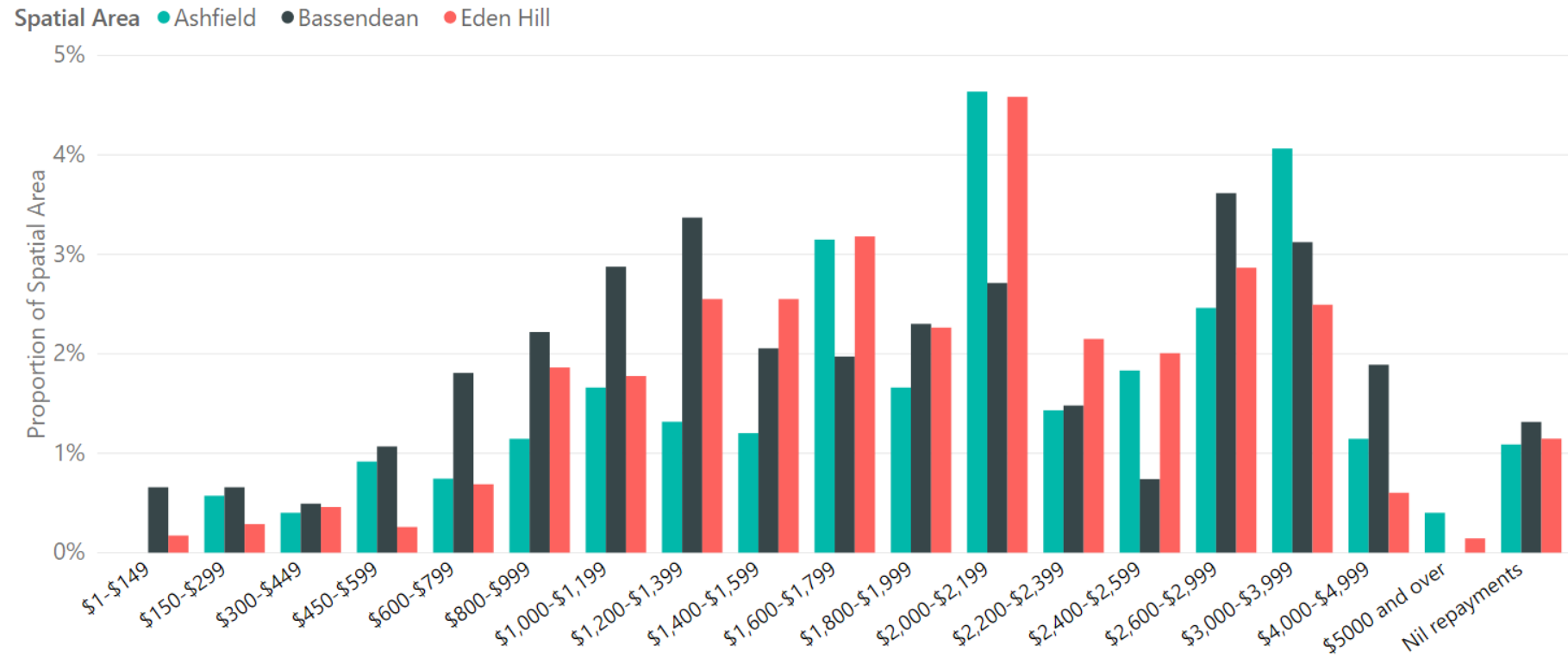


Source: REIWA Suburb Profiles as of October 2017, FAR lane 2017

Contrary to the median house prices, Bassendean’s mortgage repayments are in a lower range than the other areas, whereas Ashfield has more households in the higher ranges (Figure 18). This may be due to older people buying in a lower market.

Bassendean also has a larger proportion of households in the higher range, possibly reflecting a market of old and new mortgages. Ashfield and Eden Hill however, have more households in the higher ranges which reflects the younger age demographic probably buying in a higher, and newer market.

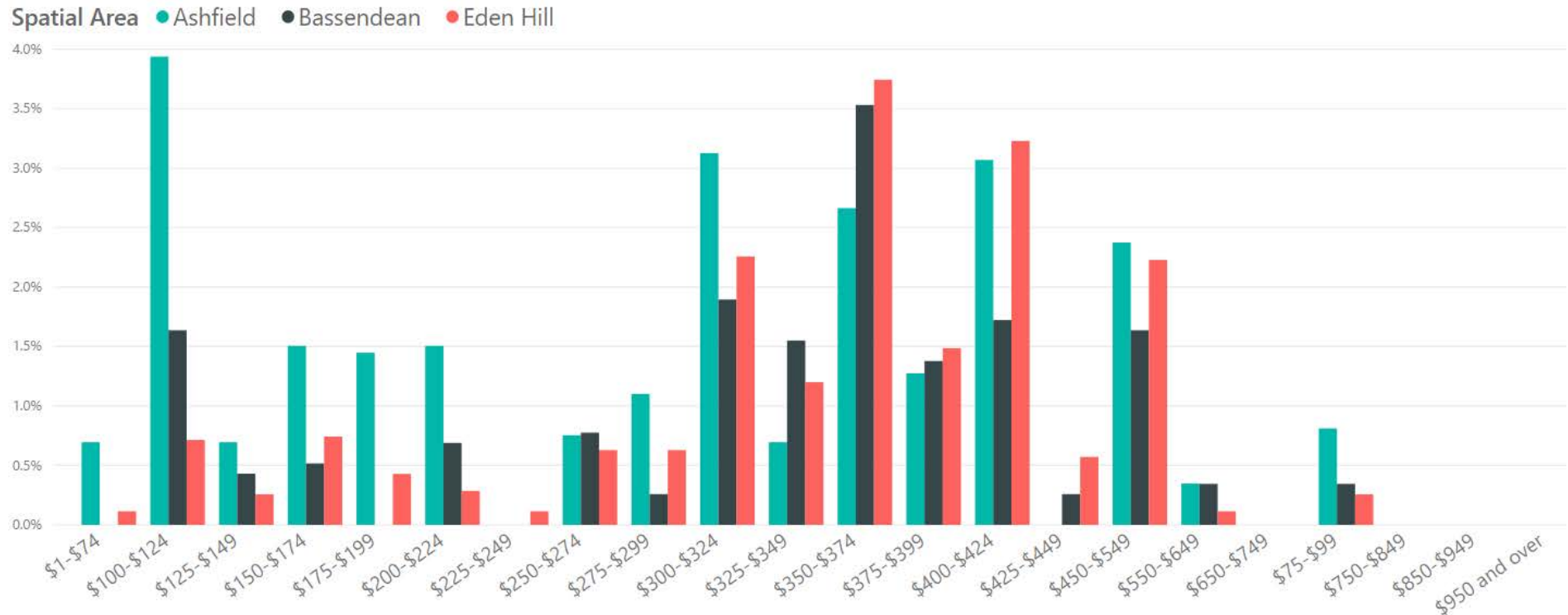
Figure 18- Town of Bassendean Monthly Mortgage Payments



Source: ABS Census 2016 FAR lane 2017

Figure 19 illustrates the distribution of weekly rent payments in the Town of Bassendean. This suggests Ashfield has a more diverse range of rental payments which may be due to a broader range of dwelling configurations, and cheaper housing. Bassendean and Ashfield are clustered around the \$300 - \$450 per week payment, which suggests housing is of a similar type.

Figure 19- Town of Bassendean Weekly Rent Payments



Source: ABS Census 2016, FAR lane 2017

2.9 RESIDENTIAL MARKET EXPECTATIONS

In preparing the Profile, FAR Lane surveyed four Bassendean real estate agencies to capture their insights from responses to the questions:

1. Has the demographic of both buyers and sellers changed? If so, how?

2. Is there an observable trend in people wanting to work from home? For example Is there an increasing demand in buyers looking for a house that they can work from home at? If so is there a criterion for the house?
3. If known, what are the occupations/industries of employment of customers that have either bought or looking to buy a house from which they can work from home?
4. What are the current development trends? ie. Size, density, yards/gardens. Does the live/work trend have an impact on this?

All respondents observed that most homebuyers in Bassendean are young professionals and young families. The reasons offered for this included;

- Price point
- Existing layout of houses
- Houses that they could renovate, and
- Size of lots and houses

Key criteria that most prospective buyers have in purchasing housing in the Town of Bassendean included:

- At least three bedrooms
- Two bathrooms
- Two living areas
- Yard or garden
- Larger lot size

Respondents couldn't identify any observable development trends other than sub division and renovation. In addition, only one of the respondents recognised a slight trend in homebuyers looking for a house with extra rooms to use an office or place to work from home. The other three respondents had either not observed any demand for houses that purchasers could work from home from.

3 ECONOMIC OVERVIEW

3.1 INTRODUCTION

Economic analysis undertaken for the Profile includes examination of factors including:

- Gross regional product;
- Economic output;
- Value added;
- Industry of employment;
- Location quotient;
- Shift share; and
- Employment self-containment.

Analysis sourced ABS Census 2011 and 2016, REMPLAN and REIWA data to summarise and provide snapshots of the Town of Bassendean economy.

3.2 GROSS REGIONAL PRODUCT

Gross regional product in this Profile refers to the market value of all final goods and services produced within the Town of Bassendean annually.

The Town of Bassendean's Gross Regional Product (GRP) is estimated at \$1.12 billion (REMPAN 2018). This represents approximately 4.79% of the Eastern Metropolitan area's GRP, and 0.73% of Greater Perth's GRP (Table 1).

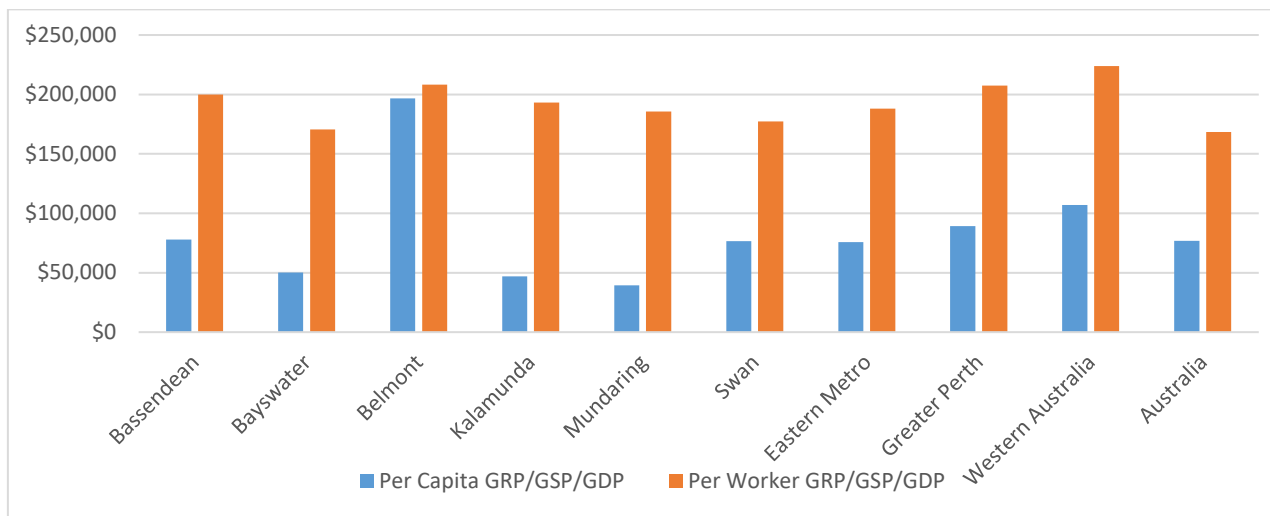
Table 1- Comparative Gross Regional Product

| | Bassendean | Eastern Metro | Greater Perth | Western Australia | Australia |
|---------------------------------------|---------------|---------------|---------------|-------------------|---------------|
| GRP/GSP/GDP | \$1,122.121 M | \$23,402.55 M | \$154,142 M | \$239,706 M | \$1,654,864 M |
| Bassendean's GRP as a % of Benchmarks | - | 4.79% | 0.73% | 0.47% | 0.07% |

Source: Latest REMPLAN data incorporating Australian Bureau of Statistics' (ABS) 2011 Gross State Product, June 2016 National Input Output Tables and 2013 / 2014 Census Place of Work Employment Data.

The Town of Bassendean has the second highest GRP per capita and worker out of the EMRC areas. This suggests that whilst the economy is smaller, the Town has the second most productive workforce out of the EMRC areas (Figure 20).

Figure 20- Comparative Gross Regional, State and Domestic Product per Capita and per Worker



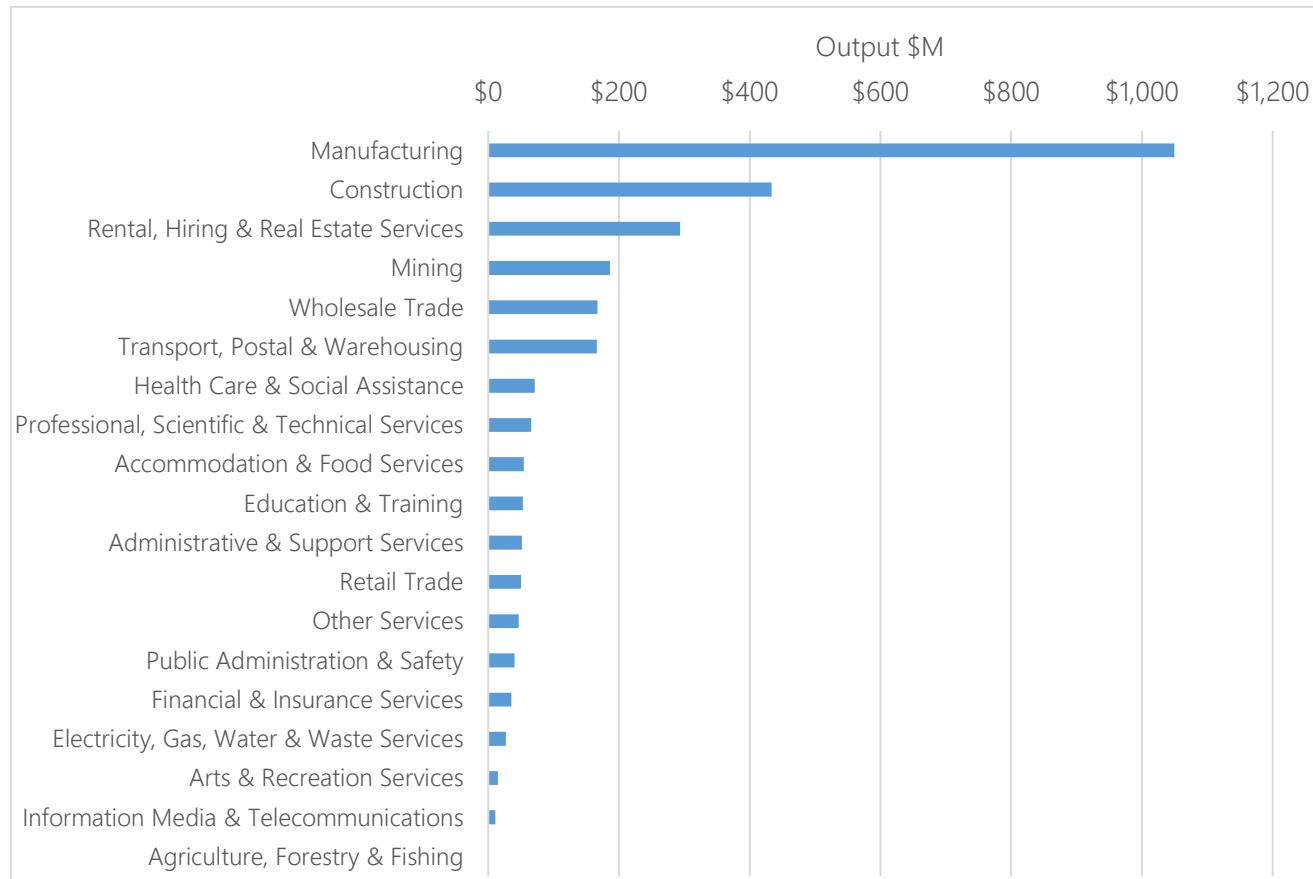
Source: Latest REMPLAN data incorporating Australian Bureau of Statistics' (ABS) 2011 Gross State Product, June 2016 National Input Output Tables and 2013 / 2014 Census Place of Work Employment Data.

3.3 ECONOMIC OUTPUT

Economic output in this Profile refers to the total value of all goods and services produced within the Town of Bassendean.

The Town of Bassendean’s economic output is estimated at \$2,817M per year (REMPPLAN 2018). This is dominated by manufacturing, construction, and rental, hiring & real estate services, making up over 60% of Bassendean’s total output (Figure 21).

Figure 21- Bassendean Total Output by Industry

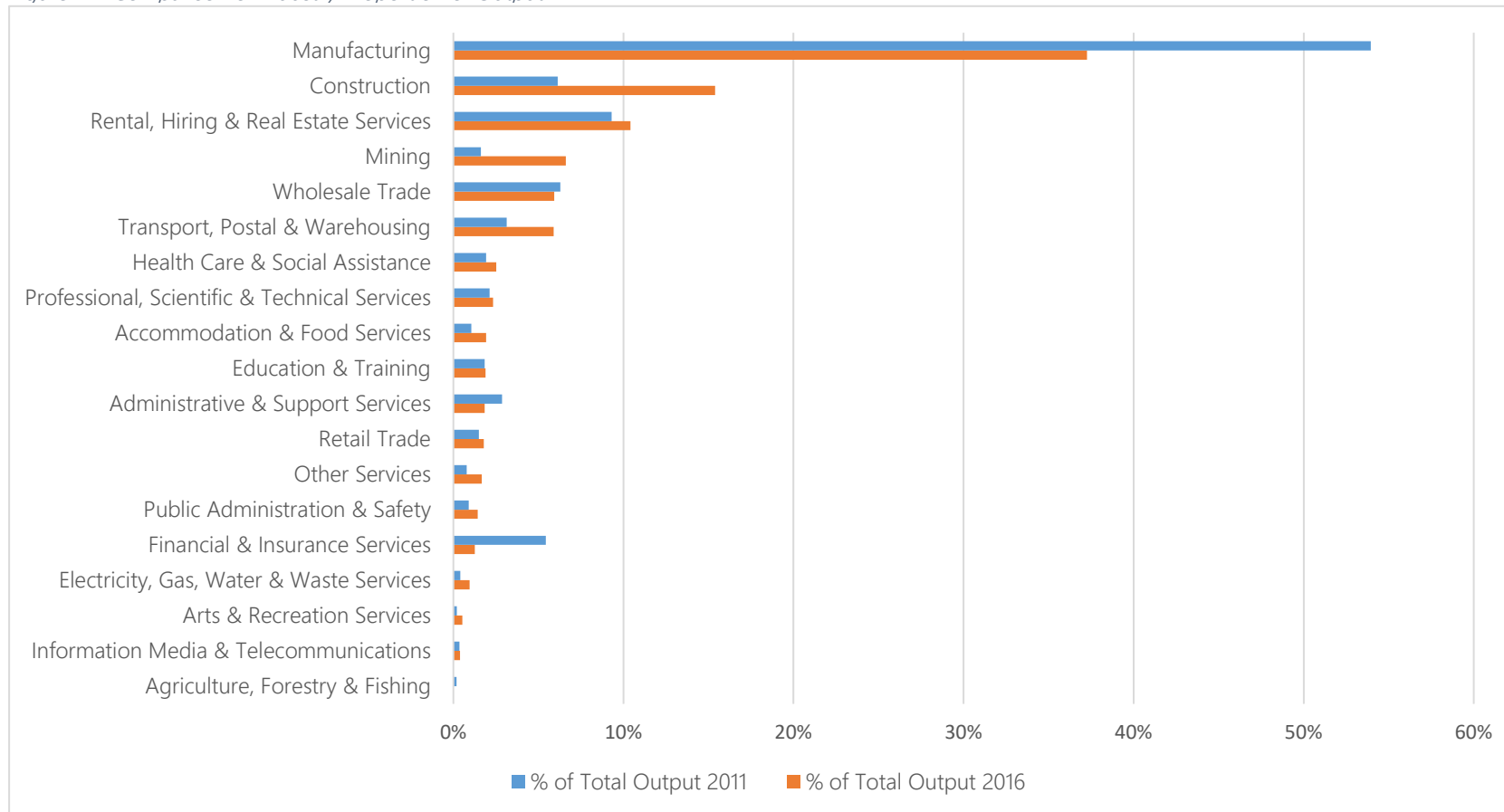


Source: REMPLAN 2018, FAR Lane 2018

Other key characteristics and trends include (Figure 22 and Figure 23):

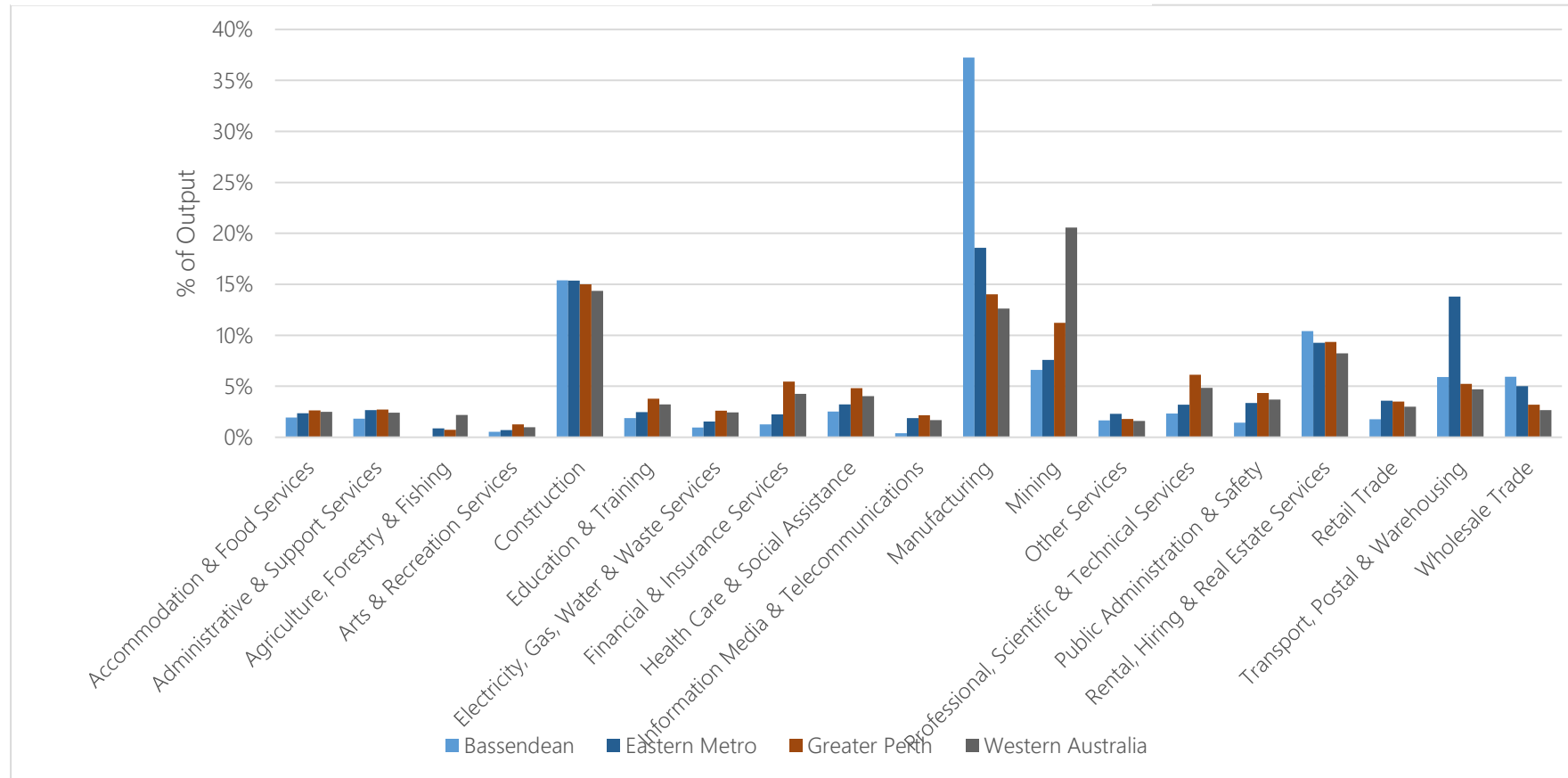
- Between 2011 and 2016, Bassendean’s construction industry output more than doubled, along with arts and recreation services;
- Between 2011 and 2016, manufacturing’s contribution to total output declined by 40%; and
- Between the 2011 and 2016, mining output had the most significant growth in terms of contribution to Bassendean’s total output.
- The proportion of non-mining industry’s contribution to Bassendean’s total output is due to the significant decrease in manufacturing output. This may be due to the national declining manufacturing trend, automation, and migration of key manufacturing businesses.

Figure 22- Comparison of Industry Proportion of Output



Source: REMPLAN 2018, FAR Lane 2018

Figure 23-Comparison of Output Proportions



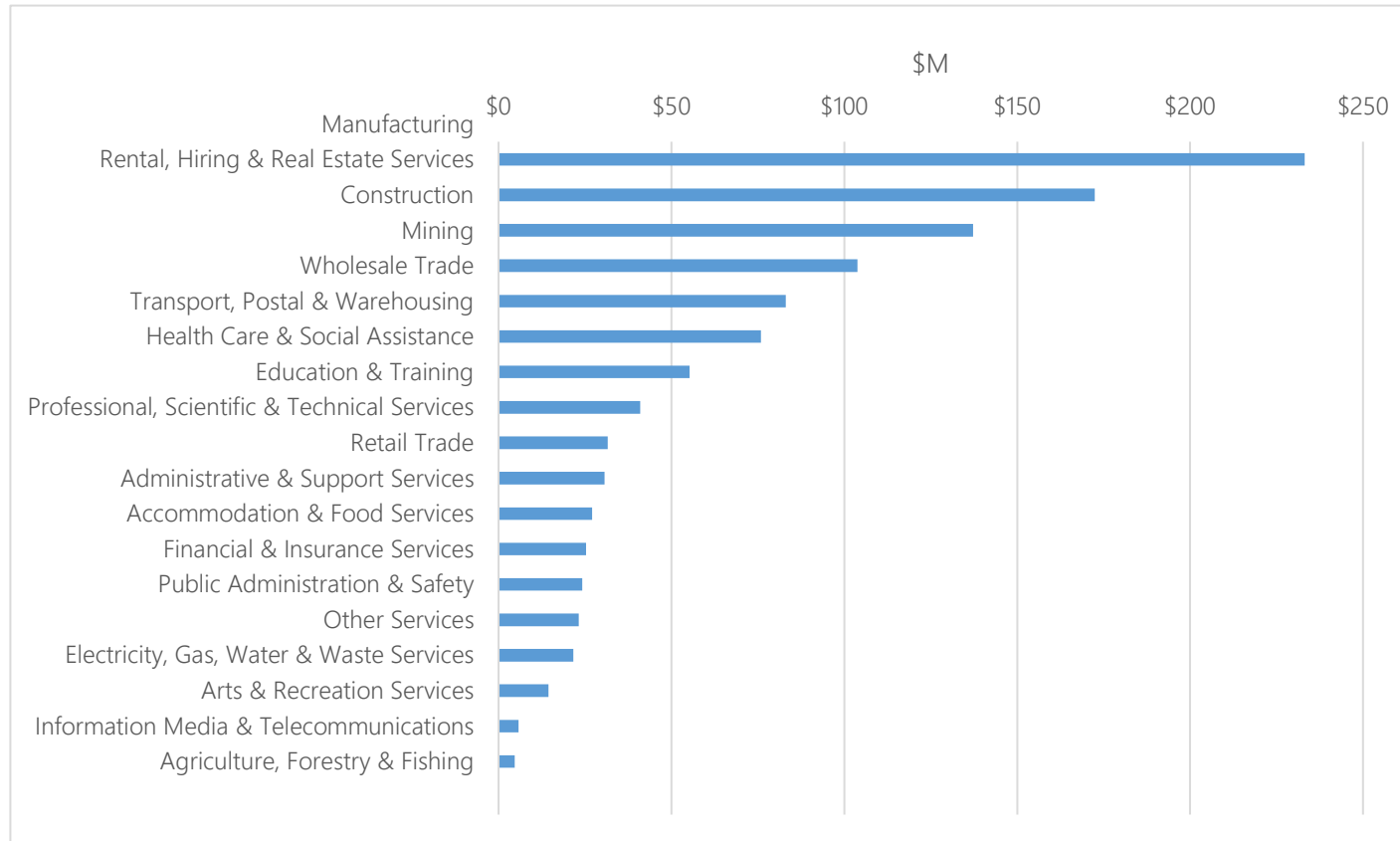
Source: REMPLAN 2018, FAR Lane 2018

3.4 VALUE ADDED

Value-added data in this Profile represents the marginal economic value that is added by each industry sector in the Town of Bassendean.

The Town of Bassendean’s total value added is \$1,110 million, with the key contributors being manufacturing, rental, hiring & real estate services, and construction (Figure 24).

Figure 24- Bassendean Value Added by Industry (\$M)

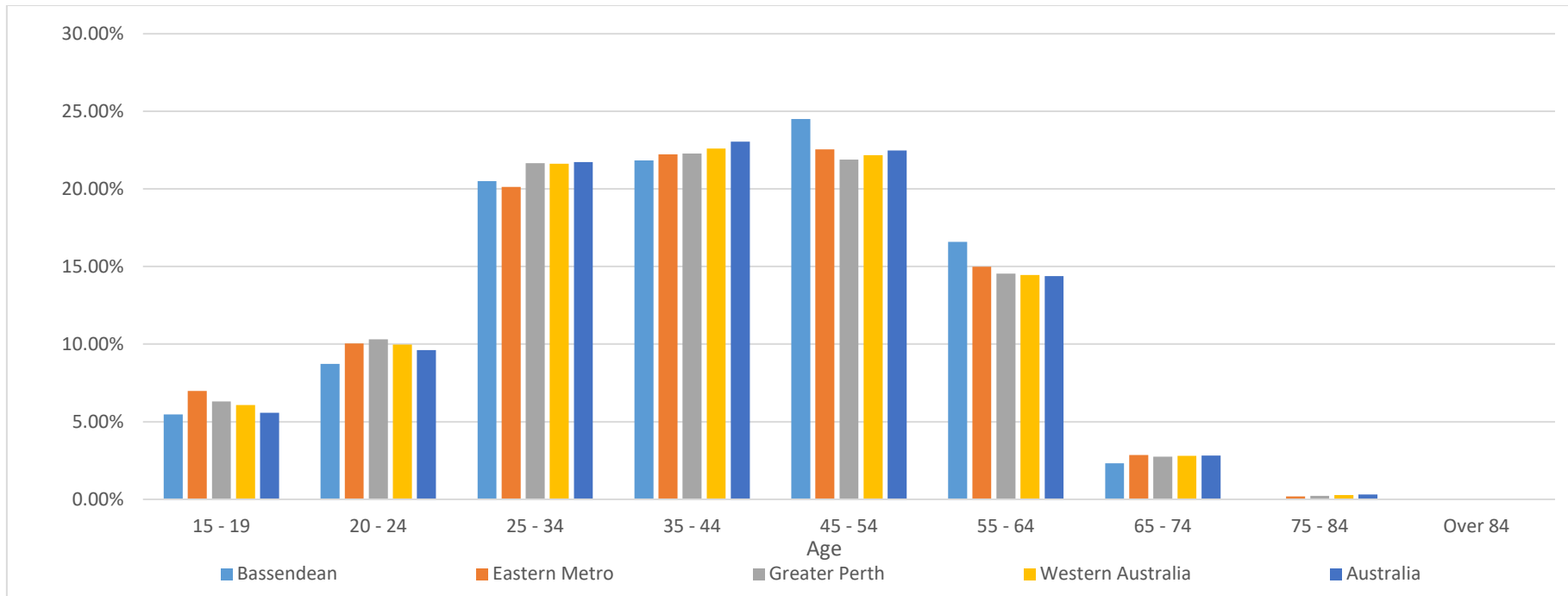


Source: REMPLAN 2018

3.5 EMPLOYMENT DEMOGRAPHICS

The median age for workers in the Town of Bassendean is older compared to benchmark areas of Eastern Metro, Greater Perth and Western Australia as the result of proportionally lower numbers of workers aged between 15-24, and significantly higher proportions of workers aged 45-64 (Figure 25).

Figure 25- Comparative Age Profile of Employed Persons

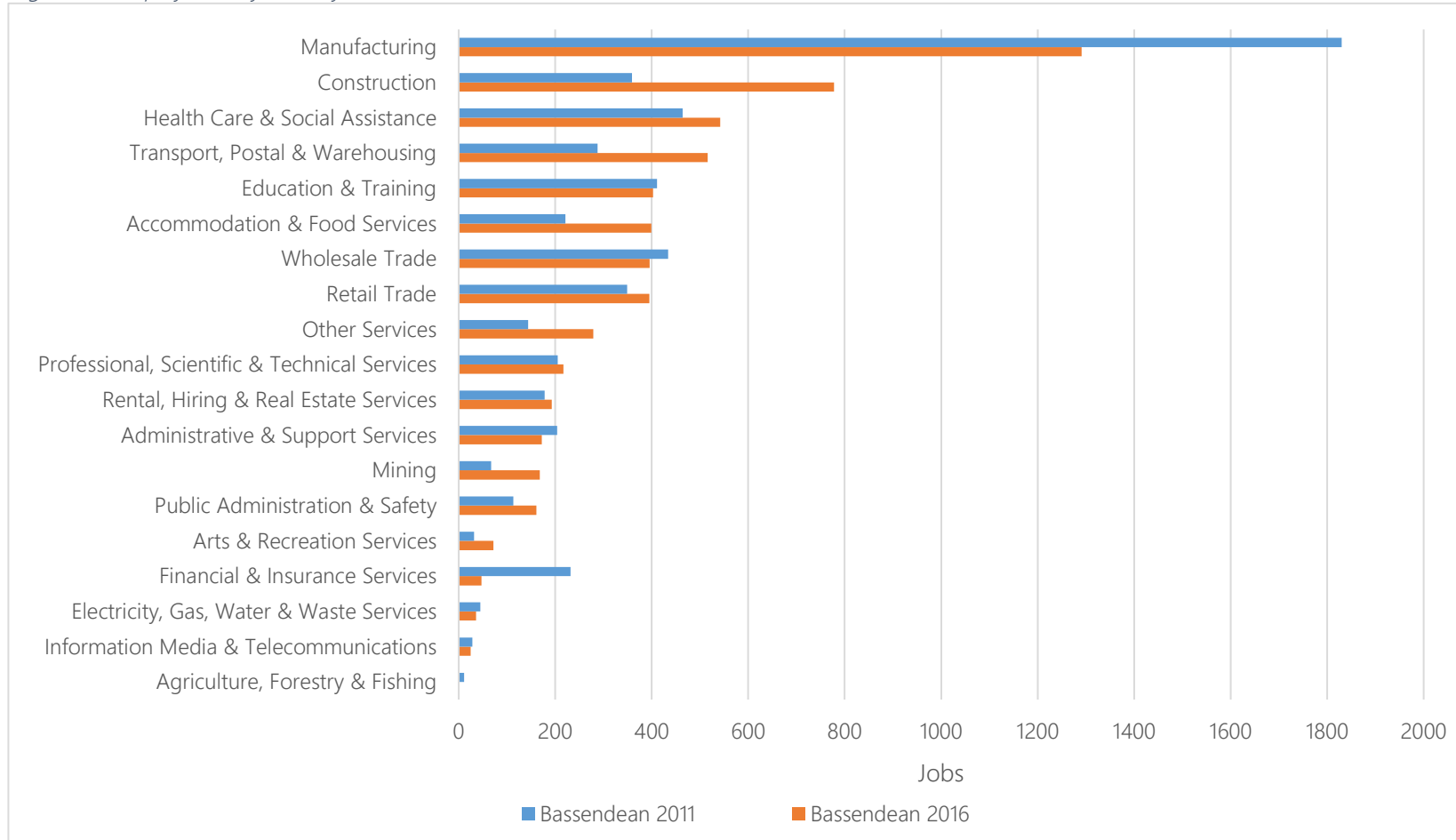


Source: REMPLAN 2018, FAR Lane 2018

3.6 INDUSTRY OF EMPLOYMENT

The Town of Bassendean’s local employment market is dominated by manufacturing, construction, and transport, postal and warehousing industries, with these sectors representing 42.5% of total jobs (Figure 26). Of these, construction and transport, postal and warehousing industries experienced growth between 2011 and 2016, however manufacturing jobs in Bassendean declined by 30% over this same period.

Figure 26- Employment By Industry

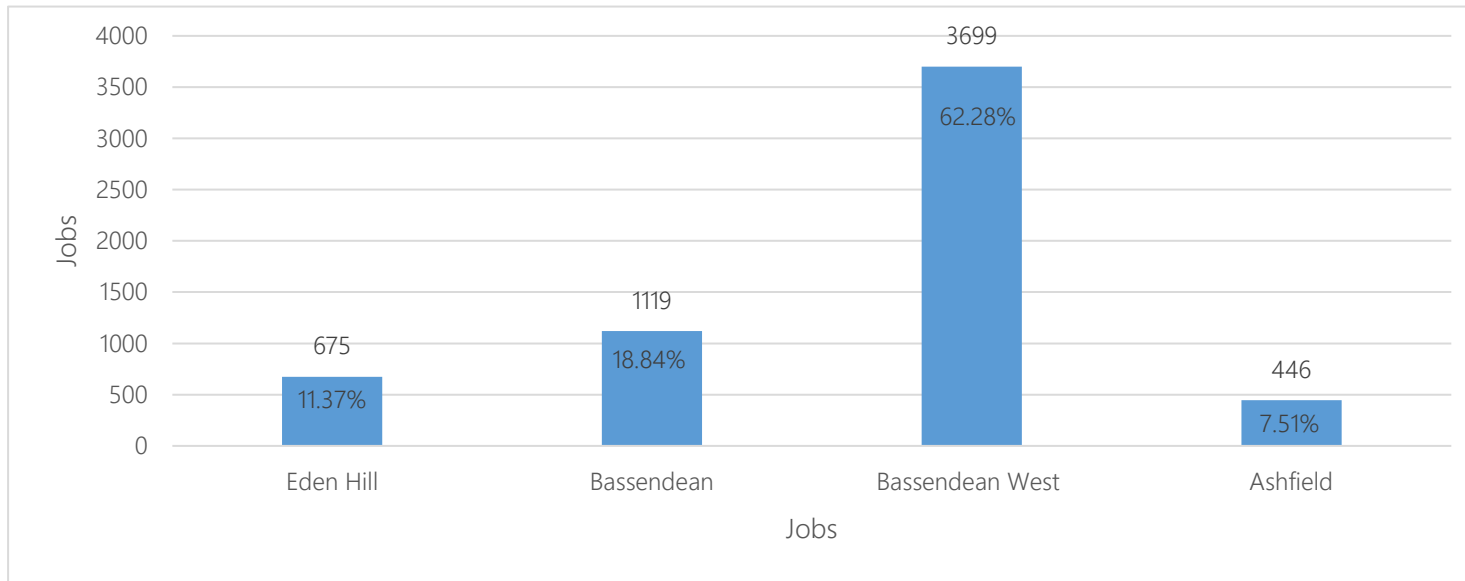


Source: Census 2011, 2016. FAR lane 2018

3.7 EMPLOYMENT LOCATIONS

A summary of job locations by destination zone is shown in Figure 27.

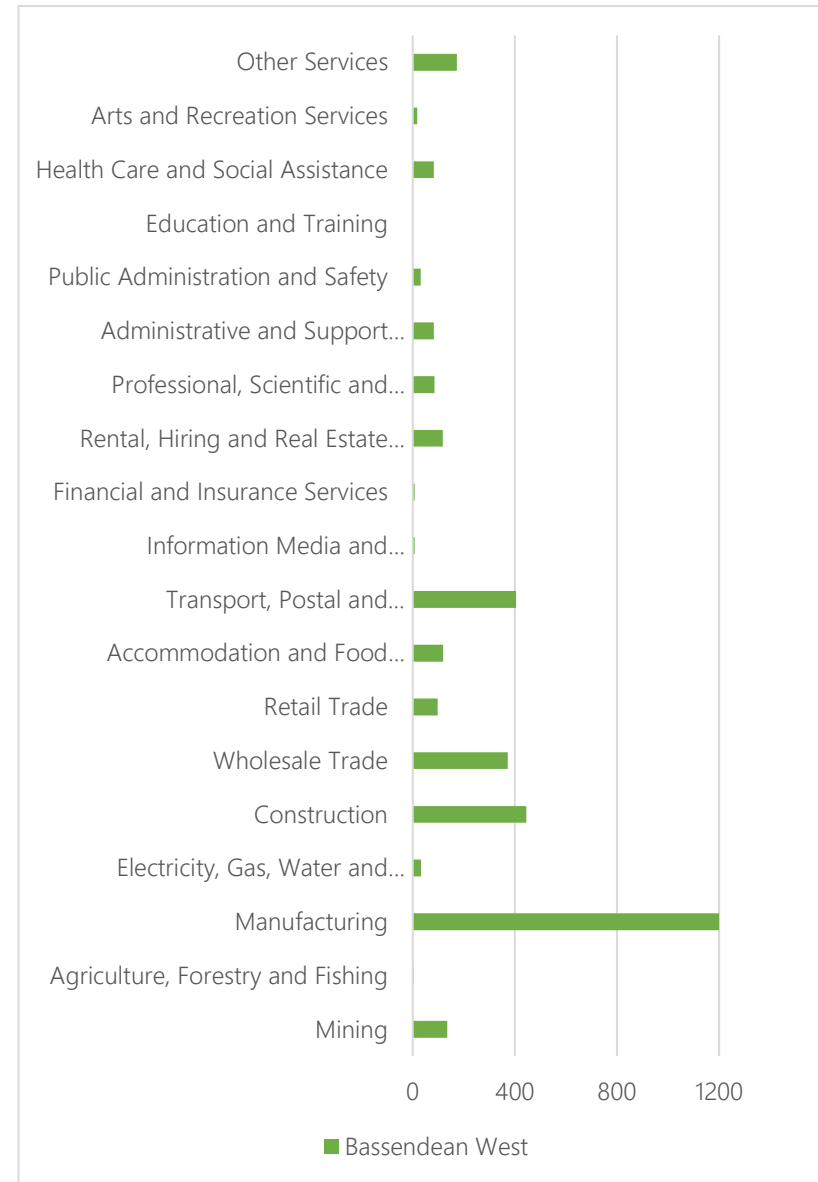
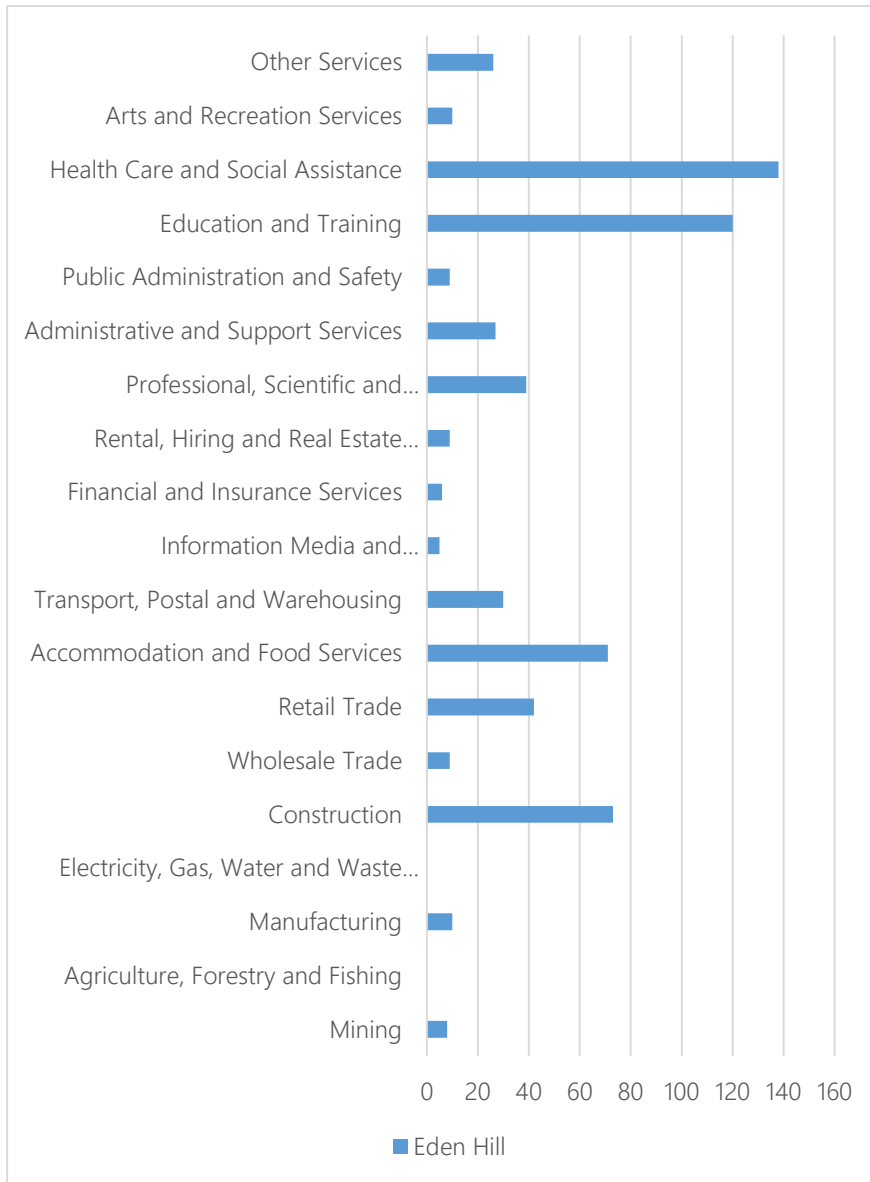
Figure 27- Bassendean Employment by Destination Zone



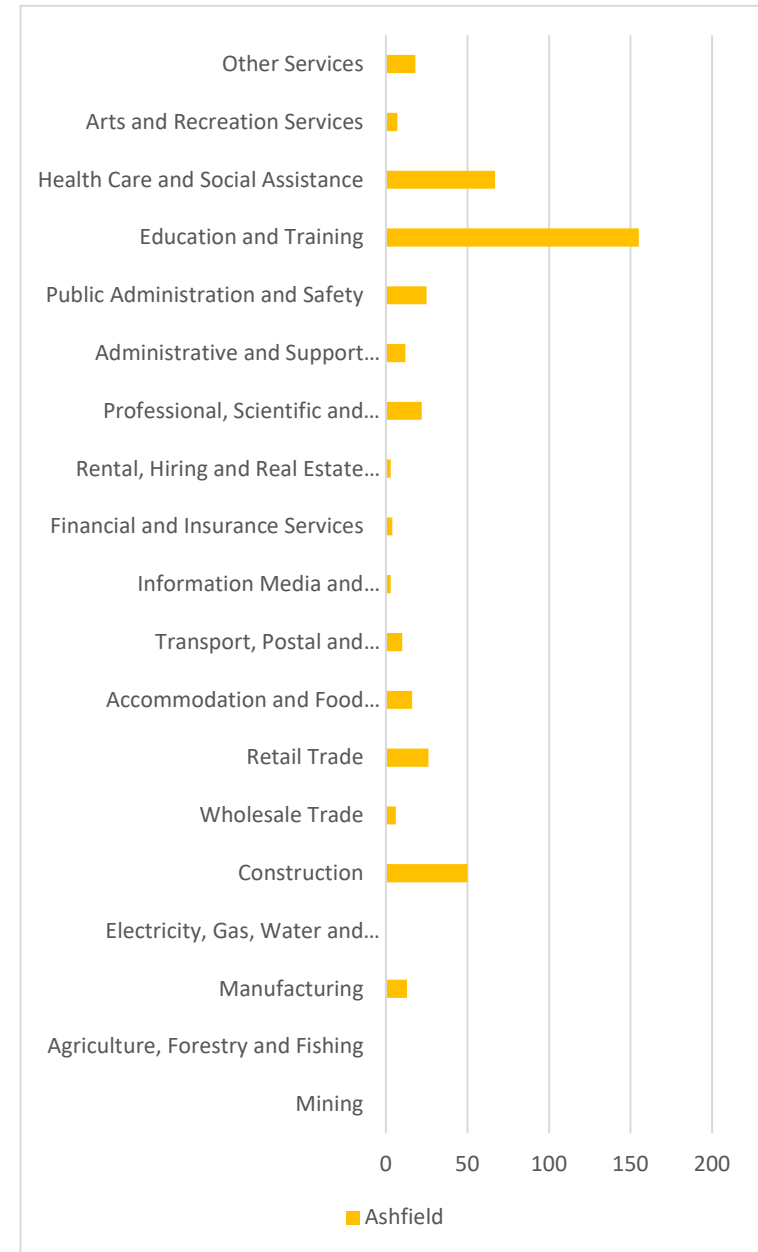
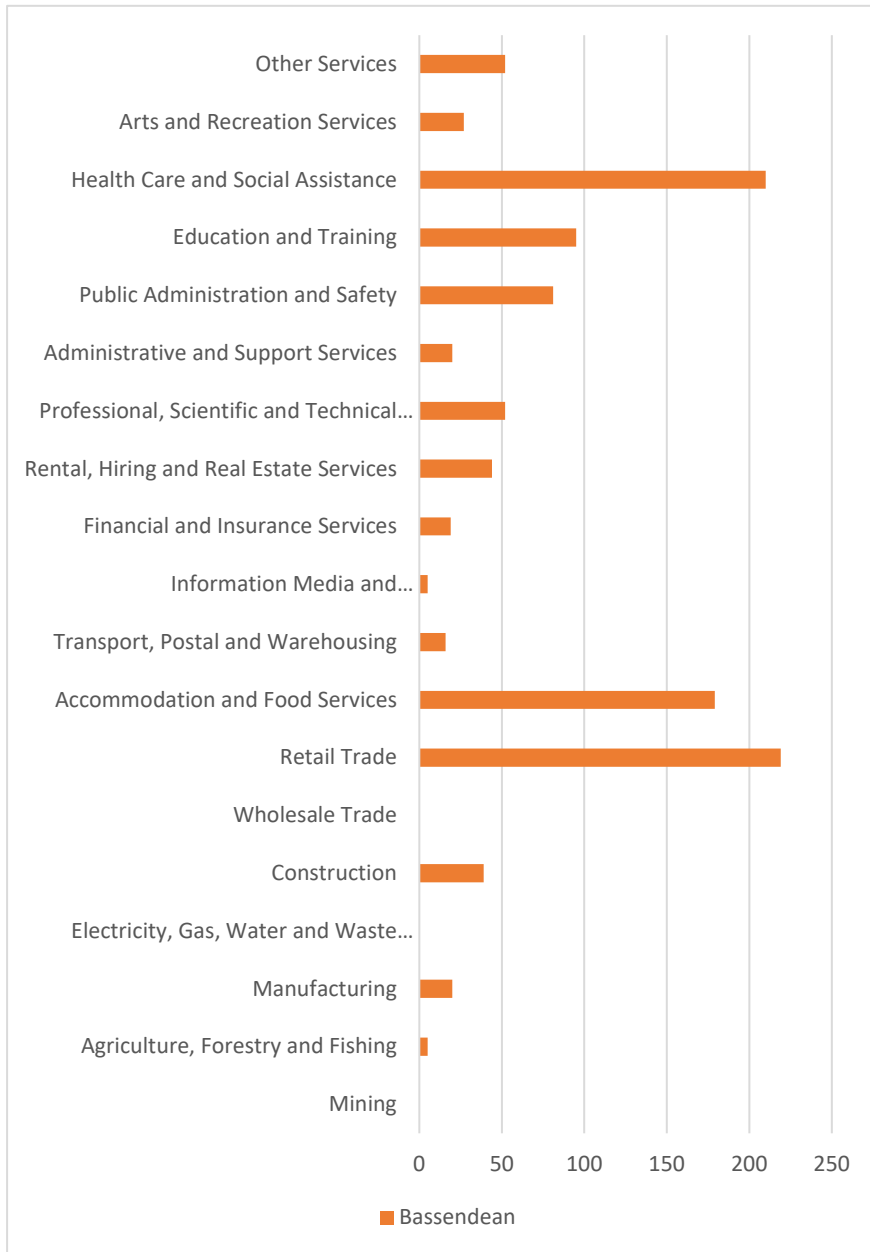
Source: Census 2011, 2016. FAR Lane 2018

Over 60% of jobs are located in Bassendean West, Bassendean’s only industrial area. It is the key employment location for manufacturing, construction and transport, postal and warehousing. Approximately 19% of Bassendean’s employment is located in the eastern Bassendean destination zone. As Bassendean Village is located within this area, its employment industries are predominantly in retail trade, health care services, and accommodation and food services. Ashfield and Eden Hill make up 7.5% and 11.5% of the Town of Bassendean’s employment. Due to its relatively residential characteristics, it is the location for the majority of Bassendean’s education and training jobs. A detailed breakdown of industries of employment by destination is shown in Figure 28.

Figure 28- Employment Industry by Destination Zone



Source: Census 2011, 2016. FAR Lane 2018

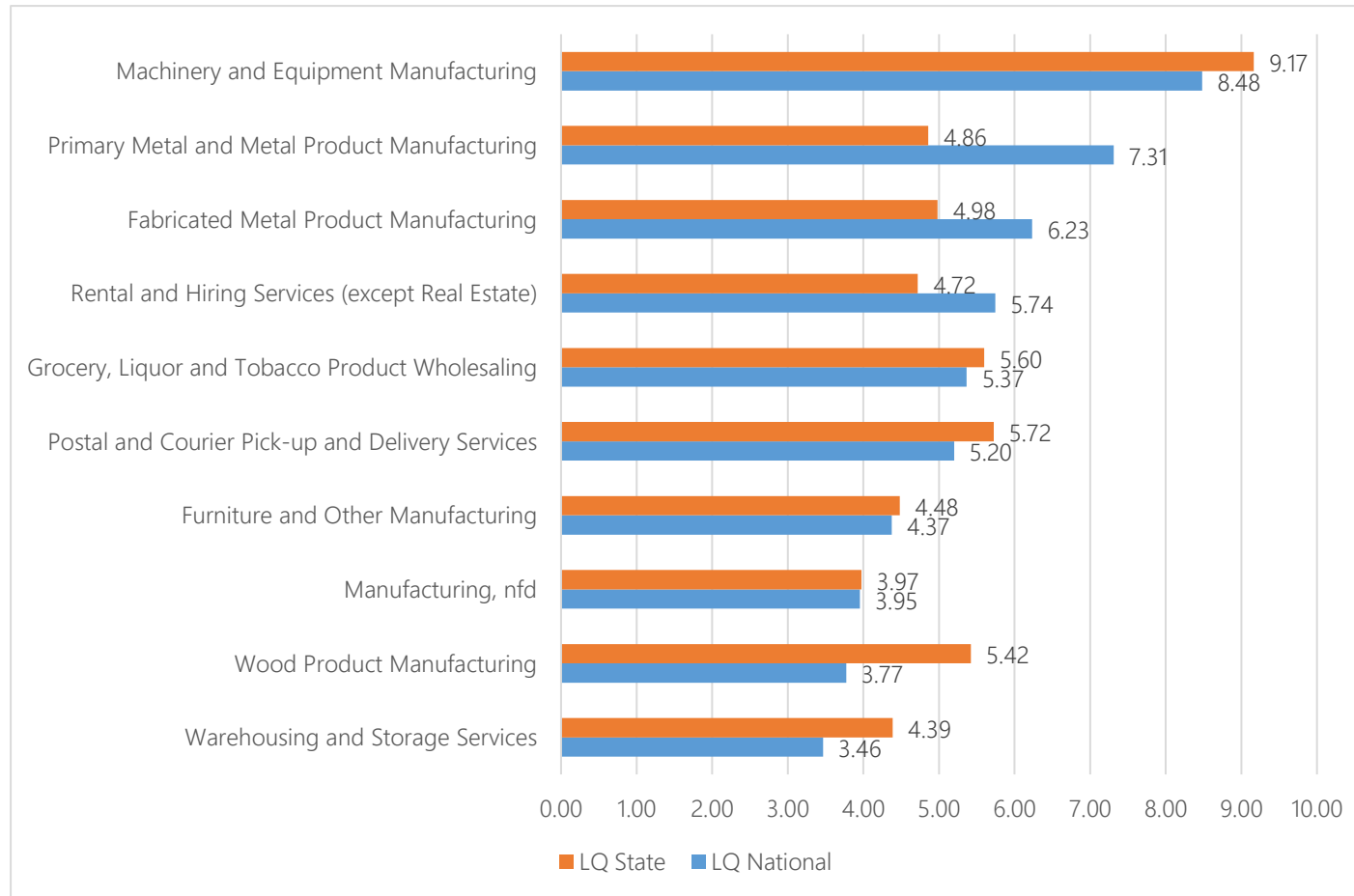


Source: Census 2016, FAR lane 2018

3.8 LOCATION QUOTIENT

A location quotient (LQ) is a simple ratio used to determine the concentration or dominance of an industry in a region (i.e. local government area) in comparison to a larger reference or benchmark region (i.e. State or Nation). A location quotient of above 1 suggests that there is a comparatively larger concentration of a particular industry in the region, whilst a score of less than 1 suggest a comparative locational weakness in this industry.

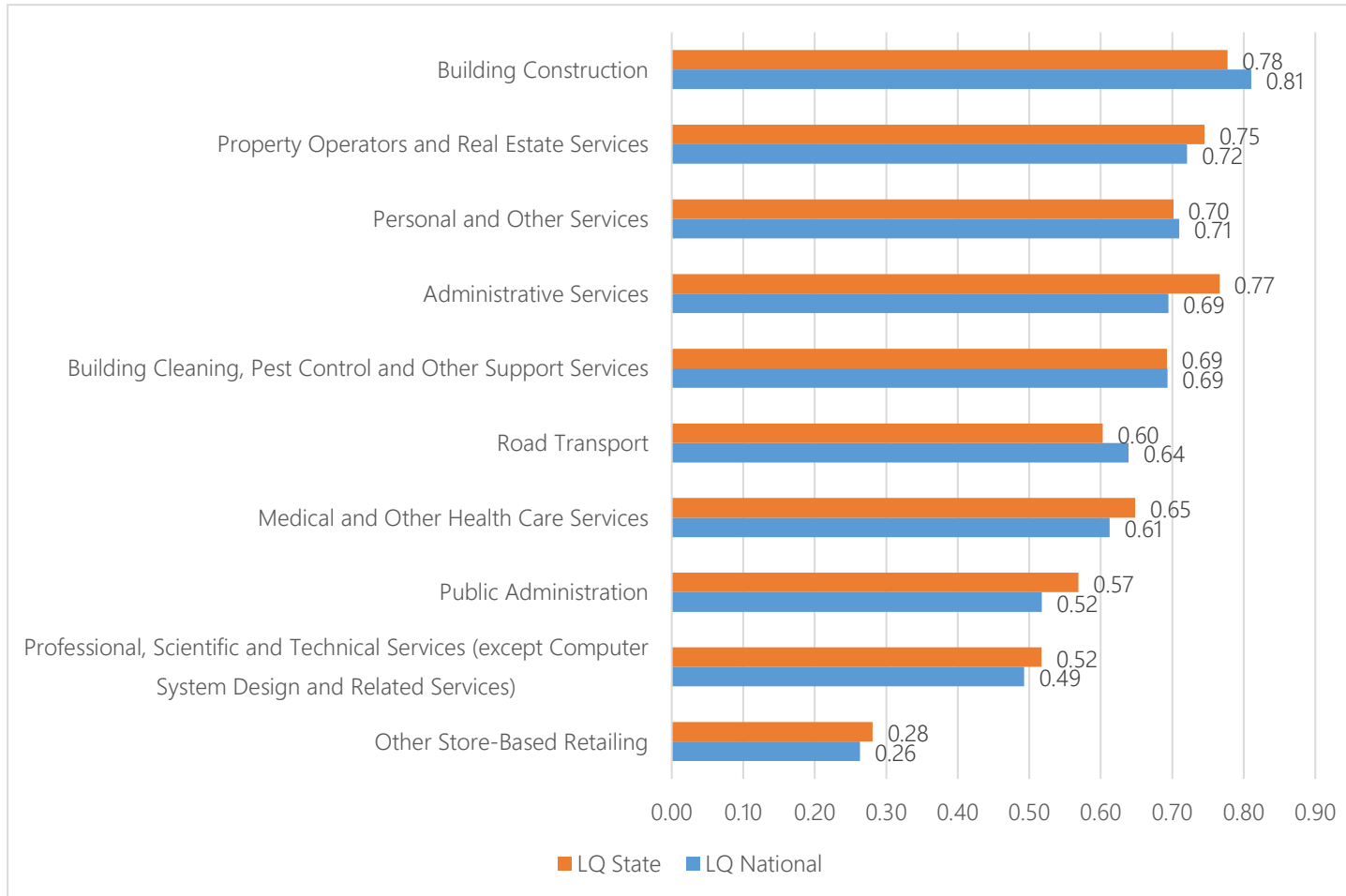
Figure 29- Bassendean Top 10 Industries by Location Quotient



Source: Census 2011, 2016. FAR Lane 2018

LQ analysis suggests Bassendean has a significantly large concentration of manufacturing (particularly mining manufacturing) and construction jobs in comparison to Western Australian and Australian Benchmarks (Figure 29).

Figure 30. Lowest 10 Industries by Location Quotient



Source: Census 2011, 2016. FAR Lane 2018

Examination of industries with comparatively low location quotients can suggest areas where there may be gaps in goods offered/service provision within a community (Figure 30). They can therefore provide direction as to where there may be local opportunities for enterprises to meet local needs, if these needs are not met by adjacent economies and communities. In the case of Bassendean, areas where there may be opportunities to address gaps include:

- Retailing;
- Professional, scientific and technical services;
- Medical and other health care services;
- Administrative services; and
- Personal and other services.

3.9 SHIFT-SHARE ANALYSIS

Shift share analysis in this Profile provides an understanding of the growth trends of a particular industry in the Town of Bassendean, compared to the performance of the same industry in benchmark economies. This analysis is broken down into three components:

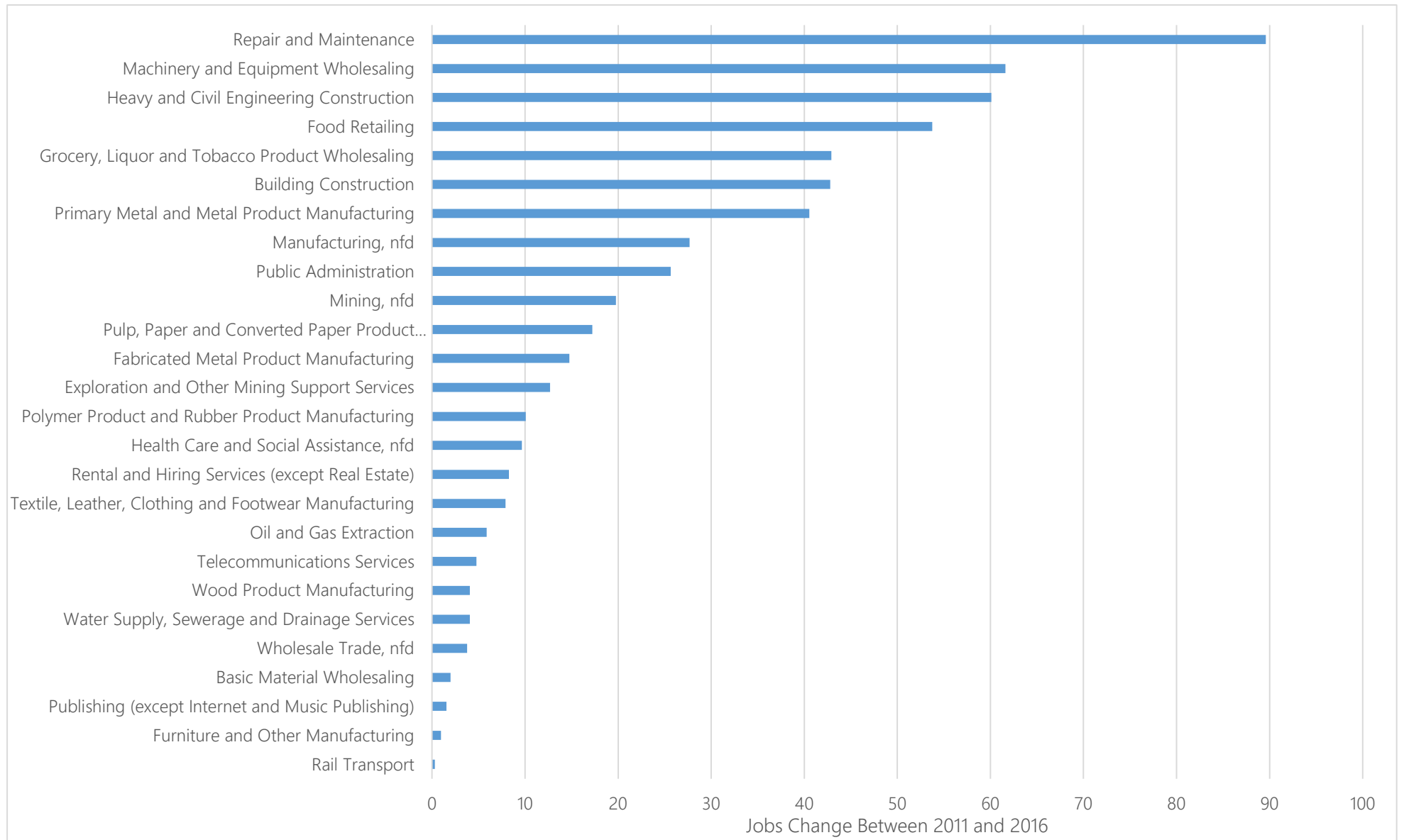
- **National growth effect** – amount of growth in an industry that could be attributed to an overall growth in the national economy;
- **Industry mix effect** - the amount of growth or decline in an industry that could be attributed to the performance of the specific industry at the national level;
- **Regional competitive effect** – the amount of growth or decline in a specific industry that could be attributed to a local advantage or disadvantage. This component provides the most interesting insight, as it quantifies the level of advantage or disadvantage an industry has in the local area;

A key insight that can be gleaned from shift-share analysis is identification of the industries experiencing a positive regional competitive effect in low and high-growth industries. Strong performance in low-growth industries suggests that the local economy may have an advantage that helps enterprises compete, even in sectors that may not be growing within the greater economy (Figure 31).

The three industries with highest regional competitive effect in industries that outperformed in low growth industries relative to Western Australia were:

- Repair and Maintenance (+89 jobs between 2011-16)
- Machinery and Equipment Wholesaling (+62 jobs between 2011-16)
- Heavy Civil Engineering Construction (+60 jobs between 2011-16)

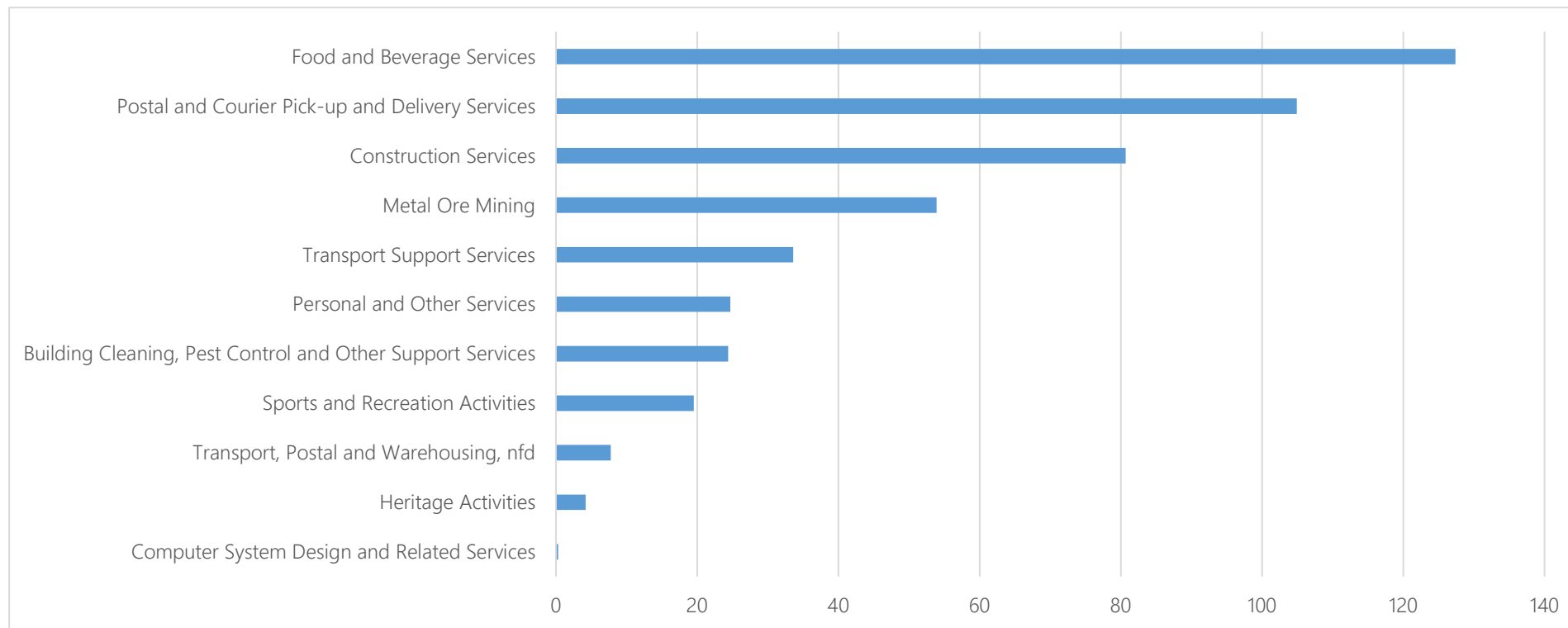
Figure 31- Regional Competitive Effect- Bassendean Industries that Outperformed in Low Growth Industries



Source: Census 2011, 2016. FAR Lane 2018

Identification of industries that perform strongly in growing markets provides an insight into sectors that have the potential to support future economic growth within an economy. These industries are generally considered high-priority, with decision-makers ensuring that they do not experience capacity constraints that may adversely impact upon future growth (Figure 32).

Figure 32- Regional Competitive Effect- Bassendean Industries that Outperformed in High Growth Industries



Source: ABS Census 2011, 2016. FAR Lane 2018

The three industries with highest regional competitive effect in industries that outperformed in high growth industries relative to Western Australia were:

- Food and Beverage Service (+127 Jobs)
- Postal and Courier Pick-up and Delivery Services (+104 Jobs)
- Construction Services (+80 Jobs)

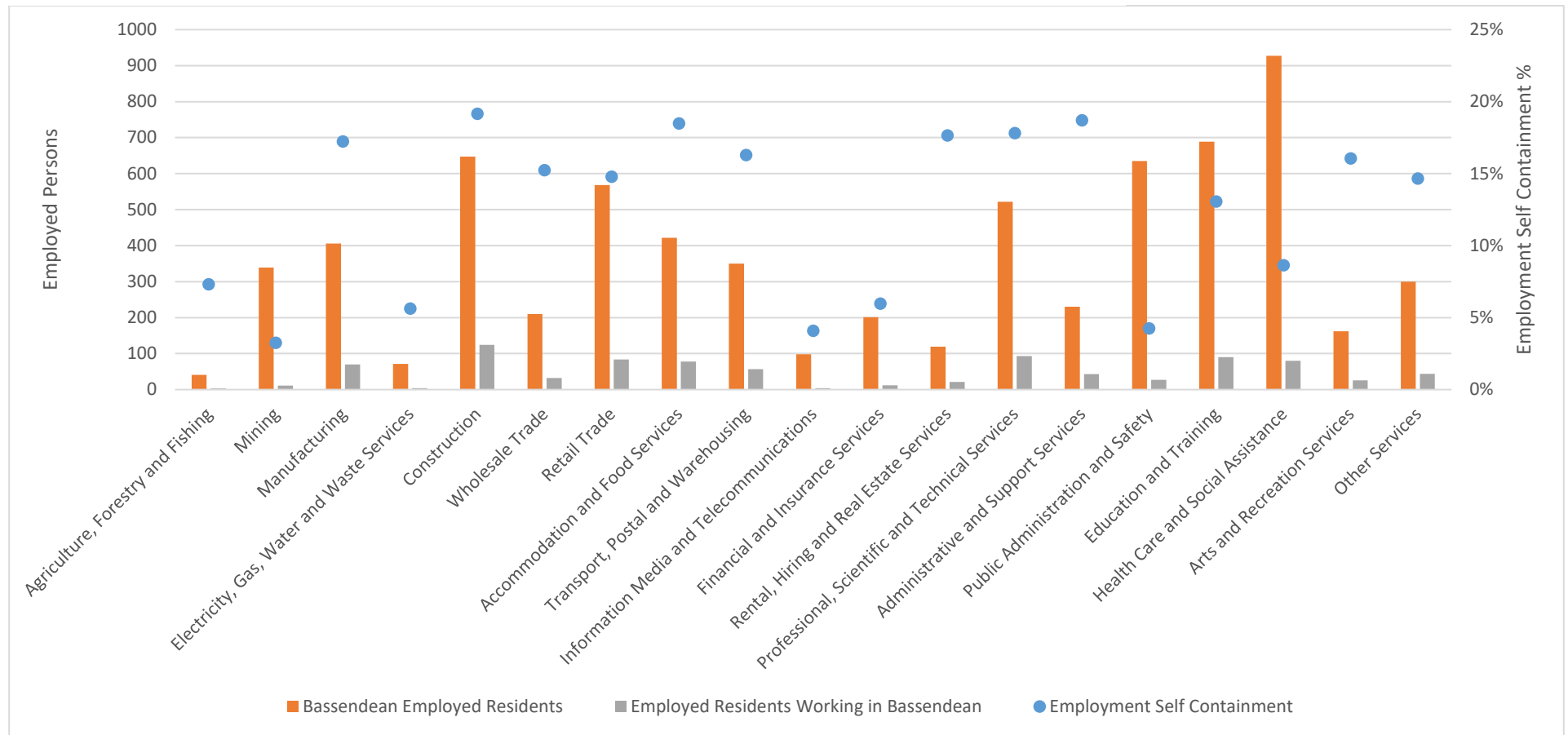
3.10 EMPLOYMENT SELF CONTAINMENT

Employment self-containment for the purposes of this profile represents the proportion of Town of Bassendean residents who are employed within the boundaries of the Town of Bassendean. This metric can be useful in providing insights as to the attractiveness of the local economy as a place of work for local residents, as well as a measure of the sustainability of the urban system (as economies with a stronger relationship between place of work and residence are likely less exposed to externalities associated with commuter infrastructure).

Approximately 13% of employed persons living in the Town of Bassendean also work in the Town of Bassendean. These workers predominately work in industries including construction, administrative and support services, and accommodation & support services.

Bassendean's relatively low self-containment is not surprising given the size and residential nature of the LGA, its significant passenger rail infrastructure, and its proximity to major employment nodes including the Perth CBD, Perth Airport, Midland Strategic Metropolitan Centre and a variety of major industrial centres. Figure 33 illustrates the industry distribution of employed residents:

Figure 33 - Bassendean Employment Self Containment by Industry



Source: Census 2016, FAR lane 2018

4 KEY GROWTH SECTORS

The Profile scope of works required consideration of key growth sectors identified by the Town of Bassendean in addition to observation of more general economic trends. The data for these sectors were examined in far greater detail, with profiling to 4-digit ANZSIC level (ABS Census 2011 and 2016)

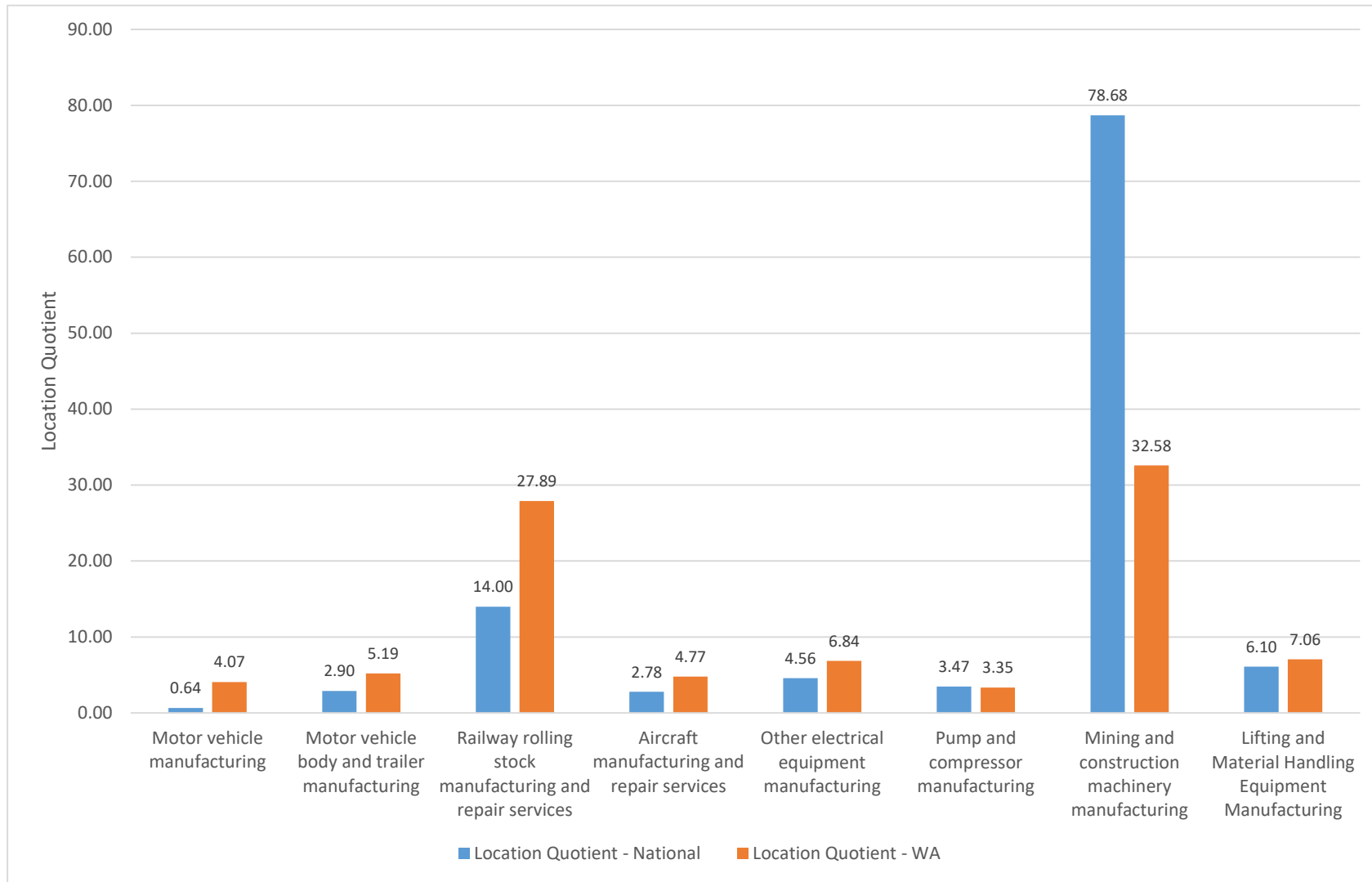
4.1 ADVANCED MANUFACTURING

Analysis of the Advanced Manufacturing growth sector included any manufacturing process that takes advantage of high-technology or knowledge-intensive inputs as an integral part of its manufacturing process. As such, industries including; chemical and medicinal manufacturing, vehicle and transport manufacturing, professional and scientific equipment manufacturing, computer and electronic manufacturing and specialised machinery and equipment manufacturing were examined.

Advanced manufacturing employs 346 people in Bassendean, 250 of these within mining and construction machinery manufacturing. Shift-share analysis suggests, industries including human pharmaceutical and medicinal product manufacturing, motor vehicle manufacturing, and motor vehicle body and trailer manufacturing are outperforming in a low growth industry. Of the sectors considered, no sectors were shown to be outperforming in a high growing industry.

Employment location quotient analysis suggests that Bassendean has a degree of specialization on both a national and state level, particularly in mining and construction machinery manufacturing and railway rolling stock manufacturing and repair services (Figure 34).

Figure 34. Town of Bassendean Location Quotients of Advanced Manufacturing Industries



Source: Census 2016, FAR Lane 2018

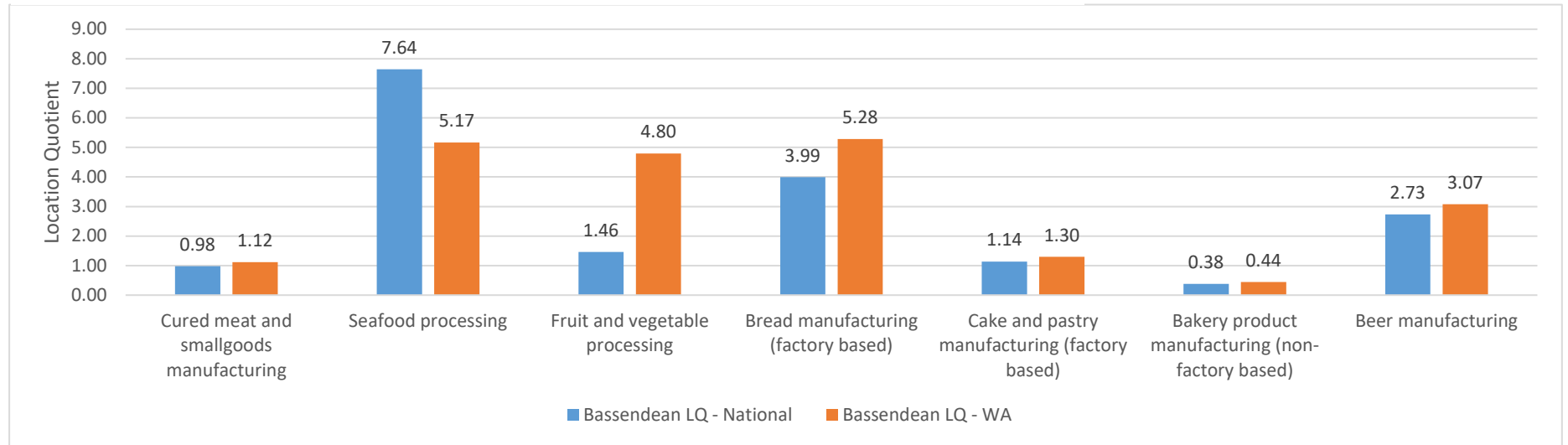
Between 2011 and 2016, advanced manufacturing employment has halved from 721 to 346. This is to be expected to a certain extent as advanced manufacturing in Australia dropped by 29% between 2011 and 2016, however Bassendean’s total advanced manufacturing employment fell by an additional 23%.

4.2 FOOD AND AGRIBUSINESS

Analysis of the food and agribusiness growth sector included consideration of food-related production, food processing and the major inputs into these sectors, but not the wholesale or retail sale of these goods.

In 2016 there were 88 food and agribusiness jobs in Bassendean, 56 of which were employed in bread manufacturing. This sector therefore is relatively small in size and reliant on a relatively limited number of business operations. Bread manufacturing, along with fruit and vegetable processing and seafood processing, were the only sectors in this industry that grew between 2011 and 2016 (Figure 35).

Figure 35- Food and Agribusiness Employment Location Quotient



Source: Census 2011,2016. FAR Lane 2018

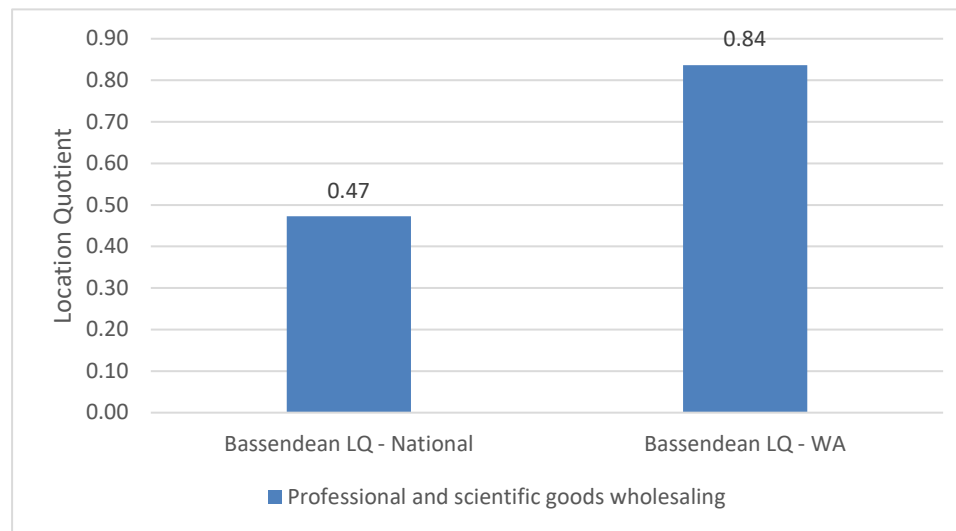
Within Bassendean, all food and agribusiness jobs were manufacturing based, with no primary production occurring within the LGA.

4.3 MEDICAL TECHNOLOGIES AND PHARMACEUTICALS

Analysis of the medical technologies and pharmaceuticals growth sector included consideration of activities including the research and development, production and wholesale of medical technologies, devices and pharmaceutical goods, and related services.

Between 2011 and 2016, medical technologies and pharmaceuticals employment declined from 16 jobs to 3 (a drop of 82%, whilst Australia wide, it fell by 12%), all of which were in professional and scientific goods wholesaling. Location quotient analysis suggests Bassendean has a weakness in the medical technologies and pharmaceuticals industry, or that there is a potential opportunity for growth in this sector from a relatively low base.

Figure 36- Medical Technologies and Pharmaceuticals Location Quotient



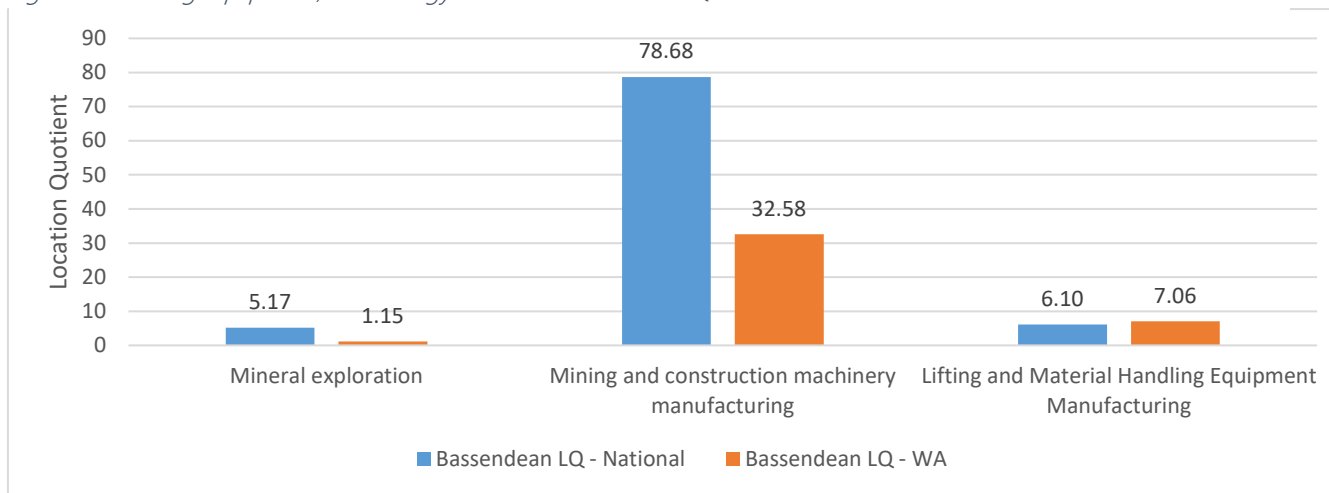
Source: Census 2016, FAR Lane 2018

4.4 MINING EQUIPMENT, TECHNOLOGY SERVICES

Mining equipment, technology and services businesses are those that provide specialised support and solutions to the mining and minerals processing industry. In 2016 the Town of Bassendean contained 283 jobs, down from 455 in 2011. 88% (250) of the jobs in this sector are in mining construction machinery manufacturing.

Location quotient suggests a high degree of specialization and economic strength in mining exploration, mining construction machinery manufacturing, and lifting and material handling equipment manufacturing (Figure 37).

Figure 37- Mining Equipment, Technology and Services Location Quotient



Source: Census 2011, 2016. FAR lane 2018

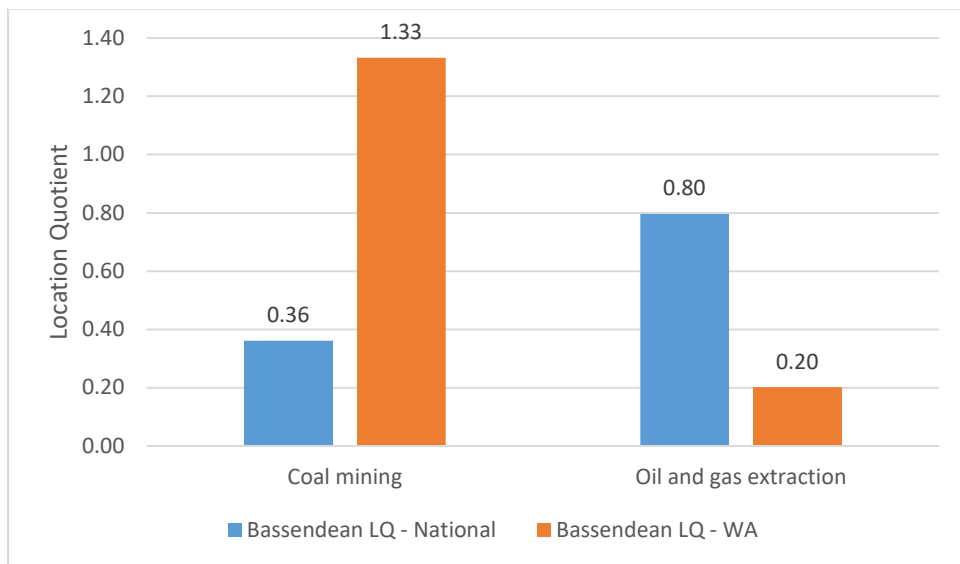
Decline in this industry is on par with national trends, with a fall of 38%, compared to a 48% fall Australia-wide. This reflects a broader slowdown in the resources sector, as well as a shift from construction to operations of mine sites in Western Australia.

4.5 OIL, GAS AND ENERGY RESOURCES

The oil, gas and energy resources growth sector is comprised of products and services used in the exploration, extraction, processing, storage, and export of energy resources such as coal, oil and gas. The majority of firms are involved in exploration and/or extraction activities.

In 2016 this sector employed 19 workers, three times as many in 2011. Of these, 10 were in coal mining working as fabrication engineering trades workers. Location quotient analysis suggests no degree of specialisation or economic strength in coal mining or oil and gas extraction, with a workforce consisting of managerial, professional and fabrication-based jobs.

Figure 38- Oil, Gas and Energy Resources Employment Location Quotient



Source: Census 2011,2016. FAR lane 2018

5 COMMERCIAL FLOORSPACE DEMAND ANALYSIS

5.1 APPROACH

Demand for goods and services across the Town of Bassendean was modelled over a 13-year period (2018-2031). The modelling took into account population growth across a broad catchment areas that encompassed parts of the Central, North East and South East sub-regions.

The following data sources were used to inform the commercial floorspace demand analysis:

- WA Tomorrow Band C – estimates of natural population growth across Western Australia
- WA Land Use Employment Survey by Planning Land Use Codes (PLUC)
- ABS Household Expenditure Survey 2015-16
- ABS Household Income and Wealth – Equivalised Disposable Household Income Quintiles

Figure 39- Bassendean Commercial Centres Floorspace m2 (NLA) (2015)

| Commercial Centres | | Shop/Retail NLA |
|--------------------|-----------------------|-----------------|
| Complex Number | Complex Name | SHP |
| 350 | BASSEDEAN TOWN CENTRE | 11,915 |
| 351 | EDEN HILL | 160 |
| 352 | IDA STREET | 1,522 |
| 354 | WEST ROAD | 75 |
| 355 | COLSTOUN ROAD | 725 |
| 356 | BASSEDEAN ISO USES | 65 |
| | Grand Total | 14,462 |

Source: Department of Planning Land Use Employment Survey 2015

Town of Bassendean commercial centres referenced in this analysis are summarised in Figure 39, with locations outlined in Figure 40.

Figure 40- Map of Bassendean Commercial Centres



Source: Department of Planning Land Use Employment Survey 2015

Modelling included surrounding commercial centres with more the 5,000m² of NLA floorspace A summary of existing floorspace supply is outlined in Figure 41 with locations described in Figure 42.

Figure 41- Floorspace Demand Model Commercial Centres Floorspace m2 (NLA)

| Centre | Floorspace m2 | Centre | Floorspace m2 |
|--------------------|---------------|---------------------|---------------|
| BASSEDEAN ISO USES | 65 | KALAMUNDA CENTRE | 14,994 |
| BASSEDEAN VILLAGE | 11,915 | KINGFISHER AVENUE | 5,722 |
| BEECHBORO VILLAGE | 4,964 | MAIN STREET | 6,666 |
| BELMONT T.C. | 43,148 | MAYLANDS | 11,811 |
| BENARA RD MORLEY | 5,511 | MIDLAND CENTRE | 83,354 |
| COLSTOUN ROAD | 725 | MIRRABOOKA SQUARE | 41,657 |
| DIANELLA PLAZA | 14,101 | MORLEY CITY CENTRAL | 530 |
| DOG SWAMP | 10,124 | MORLEY-GALLERIA | 98,659 |
| EDEN HILL | 160 | MT LAWLEY | 12,014 |
| ELLENBROOK CENTRE | 28,501 | NORANDA SQUARE | 11,026 |
| FORRESTFIELD FORUM | 12,956 | NORTHLANDS | 10,847 |
| GEH EAST | 8,572 | SALISBURY STREET | 1,270 |
| GT EASTERN HWY | 1,350 | STIRLING CENTRAL | 13,165 |
| GUILDFORD STH | 5,874 | SUBIACO | 42,177 |
| IDA STREET | 1,522 | WEST ROAD | 75 |
| INGLEWOOD | 8,130 | | |

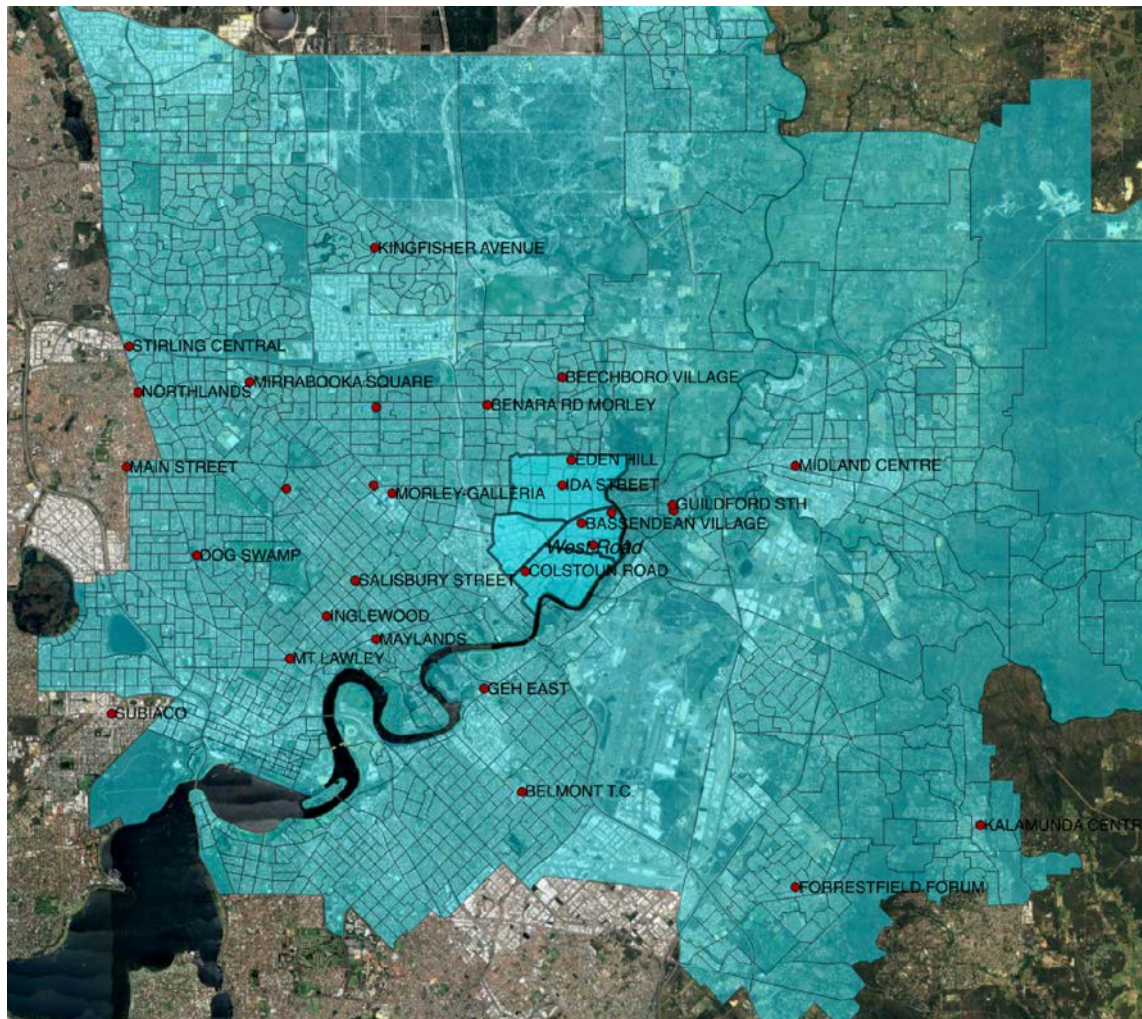
Source: Department of Planning Land Use Employment Survey 2015

Analysis was undertaken utilising a gravity model that distributed potential demand for shop retail uses based upon a customer's proximity to a retail offer, and the scale of each offer. This is an industry standard technique that allows decision-makers to understand the potential floorspace that could be expected to be commercially activated if a particular activity centre and/or operator was to attract its share of expenditure. It should be noted that in reality, a range of other factors will impact upon the scale and competitiveness of retail offer including:

- Convenience of access
- Brand offer and differentiation
- Urban amenity
- Land-use planning constraints

These factors may mean that some centres can commercially support larger floorspace scale than anticipate, whilst others may struggle to achieve anticipated scale. Gravity modelling undertaken assumed that a commercially viable centre would turnover an average of \$7,500/m2 net lettable area.

Figure 42- Commercial Floorspace Demand Model Area



Source: Department of Planning Land Use Employment Survey 2015

5.2 COMMERCIAL FLOORSPACE PROJECTIONS

Figure 43 illustrates the projected floorspace that could support a diverse range commercially viable offering based upon the approach and assumptions outlined in Section 5.1.

Figure 43- Bassendean Projected Floorspace Demanded

| Complex Name | m ² of Commercial Floorspace Demanded | | | |
|------------------------|--|--------|--------|--------|
| | 2018 | 2021 | 2026 | 2031 |
| BASSENDEAN TOWN CENTRE | 13,641 | 14,433 | 16,126 | 18,116 |
| EDEN HILL | 262 | 286 | 323 | 366 |
| IDA STREET | 2,425 | 2,593 | 2,881 | 3,218 |
| WEST ROAD | 85 | 88 | 99 | 111 |
| COLSTOUN ROAD | 1,228 | 1,308 | 1,450 | 1,617 |
| BASSENDEAN ISO USES | 71 | 74 | 83 | 94 |

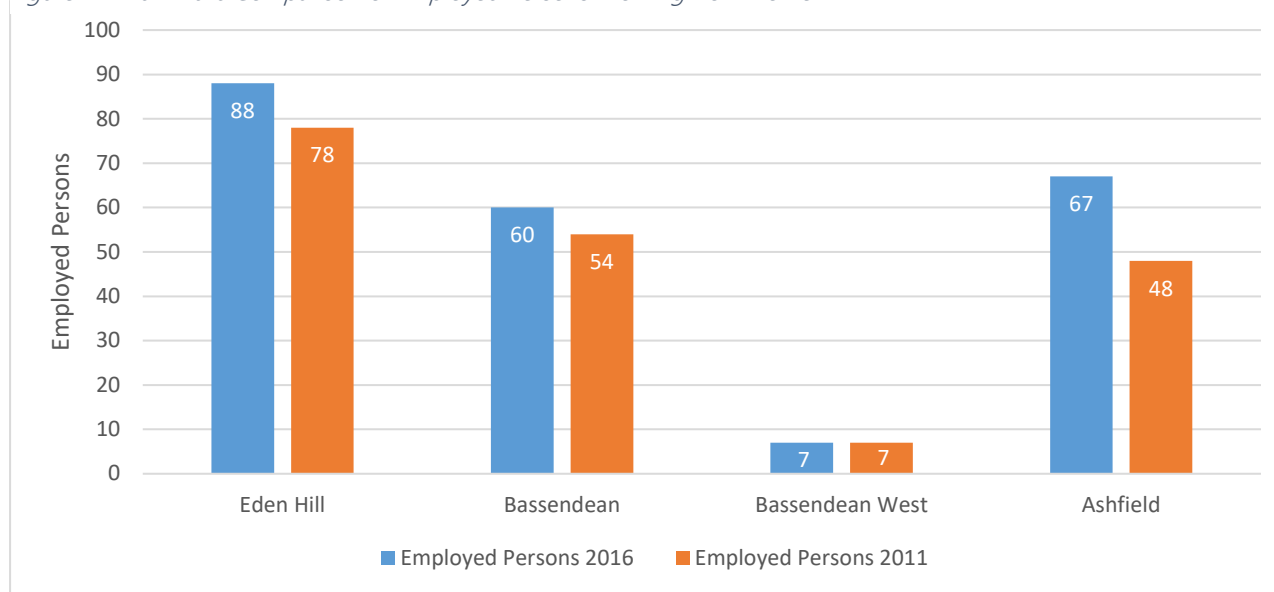
Source: FAR lane 2018

These findings reflect a moderate level of growth anticipated in Bassendean to 2031. The Bassendean Town Centre in particular is projected to grow by 32%, or an approximate 4,500sqm of net lettable area. This equates to an additional full-range supermarket with equivalent new specialty stores.

6 LIVE-WORK AND MICROBUSINESS TRENDS

Analysis of home-based employment within the Town of Bassendean indicates that there were 222 employed persons working from home in 2016. This makes up for almost 4% of persons working within the Town of Bassendean. Since 2011, the number of people that reported as working from home has increased 19% from 187 to 222. Approximately 40% of those that work from home in Bassendean are based in Eden Hill (Figure 44).

Figure 44- 2011-2016 Comparison of Employed Persons Working from Home

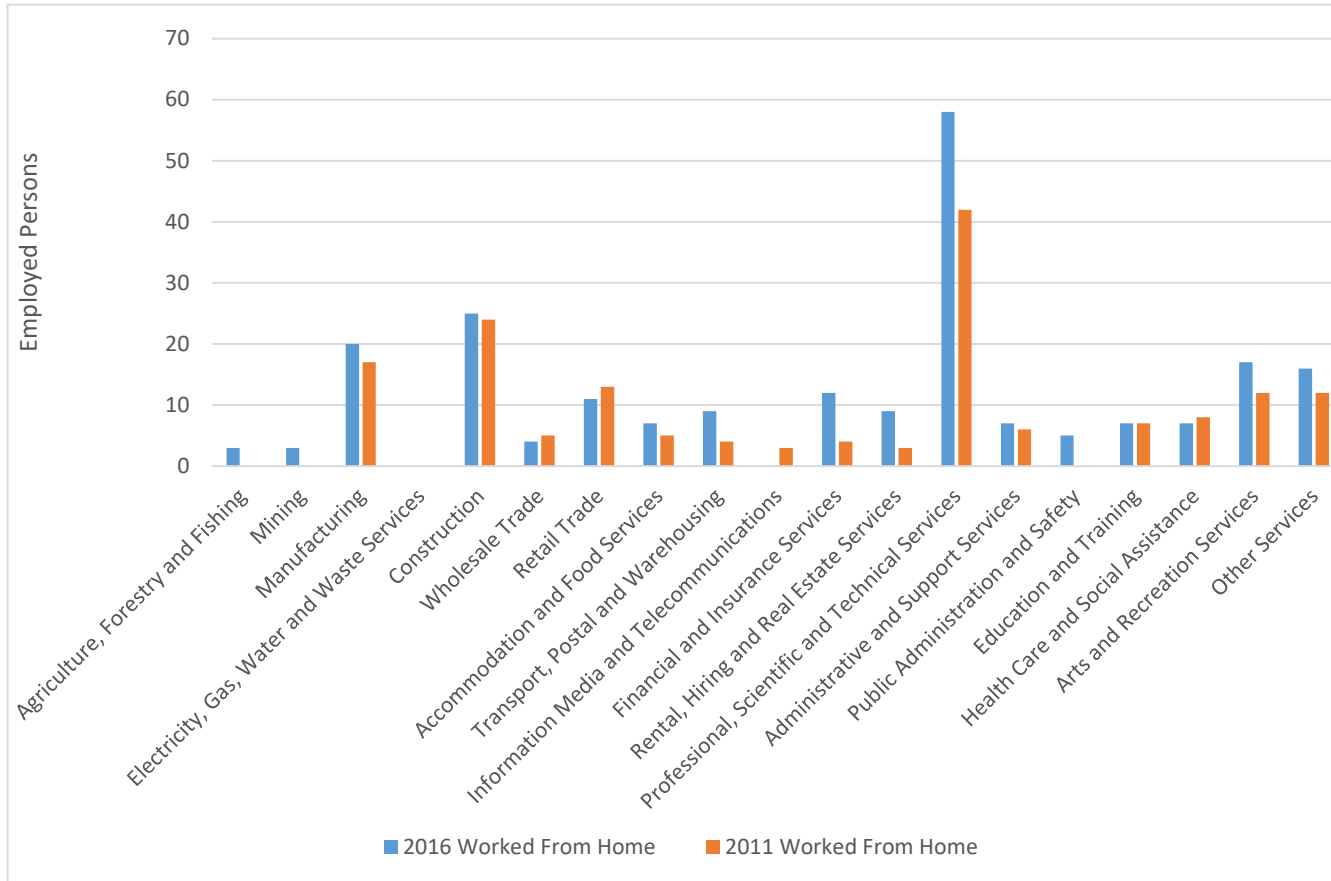


Source: ABS Census 2011, 2016. FAR lane 2018

Between 2011 and 2016, the most significant growth in people working from home was in Ashfield. This is attributed to growth in arts and recreation services activities.

A majority of employed persons who worked from home work in Professional, Scientific and Technical Services, Construction, and Manufacturing (Figure 45).

Figure 45- Persons Who Worked from Home - Industry of Employment



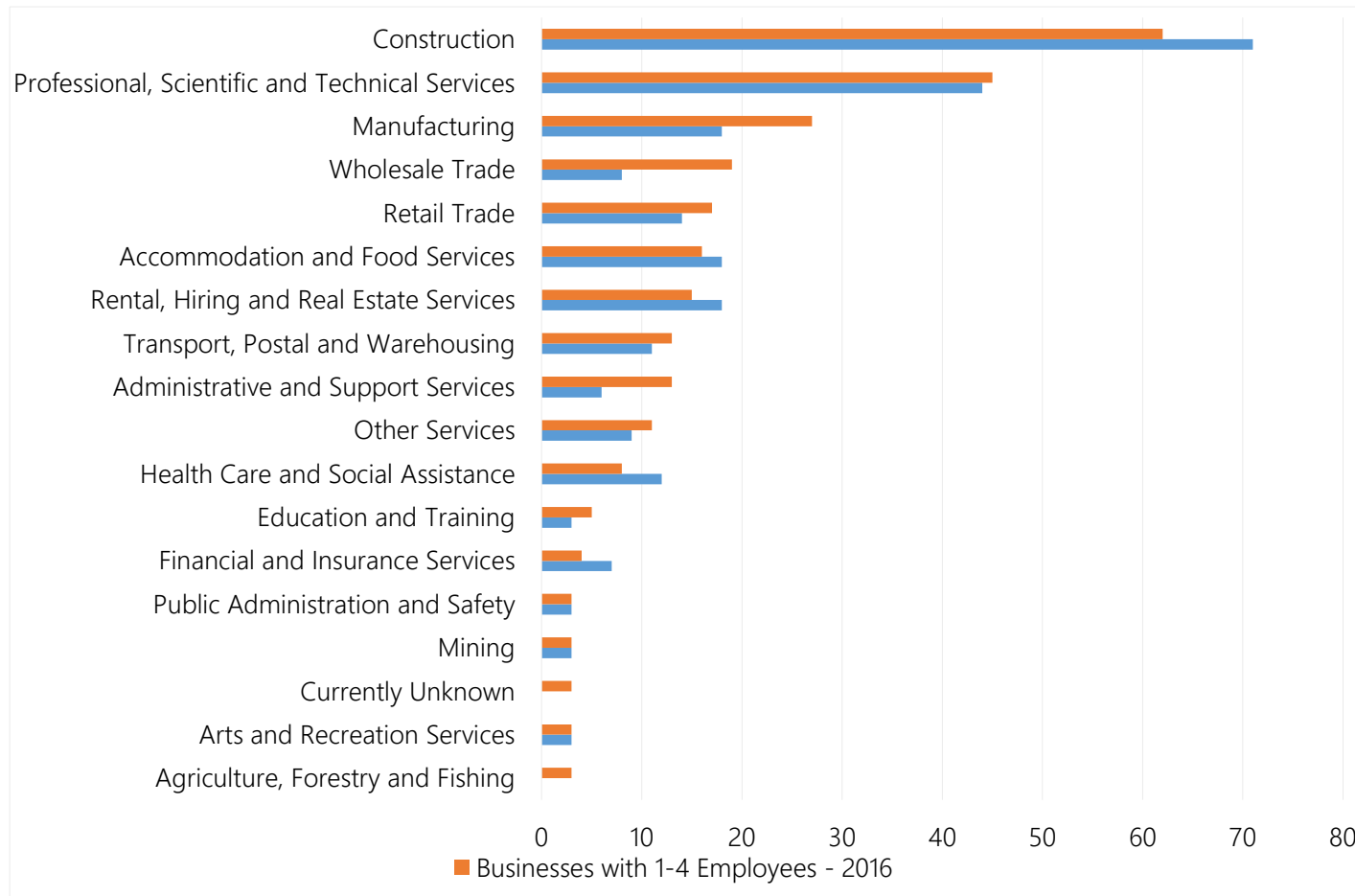
Source: Census 2011, 2016. FAR lane 2018

The growth in people employed in professional, scientific, and technical services is consistent with other markets, with this sector strongly represented in location flexible business models (e.g. consulting). Similarly, the growth in arts and recreation services is likely due to artists having home studios.

6.1 MICRO BUSINESSES

The number of micro businesses (businesses of between 1 and 4 employees) in Bassendean increased from 248 to 270 (8.9%) between 2011 and 2016. This is 5% higher than EMRC, Greater Perth and WA. As Figure 46 illustrates, wholesale trade, manufacturing, and administrative & support services are the primary contributors to this growth.

Figure 46- Number of Businesses with 1-4 Employees 2011-2016



Source: ABS Counts of Australian Businesses, including Entries and Exits, Jun 2012 to Jun 2016. FAR Lane 2018

7 FINDINGS AND RECOMMENDATIONS

The Bassendean Economic Profile provides an insight into a range of characteristics and trends that represent Bassendean's historic communities, emerging economy and changing demographics. Whilst care has been taken in preparing the profile to ensure that key insights have been captured in each section, a number of opportunities stand out as being critical in supporting future land use planning and economic development projects. These are described below.

7.1 DRIVING GROWTH IN LIVE-WORK/MICRO BUSINESS ACTIVITY

Growth in this sector will result both from growth in macroeconomic conditions that make such business models desirable (e.g. customer industry growth, ATO tax treatment, and procurement treatment by agencies), as well as capacity to accommodate such activities. Feedback from real estate agents in Section 2.9 suggests that there does not appear to currently be any major barriers reported by the market in realising live-work arrangements if they are desired. It is likely however that there are opportunities to foster growth in this sector through leveraging factors in the control or influence of the Town of Bassendean including:

- Ensuring recognition by Councillors and Town Officers as to home-based business' role as legitimate employment generating activities. This may mean shifting the perception of these businesses from stay-at-home parents having 'hobbies' to professionals running legitimate enterprises. Develop strategies to encourage and support home-based businesses (e.g. developing home-based business service hubs, shared print facilities, mail centres, and meeting spaces);
- A review of the Town of Bassendean's Town Planning Scheme to identify any limitations on size, scale (maximum number of employees), signage, and parking requirements associated with live-work and micro-business activities;
- Active planning of, and investing in, development of Bassendean's passenger rail station precincts to encourage mixed use development and a variety of housing options in close proximity to Stations (many home-base businesses seek locations where there is easy access to their customer base);

- Development of a strong understanding of the underlying drivers for growth in the professional, scientific, and technical services and arts and recreation services sector, and, the growth in home-based business models. Such an understanding may inform future growth strategies such as:
 - Development of formal and informal professional support networks;
 - Development of shared infrastructure (e.g. galleries that exhibit a range of local artists works);
 - Development of a shared brand under which individual enterprises may operate; and
 - Encourage interim residential development in areas where long-term aspirations may include conversion to commercial space. This may include in smaller neighbourhood centres and around train station precincts in the short term. In such cases, approvals could be specifically linked to home-based business activities, with the operation of these businesses serving to activate these spaces with activities and behaviours that would be more common in future commercial nodes. Formal and informal co-working spaces and business incubators should also be encouraged, as the desire to work *from* home should also be extended to a simple desire to work *near* home.

7.2 SUPPORTING ADVANCED MANUFACTURING ACTIVITIES

Sections 3.2, 3.3 and 3.8 each discuss aspects of the decline of manufacturing activities within the Town of Bassendean. Whilst trends including gentrification of industrial lands (such as Ashfield), automation and globalization each potentially contributed to this decline, Bassendean activity centres are strongly placed to benefit from the next wave of manufacturing activity. This will be vastly different from the factories of yesteryear, with a focus on local design and adaption informing automated production (through technologies such as 3D printing). Manufacturing activities of the future therefore are potentially much more likely hybrid businesses, incorporating design studios, warehousing and workshops. Such activities require strong linkages to major commercial and industrial supply chains, as well as knowledge workers who are attracted to integrated workplaces with strong connections to surrounding centres and strong public transport linkages....all features of Bassendean centres.

Opportunities to support development of future manufacturing activities within Bassendean employment nodes may include:

- Consideration of potential constraints existing within the TPS and other planning frameworks that may restrict hybrid uses and urban forms (such as parking and land-use ratios);

- Development of initiatives that support creation of an identity for next-generation activities in Bassendean including;
- Encouraging education and workplace skill development programs for local students and workers;
- Development of targeted infrastructure such as co-working spaces/incubators specifically tailored to these industries needs (e.g. solder at Flux <http://solder.fluxperth.com/>); and
- Development of an in-depth understanding of existing and emerging manufacturing supply chains, and the roles that Bassendean may play in these.

7.3 ENCOURAGING POSITIVE AGEING IN PLACE AND RENEWAL OF HOUSING STOCK

Bassendean’s demographic profile (discussed in Section 2.2) is representative of many of Perth’s middle-ring communities where large lots with ageing housing stock are owned by ageing residents. A desire of these residents to age within their community is well recognised, with solutions required that both support those that wish to age in their own homes, as well as those that wish to downsize to a more manageable and appropriate property. Downsizing has the benefit of both supporting a better standard of living for seniors, as well as allowing for renewal of residential housing stock, potentially with an increase in housing density.

The Town has the potential to support or inhibit such activities through activities including:

- Ensuring that appropriate sites for seniors housing are located within or adjacent to activity centres, with appropriate zoning controls and development incentives used to encourage to timely delivery of infrastructure on these sites;
- Providing incentives for development of universal accessible housing within Bassendean;
- Ensuring that housing for seniors-related developments are able to be developed across a range of price points to ensure that all Bassendean residents have the option to age locally;
- Ensuring accessibility and mobility of seniors to residences and major community nodes through the careful planning and provision of infrastructure including footpaths and seniors parking;
- Acting as a critical link for seniors considering either downsizing or adapting their residences by facilitating access to services related to assessment, home modification, accessing universal housing real estate and management of financial concerns; and

- Considering the role that it plays in providing external care services (such as those funded through HACC initiatives). Currently Australia is undergoing extensive reforms in the Aged Care and Disability sectors. The changes include a move towards consumer choice and consumer directed care within a competitive market place. The Town has an opportunity to develop a compelling value proposition for the facilitation of a broader range of programs that are inclusive and meet the challenges of the changing demographics which spreads across all the cohorts of seniors.

7.4 CONTINUED DEVELOPMENT OF MAJOR TOD NODES

A key strength of Bassendean is the accessibility of economic nodes to passenger rail infrastructure. This is particularly the case with Bassendean and Ashfield, however may also be relevant in the future to Success Hill. Growth of the Bassendean economy will be reliant on continuing to develop each of these nodes to realise their potential as diverse, intense and vibrant transit oriented centres that reflect their historic character and economic roles.

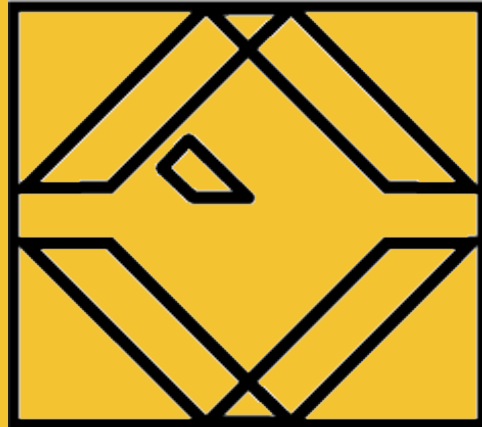
The Bassendean Town Centre is a significant commercial, cultural and recreational centre with a strong Main Street form. It has strong public and private transport linkages, with passenger rail and Guilford Rd both providing significant accessibility and exposure for commercial enterprises (including Bassendean Village). The centre is currently characterised by a population-driven offer of activities, dominated by convenience retail, civic services and hospitality. Potential opportunities for the Town of Bassendean to support future development include:

- Identify opportunities to drive intensification of activity within the walkable catchment around the centre, whilst ensuring that the integrity of heritage assets. In particular, work with State government agency stakeholders to realise development potential in the immediate surrounds of Bassendean Station; and
- Work with small and large commercial operators to ensure accessibility to retail offer from both public and private transport infrastructure. This should be reviewed regularly to ensure that changes in traffic and pedestrian conditions do not inhibit accessibility.

The Ashfield Station precinct is currently characterised by a strong industrial form on the northern side of the rail, and a suburban form on the southern side. Various State and Local Government Strategies have identified this area as having significant potential to accommodate infill and

mixed-use activities into the future, however realising the potential of the precinct will likely take a significant length of time. Potential opportunities for the Town of Bassendean to support development include activities such as:

- Identify and actively encourage transitional uses that may use industrial spaces for commercial and/or creative purposes. This reflects The Town of Bassendean's emerging role as a centre for creative industries;
- Ensure that the urban form encourages accessibility by enhancing pedestrian/bicycle infrastructure and safety (that are often lacking from an industrial urban form); and
- Facilitating the development of best-in-class live-work residential accommodation through use of development incentives and/or any appropriate Town of Bassendean land assets.



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