



Land Use and Employment Survey 2021

Avon Arc

March 2022

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Summary

This report summarises the 2021 Land Use and Employment Survey (LUES) conducted by the Department of Planning, Lands and Heritage (the Department) within the Avon Arc sub-region (the sub-region).

The Land Use and Employment Survey is one of a suite of products produced as part of the Urban Development Program (UDP). The UDP monitors land supply and promotes the timely delivery of residential, industrial and commercial land, targeted regional centres and areas of activity. The information presented in the survey assists the Department and the Western Australian Planning Commission's strategic planning processes.

The survey targets businesses and land uses located on land zoned commercial, industrial, public purpose and recreation. It focuses on the number and type of establishments, the floorspace occupied within a building and the number of persons employed. These three main variables are coded according to the Western Australian Standard Land Use Classification codes (WASLUC) and Planning Land Use Codes (PLUC). It is important to note, the survey targets townsites and does not include the surrounding agricultural land or residential zoned land. In this document, residential land uses are discussed in the context of Planning Land Use Codes and only relate to nursing homes for the aged, residential hotels, motels, other holiday housing, institutions and religious housing hotels. Information from the 2021 Land Use and Employment Survey serves to identify significant patterns, themes and emerging trends occurring in the sub-region.

Key statistics

- The 2021 Avon Arc Land Use and Employment Survey captured a total floorspace (net lettable area) of 693,550m², of which 97 per cent (669,550m²) was occupied.
- Of the six local governments, the Shire of Beverley recorded the highest vacancy rate, with 6 per cent (2,350m²) of the total captured floorspace identified as vacant floor area.
- The Shire of Northam accounted for the highest share of total floorspace within the sub-region (58 per cent), followed by the Shire of York (18 per cent) and Chittering (7 per cent).
- Floorspace captured within land uses categorised under the Primary – Rural Planning Land Use Code accounted for the highest share (18 per cent or 125,140m²) of total floorspace in the sub-region.
- The 2021 Land Use and Employment Survey recorded a total number of 7,090 employees in the sub-region. Of these, 70 per cent were classed as full time and 30 per cent as part time.
- Industries categorised under the Health/Welfare/Community Services Planning Land Use Code employed the largest share of people in the Avon Arc (24 per cent).
- The Shire of Northam recorded 67 per cent of the total recorded employment.

This report presents an overview of trends occurring in the study area through analysis of floorspace, employment and land uses within the Avon Arc sub-region. The data underpinning this study is sourced from the 2021 Avon Arc Land Use and Employment Survey.

The Land Use and Employment Survey collects key information relating to land use and employment, including the type of activities conducted by businesses, the floorspace occupied and the number of persons employed in each business (this includes volunteers and casuals). Data collected by the survey is valuable information for decision-making and assists in employment forecasting and transport modelling. The data is also widely used by internal and external stakeholders such as local governments, State Government agencies, academic institutions and property and planning consultants. The previous Avon Arc Land Use and Employment Survey was undertaken in 1999.

1.1 Study Area - Avon Arc sub-region

The Avon Arc is one of seven sub-regions within the wider Wheatbelt region and covers an area of approximately 10,500 km². The Avon Arc sits adjacent to the Perth metropolitan sub-region and is comprised of six local governments; the Shires of Brookton, Beverley, York, Northam, Chittering and Toodyay. While the survey area consists of the Avon Arc sub-region, it is mostly limited to major townsites within each local government area and does not include residential zoned land or surrounding agricultural and rural land.

At June 2020, the Avon Arc recorded an estimated resident population (ERP) of 27,850. Forty per cent (11,050 persons) of residents in the Avon Arc resided within the Shire of Northam. This was followed by the Shires of Chittering and Toodyay, with populations of 6,020 and 4,460 persons, respectively.

1.2 Locality Profile

Beverley

The Shire of Beverley is located approximately 130km south-east of Perth and recorded an ERP of 1,768 as at June 2020. The Beverley locality is classified as the Shire's urban centre. In the Shire, the 2021 Avon Arc Land Use and Employment Survey recorded 280 employees and 39,670m² of floorspace. Dominant land uses include schools, agricultural machinery manufacturing and aircraft storage and equipment maintenance. Beverley is considered an agricultural town, however also has a strong connection to the aviation industry. The Beverley Soaring Society has existed in the town for over 40 years and is comprised of more than 30 private gliders and hangars.

Brookton

The Shire of Brookton is located approximately 140km south-east of Perth and recorded an ERP of 959 as at June 2020. The Shire is the southernmost town within the Avon Arc sub-region and has one urban centre, Brookton. The 2021 Land Use and Employment Survey recorded 290 employees and 41,320m² of floorspace in the Shire. Dominant land uses include grain handling and grading, schools and agricultural equipment retail. The Shire is considered an agricultural town with the Brookton urban centre being surrounded by broad acre agricultural farms.

Chittering

The Shire of Chittering is located approximately 70km north-east of Perth and recorded an ERP of 6,021 as at June 2020. The Shire is the northernmost shire in the Avon Arc region and contains several townsites including Bindoon and Muchea. The 2021 Land Use and Employment Survey recorded 400 employees and 46,920m² of floorspace in the Shire. Dominant land uses include poultry farms, building construction services and schools. The Shire's economic profile is shaped by several industries including tourism, heavy industrial (from the newly developed Muchea Industrial Park), horticulture and agriculture.

Northam

The Shire of Northam is located approximately 100km from Perth and recorded an ERP of 11,013 as at June 2020. The Shire is considered the regional centre of the Avon Arc sub-region and contains several townsites including Northam, Wundowie, Bakers Hill and Clackline. The 2021 Land Use and Employment Survey recorded 4,770 employees and 401,140m² of floorspace in the Shire. Dominant land uses included freight railway terminals, hay production and meat abattoirs. The Shire is often known for a number of tourist attractions and activities including colonial history and architecture, picturesque canola fields, wildflowers, hot air ballooning, the Avon Descent and local artisan goods.

Toodyay

The Shire of Toodyay is located approximately 85km north east of Perth and recorded an ERP of 4,461 as at 30 June 2020. The 2021 Land Use and Employment Survey recorded 490 employees and 36,880m² of floorspace. Dominant land uses included sporting and recreation facilities, schools and warehousing and storage. The Shire's urban centre in the Toodyay locality is often known for its colonial history and architecture and local artisan goods. The Shire is also a popular tourist destination for wildflower viewing and bushwalking.

York

The Shire of York is located 97km east of Perth and recorded an ERP of 3,623 as at June 2020. The 2021 Land Use and Employment Survey recorded a total of 858 employees and 127,620m² of floorspace. Dominant land uses included fodder manufacturing, grain handling and grading services and schools. Similar to other towns within the Avon Arc sub-region, the York urban centre is known for its heritage precinct, wildflowers and local artisan goods. The Shire's Motor Museum also attracts a large number of car enthusiasts.

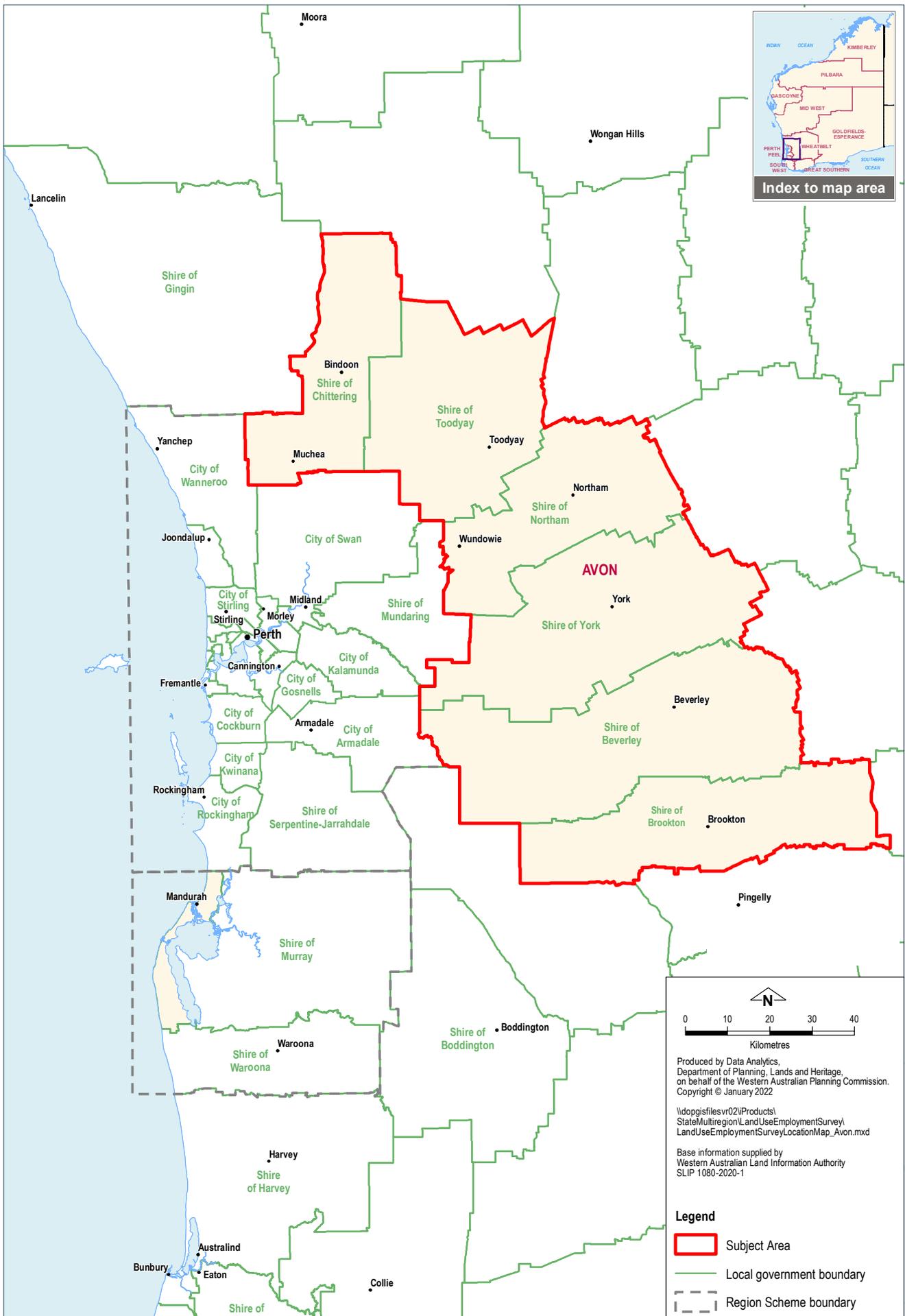


Figure 1: Avon Arc Land Use and Employment Survey 2021 survey area

2 Activities

The 2021 Land Use and Employment Survey captured a total of 2,410 activities in the Avon Arc sub-region. An activity identifies what is occupying the building or contained within the lot. Just under half (48 per cent) of the total number of activities were recorded in the Shire of Northam. This was followed by the Shire of York with 17 per cent, Toodyay (12 per cent), Beverley (9 per cent) and Brookton and Chittering (7 per cent).

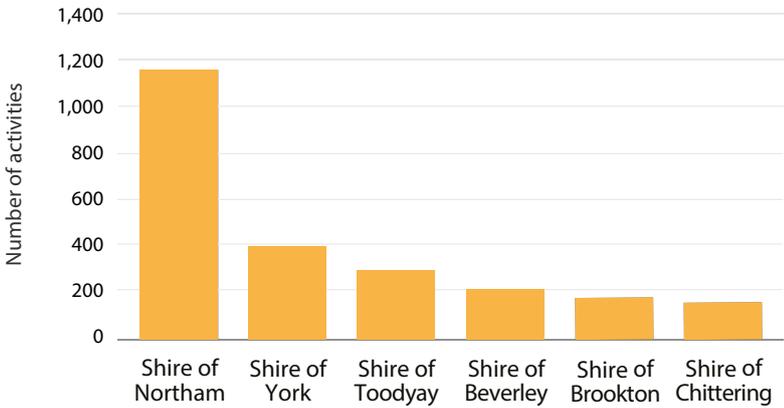


Figure 2: Activities, Avon Arc Land Use and Employment Survey 2021

3 Floorspace and vacancy rates

Figure 3 shows total floorspace in the sub-region by local government area. The Land Use and Employment Survey captured a total floorspace (net lettable area) of 693,550m², of which 97 per cent (669,550m²) was occupied. The Shire of Northam accounted for the highest share of total floorspace within the sub-region (58 per cent), followed by the Shire of York (18 per cent).

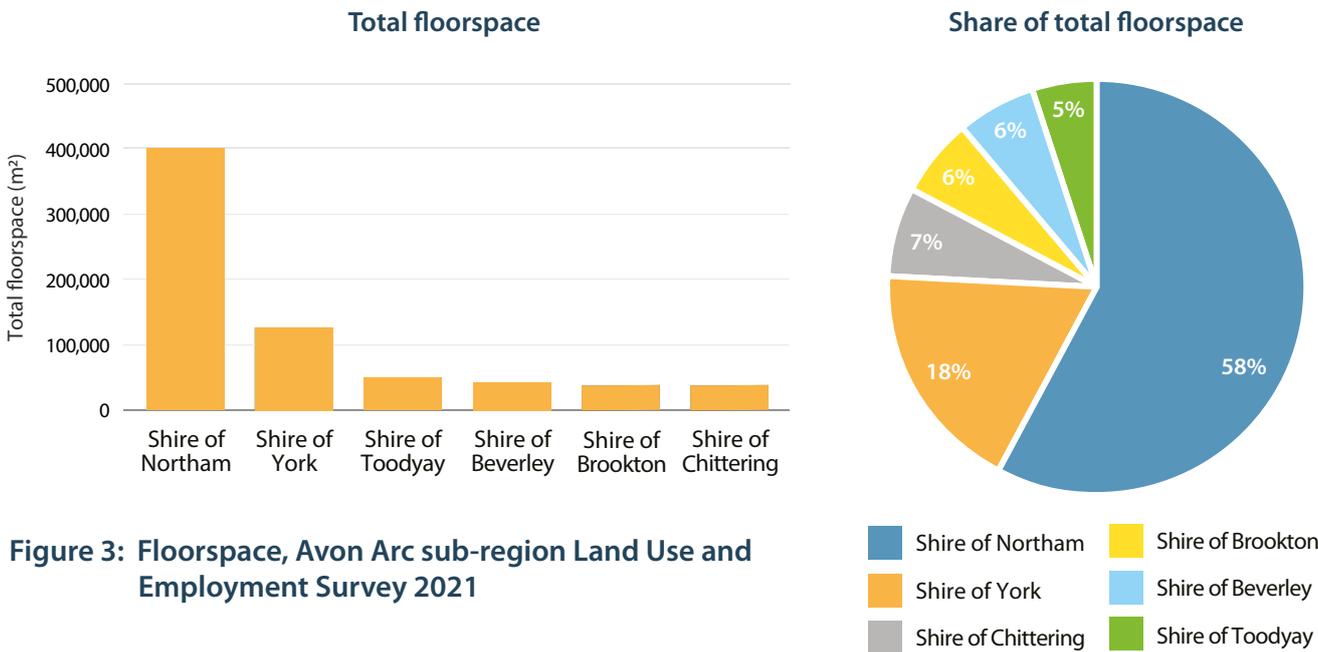


Figure 3: Floorspace, Avon Arc sub-region Land Use and Employment Survey 2021

Figure 4 shows the 10 localities within the sub-region containing the largest volume of floorspace. Northam’s status as a regional centre is reflected in the data with captured floorspace far exceeding all other localities. High volumes of floorspace within the locality of Burlong was attributed to grain handling facilities associated with CBH and the Yongah Hill Immigration Detention Centre.

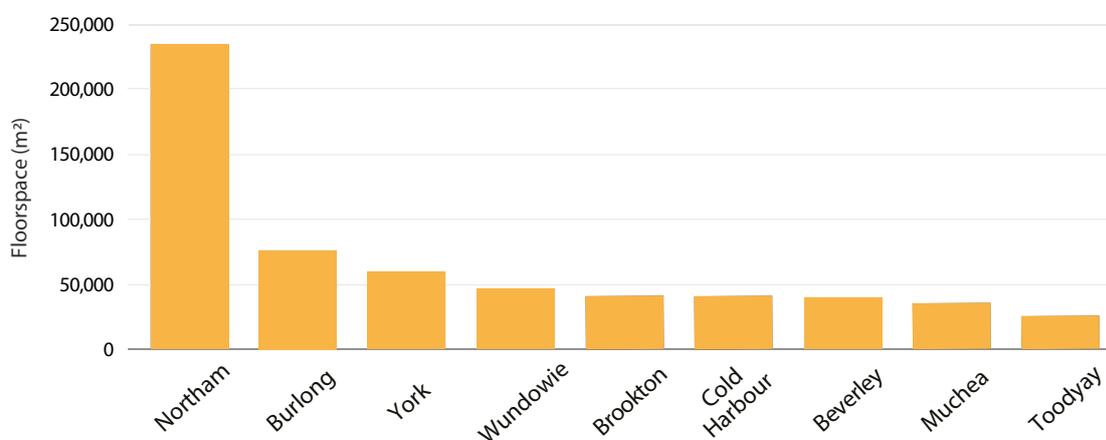


Figure 4: Floorspace by localities, Avon Arc Land Use and Employment Survey 2021

All shires in the sub-region experienced a significant increase in total floorspace since the previous Land Use and Employment Survey was conducted in 1999. Floorspace within the Shire of Northam more than doubled from 1999 to 2021, with the Health/Welfare/Community Service Planning Land Use Code experiencing the largest increase. Land uses classified under this Planning Land Use Code which experienced significant growth included colleges, schools, hospitals, health centres and police stations. The intensification of these land uses within Northam may point towards the increasing centralisation of services to the regional centre.

While less additional floorspace was developed in the Shire of Chittering, it experienced the largest percentage growth of any other local government in the sub-region, increasing tenfold over the two decades. The survey identified this new growth was predominantly in the newly established Muchea Industrial Park. Increased growth in the Shire of Chittering compared to other local governments may be triggered by the Shire’s proximity to Perth as well as the newly constructed Tonkin Highway extension.

Since the previous survey was undertaken, substantial growth in floorspace has been recorded in the Entertainment/Recreation/Cultural and Health/Welfare/Community Service Planning Land Use Codes. Land uses classified under these Planning Land Use Codes include sporting and recreation facilities, cultural facilities such as libraries and arts centres as well as hospitals and schools. This increase is perhaps attributed to the State Governments Royalties for Regions initiative, which focuses on delivering benefits to regional WA through investment in public amenities and infrastructure in regional towns. Analysis of the data from both survey years also indicated increased floorspace and employment within land uses classified under the Residential Planning Land Use Code. As the scope of the Land Use and Employment Survey does not cover residential zoned land, the Residential Planning Land Use Code generally refers to nursing homes for the aged, residential hotels, motels, other holiday housing, institutions and religious housing. This identified growth in accommodation may point towards the sub-region’s developing tourism profile.

Figure 5 shows the vacancy rates of each local government in the sub-region. A total of 24,000m² (3 per cent of total recorded floorspace) of vacant floor area was captured. Of the six local governments, the Shire of Beverley recorded the highest vacancy rate, with 6 per cent (2,350m²) of the total captured floorspace identified as vacant floor area. The lowest vacancy rate was recorded in the Shire of Chittering, with only one per cent (510m²) identified as vacant. The Shire of Northam contained the largest area of vacant floorspace, with 15,710m², however, the vacancy rate was the third lowest of all local governments. Overall vacancy rates declined by three per cent in the sub-region from 1999 to 2021.

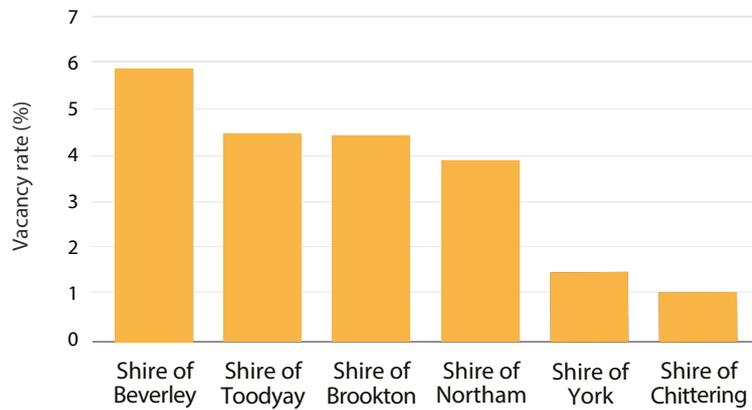


Figure 5: Vacancy rates by LGA, Avon Arc Land Use and Employment Survey 2021

4

Land use

Figure 6 shows the volume of floorspace within each Planning Land Use Code in the Avon Arc sub-region. Floorspace captured in land uses categorised under the Primary – Rural Planning Land Use Code accounted for the highest share (18 per cent or 125,140m²) of floorspace. High volumes of floorspace captured under this Planning Land Use Code were mostly attributed to poultry farms, grain handling and grading facilities and fodder producing and exporting operations. This is to be expected given the large number of broad acre farms situated within the sub-region.



Figure 6: Floorspace by Planning Land Use Code, Avon Arc Land Use and Employment Survey 2021

ENT	HEL	MAN	OFF	PRI	RES
Entertainment / Recreation / Culture	Health / Welfare / Community Service	Manufacturing / Processing / Fabrication	Office / Business	Primary - Rural	Residential
RET	SER	SHP	STO	UTE	VFA
Other Retail	Service Industry	Shop / Retail	Storage / Distribution	Utilities / Communications	Vacant Floor Area

Table 1: Planning Land Use Codes

Land uses falling within the Health/Welfare/Community Service Planning Land Use Code accounted for the second highest share of total floorspace, with 16 per cent (112,900m²). The majority of this floorspace was captured in schools, hospitals and community organisations. Approximately 60 per cent of floorspace recorded in the Health/Welfare/Community Service Planning Land Use Code was located within the Shire’s of Northam, followed by 17 per cent in the Shire of York.

Nine per cent (64,660m²) of the total floorspace in the sub-region was classified under the Entertainment/Recreation/Culture Planning Land Use Code. This mostly included land uses such as sporting and recreation facilities, churches and community halls as well as hotels and taverns. Just under half (44 per cent) of floorspace recorded under the Entertainment/Recreation/Culture Planning Land Use Code was located in the Shire of Northam, followed by the Shire of York (19 per cent) and Toodyay (15 per cent).

Figure 7 identifies the dominant land uses in the sub-region by showing the three Planning Land Use Codes accounting for the highest share of floorspace within each local government.

Large industrial areas within the Shire of Northam accounted for the majority of floorspace within the Manufacturing/Processing/Fabrication Planning Land Use Code. In the Shire of Brookton, farm supply stores accounted for the high proportion of floorspace within the Other Retail Planning Land Use Code. The Shire of Chittering recorded a significant proportion of floorspace under the Service Industry Planning Land Use Code. This was attributed to large scale industries contained in the Muchea Industrial Park.

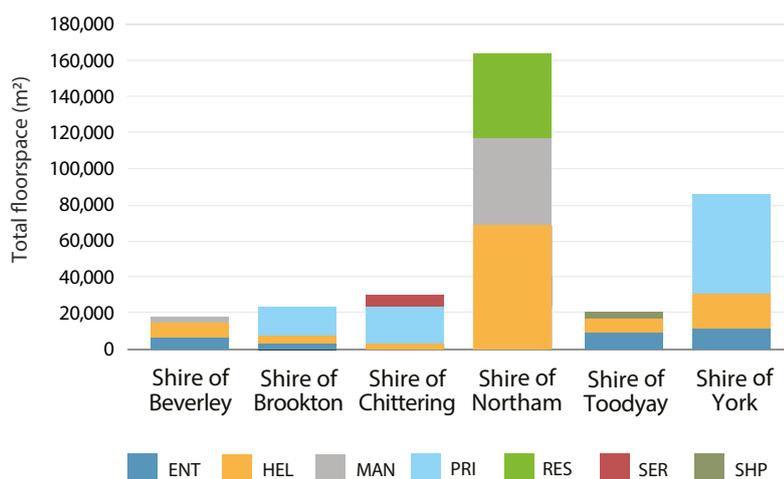


Figure 7: Percentage of floorspace by Planning Land Use Code and LGA, Avon Arc Land Use and Employment Survey 2021

The Health/Welfare/Community Services Planning Land Use Code accounts for between eight to 21 per cent of all floorspace within each LGA. This is the only Planning Land Use Code present in all local government shown in Figure 7. Additionally, a significant portion of floorspace within half of the local governments is dedicated to Primary – Rural and Entertainment/Recreation/Culture. This is to be expected given these are the three Planning Land Use Codes which contain the highest share of total floorspace in the sub-region.

5 Employment

Figure 8 shows full time and part time employment in the Avon Arc region. The 2021 Land Use and Employment Survey recorded a total number of 7,090 employees in the sub-region. Of these, 70 per cent were classed as full time and 30 per cent as part time.

With the exception of Entertainment/Recreation/Culture and Shop/Retail, full time employees mostly accounted for the largest share of employment within each Planning Land Use Code.



Figure 8: Full time and part time employment by Planning Land Use Code, Avon Arc Land Use and Employment Survey 2021

Industries categorised under the Health/Welfare/Community Services Planning Land Use Code employed the largest share of people in the sub-region (24 per cent). These industries included education, hospitals as well as fire brigades and police. This was followed by the Office/Business Planning Land Use Code, with 17 per cent of employment and subsequently, the Shop/Retail Planning Land Use Code (14 per cent). Persons within the Office/Business Planning Land Use Code were generally employed by State or local government departments or other health services, such as physiotherapists or chiropractors.

Figure 9 shows the number of employees in relation to floorspace for the sub-region. Land uses classified under Shop/Retail and Office/Business are among the highest employers in the sub-region, however recorded a lower level of floorspace than the ten other Planning Land Use Codes. This is to be expected given the nature of industries categorised under Shop/Retail and Office/Business generally employing a higher number of staff relative to floorspace, compared to industries categorised under Primary – Rural, which recorded a very high floorspace to employee ratio. For example, the Land Use and Employment Survey found that land uses such as the grain handling and grading facilities operated by CBH group contain large storage areas for holding grain relative to the number of staff employed to manage the sites. At the time of the survey, the region would have also been outside of their grain harvesting season, further exacerbating the high floorspace to employment ratio.

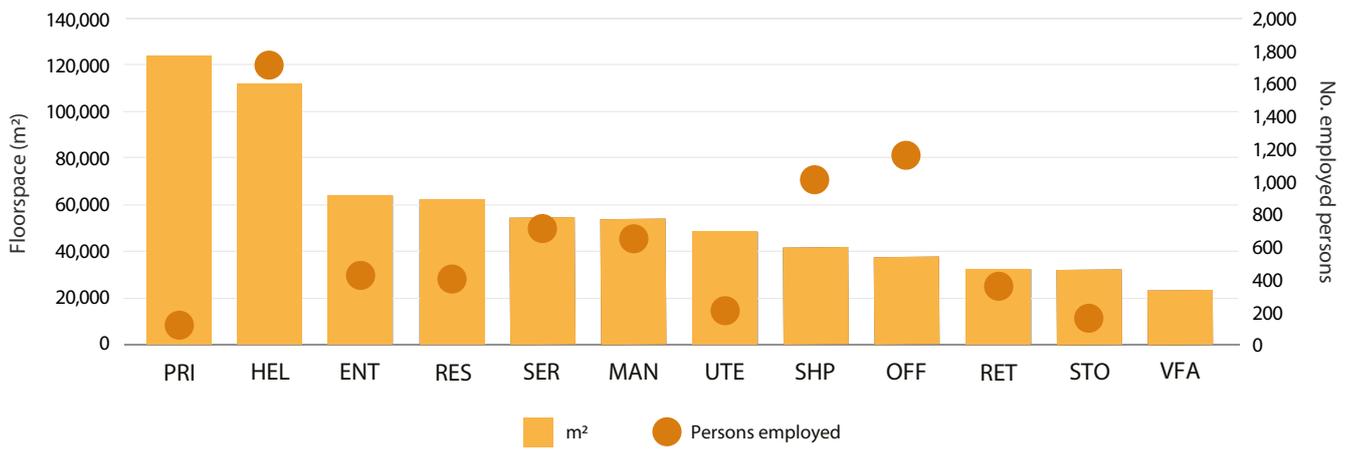


Figure 9: Employment vs. floorspace by Planning Land Use Code, Avon Arc Land Use and Employment Survey 2021

Figure 10 Shows employees by local government in the Avon Arc sub-region. The Shire of Northam contained 67 per cent of the total recorded employment. This is to be expected given Northam’s role as a regional centre within the sub-region. The Shires of York and Toodyay recorded the second and third largest share of employment at 12 and 7 per cent, respectively.

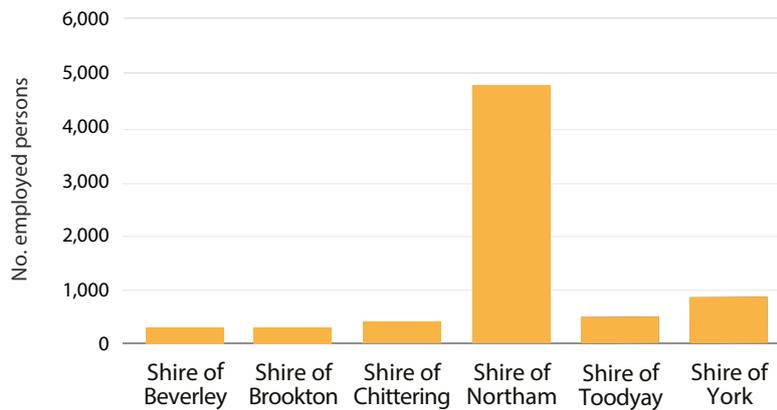


Figure 10: Number of employed by LGA, Avon Arc 2021 Land Use and Employment Survey

Figure 11 identifies which three Planning Land Use Codes within each local government contain the highest share of employment. The Health/Welfare/Community Services Planning Land Use Code remained dominant, accounting for between 23 and 34 per cent of all employment within the sub-region across most local governments. High employment was also recorded in the Shop/Retail Planning Land Use Code, comprising between 13 to 21 per cent share of total employment within each local government.

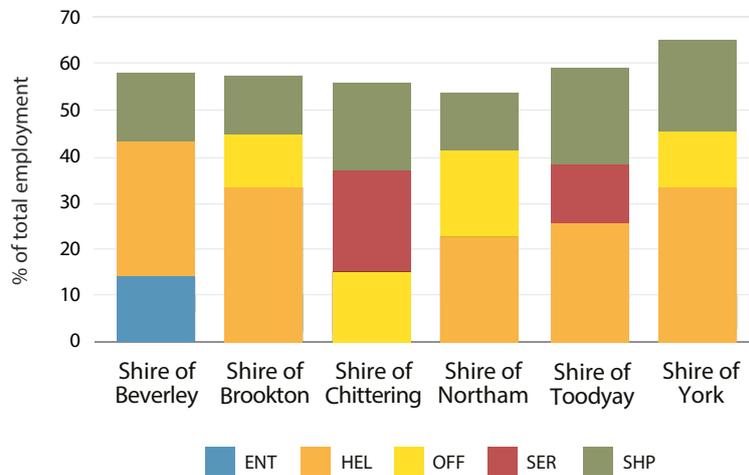


Figure 11: Planning Land Use Code Percentage of employment by LGA, Avon Arc 2021 Land Use and Employment Survey

Figure 12 shows localities in the sub-region containing the highest employment. The locality of Northam contained more than half of all employment recorded in the sub-region. This is to be expected given the town is considered the regional centre of the sub-region. Employment in the locality of York was mostly generated by the hospitality industry (restaurants, cafes and taverns) as well as State and Local government departments. Abattoir operations accounted for 60 per cent of employment in the Wundowie locality.

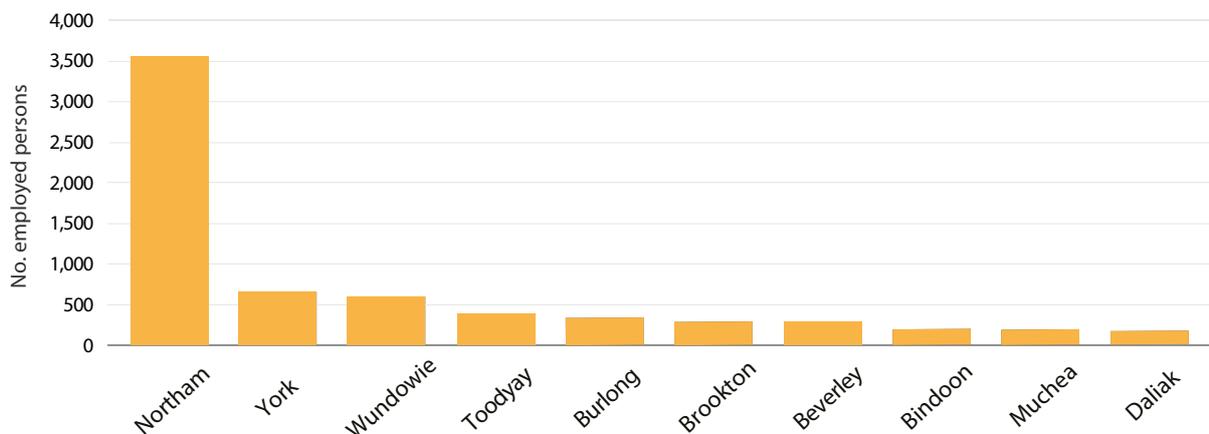


Figure 12: Employment by locality, Avon Arc 2021 Land Use and Employment Survey

Appendices

Appendix A – Planning Land Use Category (Planning Land Use Code)

PRI – Primary-Rural

Land use activities which usually involve the use of large areas of land, including mining, agriculture, fishing and nature conservation. The function of many of these activities is to make use of, or extract from, the land in its natural state. Since such activities are the first step in the production process they are quite distinct from the other categories.

MAN – Manufacturing/Processing/Fabrication

This category includes land use activities involving the manufacture, processing and fabrication of all general goods. Both the scale and associated environmental impact of these activities separate them from other land use categories.

STO – Storage/Distribution

Any land use activity which involves the storage, warehousing or wholesaling of goods usually conducted from large structures, or involving large bulk goods, but does not include activities that attract the general retail trade activities.

SER – Service Industry

This category includes service industries offering a range of services. The scale and environmental impact of such activities require their separation from other land uses. These services include film processing, cleaning, motor vehicle and other repair services, and other servicing activities, including some construction activities.

SHP – Shop/Retail

Any activity which involves the sale of goods from a shop located separate to, and/or in, a shopping centre other than those included in Other Retail.

RET – Other Retail

Many of these activities are not normally accommodated in a shopping centre. By virtue of their scale and special nature the goods of these activities separate them from the Shop/Retail category (e.g. car sales yard, carpet showroom).

OFF – Office/Business

Administrative, clerical, professional and medical offices are activities which do not necessarily require the land area/floor space or exposure of other land uses. Although offices require building and parking facilities, these needs are quite distinct from those of commercial uses and service industries.

HEL – Health/Welfare/Community Services

Includes government, government subsidised and non-government activities, which provide the community with a specific service, such as hospitals, schools, personal services and religious activities.

ENT – Entertainment/Recreation/Cultural

Activities which provide entertainment, recreation and culture for the community and which occur in buildings and/or on land, such as passive and active sports venues, museums, amusements and gambling services.

RES – Residential

Includes all types of residential land use ranging from single housing to nursing homes for the aged, residential hotels, motels, other holiday housing, institutions and religious housing.

UTE – Utilities/Communications

All forms of local, state national and international communication, transportation and other utilities (e.g. electricity, gas, water, sewerage, roads, parking and other transport or communications related activities) covering the public and private sectors.

VFA – Vacant Floor Area

This category accounts for vacant floor areas of buildings, including both non-residential and residential.

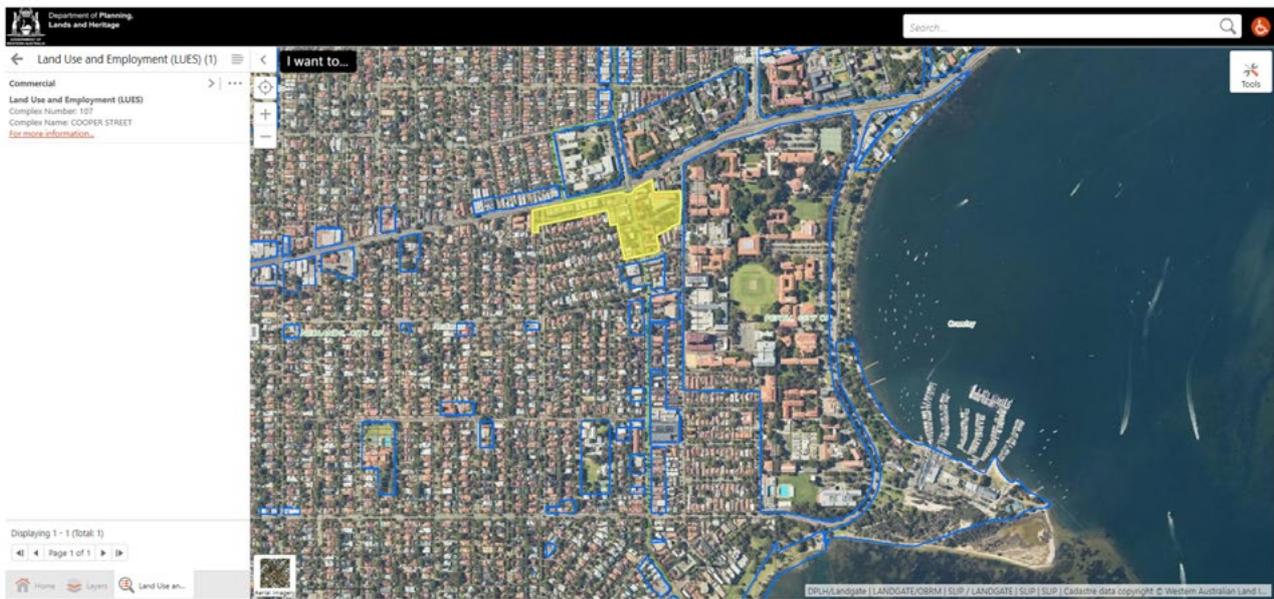
VLA – Vacant Land Area

Includes land which has not been improved by development and remains unused.

Appendix B – Land Use and Employment Survey Spatial view

The below image shows the spatial component of the Land Use and Employment Survey available to the public on the Department’s PlanWA interactive viewer.

The blue outlines are complex boundaries. A complex encompasses land having related zoning and activities (e.g. commercial zoned land will be encompassed within a commercial complex). A complex has a unique name and number assigned by the Planning Land Use Category (Planning Land Use Code) database to allow for easy identification. Details specific to the highlighted (yellow) complex are detailed in tab on the left-hand side of the screen.



PlanWA interactive viewer

The Land Use and Employment Survey data specific to the selected complex can be found in the corresponding Local Government Survey Data Table on the Department’s website. For example, the above selected complex type is commercial with complex number of 107 and a complex name of Cooper Street. See the below highlighted row for the complex’s employment data by Planning Land Use Code. Floorspace data by Planning Land Use Code for the same complex is available in the adjacent commercial floorspace tab.

