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City of Armadale

Kelmscott District Centre Retail and Employment Strategy

Final Draft Report

August 2022

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1 EXECUTIVE SUMMARY

This report provides the Retail and Employment assessment to support the development of the Kelmscott Town Centre Precinct Structure Plan (the Plan). The analysis considers a ten-kilometre catchment around the centre including demographic context, employment context and consideration of competing activity centres. Analysis has been developed in alignment with the draft State Planning Policy 4.2 (SPP4.2) and the City of Armadale Activity and Retail (Commercial) Centres Strategy (the draft ARC Strategy).

The Kelmscott Town Centre (the KTC) plays an important role in meeting the goods and services needs of the surrounding population and those driving along Albany Hwy. The Centre is planned to increase to 25,000m^2 by 2031 with a number of other key centres developing to support most of the population growth in the City of Armadale. The Armadale City Centre is planned to expand significantly to meet its role as a Strategic Metropolitan Centre. This means that further growth (above that in the draft ARC Strategy) in the KTC is mainly required to support increased residential density and commercial activity that is identified in the Plan.

The KTC is a large district centre that supports almost exclusively population driven industries. There are a number of opportunity industries going forward including:

- Retail Trade
- Food and Beverage Services
- Health Care and Social Assistance
- Education and Training
- Professional Services (population orientated)

These industries can be targeted to improve the viability and vibrancy of the KTC.

Floorspace analysis identified specific gaps in detailed floorspace uses based on relevant benchmarks. There were three gaps that should be addressed through the Plan, including:[1]

- Entertainment, Recreation and Cultural (ENT) uses
- Health, Welfare and Community Service (HEL) uses
- Office (OFF) uses

It is recommended that ENT and HEL uses be targeted in the shorter term to provide the amenity required to support OFF uses and residential development in the medium to longer term.

The gaps have been combined with projected increases in floorspace required based on residential development scenarios from the Plan. Retail gravity modelling was used to inform increases in Shop/Retail floorspace, accounting for current and future supply in surrounding activity centres. This method ensures the KTC supports additional local residential populations while respecting the activity centre hierarchy proposed by the draft ARC Strategy. Three scenarios were tested:

- Business as Usual: no increased development in the KTC

[1] Please see Section 14, Appendix 3, for floorspace Planning Land Use Code (PLUC) definitions

- Potential Yield: an additional 885 dwellings in the KTC
- Full Yield: an additional 3,259 dwellings in the KTC[2]

The floorspace development scenarios are as follows (Figure 60).

Figure 1. Floorspace Development Scenario Summary[3]

PLUC	Scenario	2021	2026	2031	2036	2041
SHP	BAU	22,573	22,573	25,000	25,000	25,000
	Potential Scenario					25,507
	Full Scenario					30,394
ENT	BAU	4,263	6,474	6,932	6,932	6,932
	Potential Scenario					7,028
	Full Scenario					7,951
HEL	BAU	217	217	1,098	1,098	1,098
	Potential Scenario					1,103
	Full Scenario					1,150
OFF	BAU	7,923	7,923	10,327	11,880	11,880
	Potential Scenario					12,058
	Full Scenario					13,773
RET	BAU	4,710	4,710	5,216	5,216	5,216
	Potential Scenario					5,322
	Full Scenario					6,342
SER	BAU	3,510	3,510	3,887	3,887	3,887
	Potential Scenario					3,966
	Full Scenario					4,726

It is estimated there could be demand for between 2,900m^2 and 7,800m^2 additional SHP floorspace and 8,400m^2 and 13,300m^2 additional Non-SHP floorspace at the KTC. The upper limit for SHP floorspace would result in a 5,394m^2 increase compared to the ARC Strategy.

Employment scenarios were developed based on the identified additional floorspace to understand the potential contribution of the KTC to the City's ESS target, established in the sub-regional planning framework. It is estimated that the City will require 21,000 jobs to meet the target by 2050. It is estimated that the KTC will support between 310 and 600 additional jobs by 2041. This equates to a contribution of between 1.5% and 2.8% of the total additional jobs required to meet the ESS target.

[2] This scenario provides an upper limit of the development that is possible in the KTC based on the Plan. It is unlikely that this level of development will be achieved within the timeframe being considered in this analysis.
[3] There is some Shop/Retail floorspace within the KTC boundary that does not appear to be accounted for in the draft ARC Strategy, which has guided the analysis. The bulk of the missing floorspace is at the River Rd Centre and has been assumed to remain constant in future. This means that the total SHP floorspace at any time point is +5,620m^2

A business survey and performance assessment of the KTC provided opportunities to support the KTC in implementing the Plan. There are a number of actions the City can use to implement the Plan to achieve a high-performing and activated KTC that supports local business needs. These include:

- Require active frontages for key sites and exposure areas as redevelopment occurs
- Providing clear wayfinding between destinations
- Require key active frontages without separation from footpaths when redeveloped (i.e. along Denny Ave)
- Continue the City's programs to improve regulatory and planning processes
- Provide increased support and information to local businesses
- Encourage parking to be external to the KTC (around the perimeter)
- Require that future multi-storey or internalised parking provides primary access via a Main St and not directly into a shopping centre
- Identifying priority uses for important active frontages (i.e. food and beverage, high turnover retail, etc.) and allowing for some specialty uses in these locations (i.e. clothing and footwear retail, jewellery retail, etc.)
- Encourage development of destination operators (i.e. supermarkets, large entertainment facilities, etc.) in locations that promote pedestrian traffic along activated frontages
- Market local industry capabilities to attract opportunity industries
- Lobby State Government for improved transport connections

2 INTRODUCTION

The City of Armadale is developing an Precinct Structure Plan (the Plan) for the Kelmscott Town Centre (KTC). The plan looks to provide guidance for the development of the KTC based on an understanding of the drivers for development and demand for employment, goods and services. This report investigates the floorspace and employment needs for the KTC to inform the Plan.

The City has undertaken a draft Activity and Retail (Commercial) Centres Strategy (the ARC Strategy) that outlines growth projections for all planned centres in the City. The KTC is to experience limited Shop Retail growth as other centres expand to meet the needs of population growth. This analysis supplements the strategy by considering:

- Current gaps in Shop/Retail (SHP) and non-SHP uses specifically relevant to the KTC
- Growth associated with additional dwellings in the KTC that arise as part of this planning process

The process used to develop the RES includes:

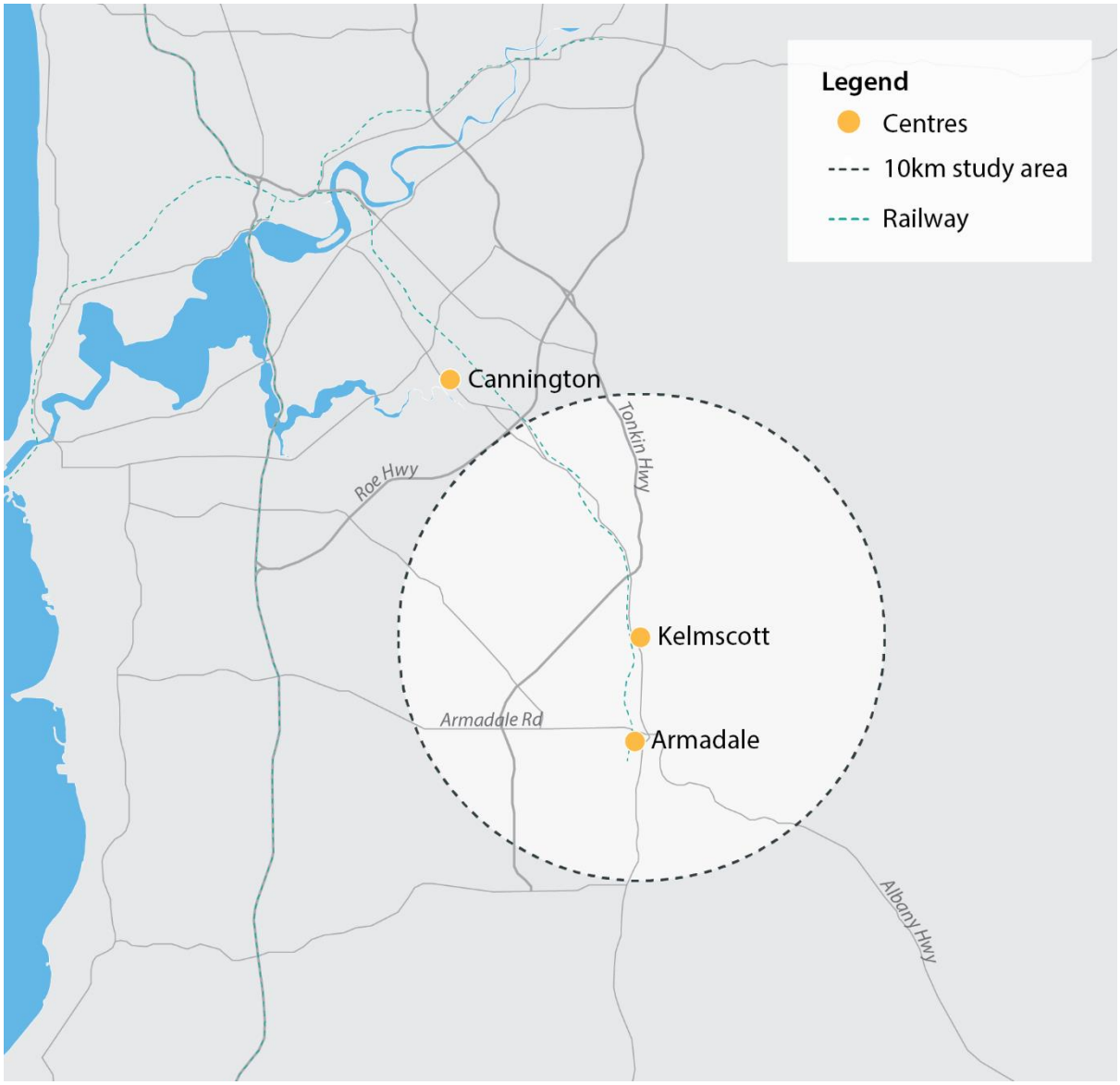
- Strategic Alignment
- Context Analysis (Demographic, Socio-economic, Employment)
- Centre Performance Assessment
- Floorspace Gap Analysis
- Retail and Non-Retail Needs Assessment
- Scenario Development

The following sections provide spatial and policy/strategy context that inform the RES.

2.1 Kelmscott District Centre Catchment

The Kelmscott District Centre is located strategically along the Albany Highway and the Perth to Armadale rail line, providing it with a direct connection to the Perth CBD via road and rail. Albany Highway is a major road that generates upwards of 30,000 vehicle movements per day through the KTC. Secondary routes including Brookton Highway and the Canning Mills Road connect residents in the east of the City of Armadale to Kelmscott. As these residents are serviced only by a small IGA in Roleystone, many rely of Kelmscott for their weekly retail needs. As such, a 10 km catchment radius has been selected to appropriately reflect visitation to the KTC (Figure 2).

Figure 2. Kelmscott District Centre Catchment

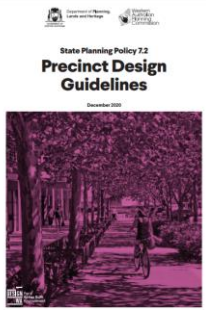


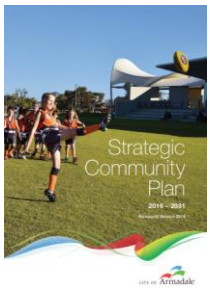
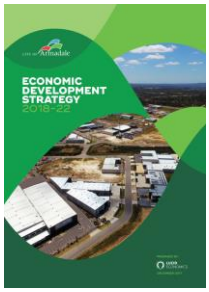
Source: Pracsys 2021

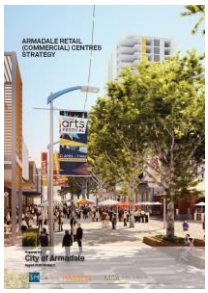
The KTC is located approximately 4km from the Armadale City Centre (the primary centre in the City's activity centre hierarchy) and is the second highest ranking centre in the City's activity centre hierarchy. The KTC plays an important role in supporting the employment, goods and services needs of the catchment population and must maintain this role into the future without impeding on the Armadale City Centre's role as a Strategic Metropolitan Centre.

2.2 Background Document Review

This section summarises the relevant policy and strategy documentation that inform the RES.

DOCUMENT	SUMMARY	RELEVANCE TO KTC
Perth and Peel @ 3.5million **Department of Planning, Lands and Heritage, 2018** 	Perth and Peel is a land use planning and infrastructure framework for Western Australia at a population of 3.5 million. A core aim is in promoting local employment opportunities to increase the number of people who live and work within the same region. This includes a focus on attracting strategic economic and employment land uses within the strategic metropolitan centres and key industrial centres, while maximising use of existing and proposed infrastructure.	• Future development must maximise existing infrastructure • Regional employment targets mean a balance must be struck between residential growth and employment growth
State Planning Policy 7.2 Activity Centres (Draft), Department of Planning, Lands and Heritage, 2020 	Good precinct design must incorporate the design elements of; urban ecology, urban structure, public realm, movement, land use, and built form. Land use planning should reflect the role of the precinct in its wider context. Land use type, proportion, mix and location should respond to community needs; current and intended future activities and functions, alongside broader trends. Diverse and adaptable land uses will support improved place outcomes, social interaction, civic engagement and access to goods, services and employment.	• Major trip-generating land uses (such as major retail, office and other employment land) should be in locations that are most accessible by walking, cycling and public transport. • Points of interest and activities need to be established along key pedestrian routes to facilitate ease of wayfinding within KTC. • Opportunities for active uses and public space near public transport nodes • A mix of uses such as various housing types, community facilities, commercial and business uses, as well as public spaces can encourage community diversity, social interaction and walking and cycling • Consider land use mix horizontally and vertically across the KTC. Vibrancy can be promoted by prescribing a vertical and horizontal mix of compatible land uses

DOCUMENT	SUMMARY	RELEVANCE TO KTC
State Planning Policy 4.2 Activity Centres (Draft), Department of Planning, Lands and Heritage, 2020 	Activity centres are multi-functional community focal points that vary in size and function. SPP 4.2 aims to develop activity centres which meet different levels of community need and enables employment goods and services to be accessed equitably and efficiently by the community. The density and diversity of housing in and around activity centres is maximised to improve land efficiency and housing variety. Development within activity centres aims to be well-designed, cohesive and functional and capitalises on the use of existing and planned infrastructure. Walking, cycling and public transport, to and between activity centres, should be maximised while private vehicle trips and dependence on parking is reduced.	• Wayfinding and accessibility for pedestrians and cyclists needs to be deconflicted to promote connections across Albany Hwy • Activity centre planning should maximise the use of existing and planned infrastructure through effective design. Adaptive reuse or improvements to accessibility should be investigated to improve utilisation • The hierarchy of activity centres should not be undermined through non-viable development. This is addressed through development of a Needs Assessment to guide the precinct structure plan
Strategic Community Plan, City of Armadale, 2018 	The City's Strategic Community Plan is the blueprint for the direction of the City out to 2031. It identifies four major goals with Community and Economy being relevant to the KTC. Community - The range and quality of services offered within the area plays a key role in making Armadale a preferred place to live by fostering community pride, safety and healthy lifestyles. Economy - A strong economy that improves employment opportunities and also provides regional services, facilities and infrastructure.	• Future plans for the City must consider economic and employment growth whilst balancing community service delivery • Developing the liveability of the KTC through appropriate land uses in line with its future vision and leveraging its transport links
Economic Development Strategy 2018-22, City of Armadale, 2017 	The vision of the Economic Development Strategy is for "[The City is] to have a vibrant and sustainable economy that provides a diversity of jobs and investment opportunities." As the economy within the City continues to evolve, there will be growing opportunities for a variety of population driven business services, including accounting, financial planning and legal services. Kelmscott is designated as a District Centre and is a major retail and commercial town centre, as well as an	• KTC provides an opportunity to promote commercial and residential opportunities through transit-orientated development (TOD) • Future office-based employment growth within the City, may be appropriate for KTC.

DOCUMENT	SUMMARY	RELEVANCE TO KTC
	established residential and industrial area.	
Armadale Retail (Commercial) Centres Strategy, City of Armadale, 2020 	The City of Armadale is rapidly growing with many green field developments to occur over the next decade. At the same time, opportunities for increased density have been identified for KTC. Kelmscott provision of Shop / Retail Floorspace is only expected to modestly increase form 22,574m^2 (2016) to 25,000 m^2 (2041).	• Changing demographic and population dynamics surrounding KTC due to elements such as macro-economic fluctuations and dwelling uptake may facilitate additional or hastened development of shop / retail and other floorspace uses • Increased density in and around KTC will increase demand for floorspace uses within the night-time economy
Town Planning Scheme No. 4, City of Armadale, 2005 	Current provisioning within the Town Planning Scheme restricts permissible land uses in surrounding land area of the KTC to maintain the central retail Town Centre functions located within the unrestricted central area of the KTC. In effect, high trip generating convenience retail and entertainment land uses are not permitted in order to maintain the primacy of the KTC.	• Restrictions on permitted uses consolidate the retail emphasis of the town centre core and provide benefits for activation and walkability. • Floorspace projections will need to consider the permitted uses for recommendations to remain feasible

3 DEMOGRAPHIC AND SOCIO-ECONOMIC ANALYSIS

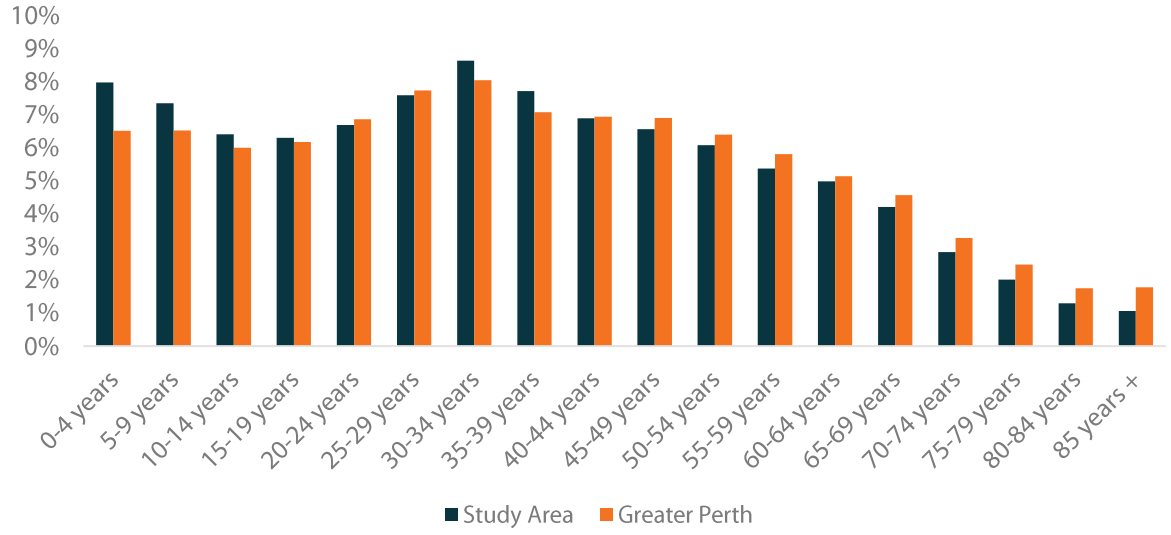
Making decisions about the future of an activity centre requires an understanding of the context and environment of where an activity centre operates and also its unique characteristics from the perspective of those who depend on it as a place to work and a place to visit. This understanding provides a reliable baseline from which a vision for the centre can be established and viable development scenarios with relevant interventions can be designed.

Without users regularly accessing the centre for goods and services, the centre will contract and fail to grow, reducing its amenity to residents and visitors. It is therefore prudent to examine the characteristics of the userbase to ensure that future planning is relevant and addresses their needs.

Demographic Profile

The study area includes a higher proportion of children and young adults than the Greater Perth area. This consistent with demographic profiles of areas with higher levels of greenfield housing developments. The age profile is expected to flatten over the next 20 years as adults age in place and children mature and move out of the household. The age profile and projected changes mean that planning for age-appropriate infrastructure including education (primary, secondary and tertiary/vocational) and dwelling diversity will be critical to supporting local residents. Similarly, as the population ages, aged care and health related floorspace is expected to increase in demand.

Figure 3. Study Area Age Profile



Source: ABS 2016

Household Composition

The study area has a high proportion of larger households than the Greater Perth average. This reflects the high proportion of families within the study area (confirmed by the age profile presented in (Figure 3).

Figure 4. Household Composition in Study Area

Source: ASB 2016

Weekly spending differs considerably by life stage with a lone person under 35 spending $849 per week versus $1,572 for a couple without children and $1,833 for a couple with at least one child under five[4]. The high proportion of housing costs as a percentage of total weekly spending for Couples with a youngest child under five may lead to less overall discretionary spending.

Figure 5. Australian Spending Habits by Type and Family Lifecycle

	Lone person aged under 35	Couple only (At least one person aged under 35)	Couple with kids (youngest child under 5)	Couple with kids (youngest child between 5-14)	Couple with kids (youngest child 15 and above)
Housing	$284	$381	$458	$355	$359
Fuel and power	$24	$35	$48	$54	$53
Food and drink	$122	$239	$282	$336	$332
Clothing and footwear	$18	$54	$62	$64	$61
Medical and health expenses	$23	$69	$85	$104	$110
Alcohol	$22	$39	$28	$35	$47
Transport	$97	$243	$247	$309	$292

[4] Moneysmart , 2016, Australian Spending Habits, https://moneysmart.gov.au/australian-spending-habits

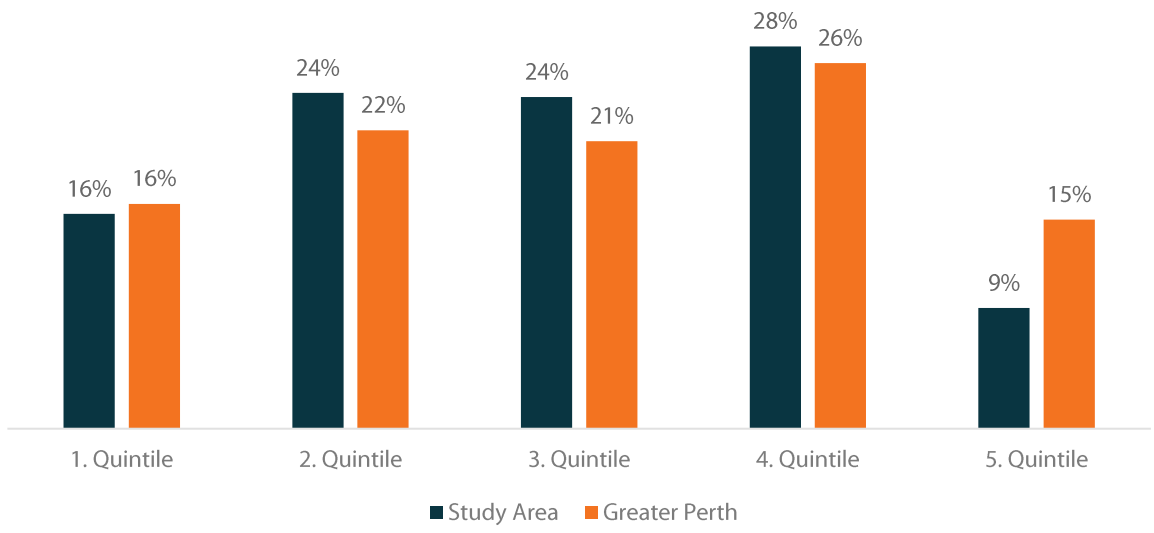
	Lone person aged under 35	Couple only (At least one person aged under 35)	Couple with kids (youngest child under 5)	Couple with kids (youngest child between 5-14)	Couple with kids (youngest child 15 and above)
Recreation	$83	$176	$158	$263	$243
Total	**$849**	**$1,572**	**$1,833**	**$2,085**	**$1,990**

Source: Moneysmart 2016

Household Income

Income demographics of an area play an important role in the success of retail developments as the level of spending on retail goods and services is primarily determined by household income. Quintiles provide a simple way of understanding how income is distributed within a study area and assessing the likely retail expenditure behaviour of study area residents. Lower quintiles spend a higher proportion of their income on basic goods and services but typically spend less overall than upper quintiles. The study area has a lower proportion of high income (5th quintile) households than Greater Perth, with a greater concentration in the 2nd, 3rd and 4th quintiles. With 64% of households in the study area falling in the bottom three quintiles, it is likely a greater proportion of available expenditure is spent on convenience retail and there may be slightly less demand for comparison retail goods. .[5]

Figure 6. Household Income Quintile



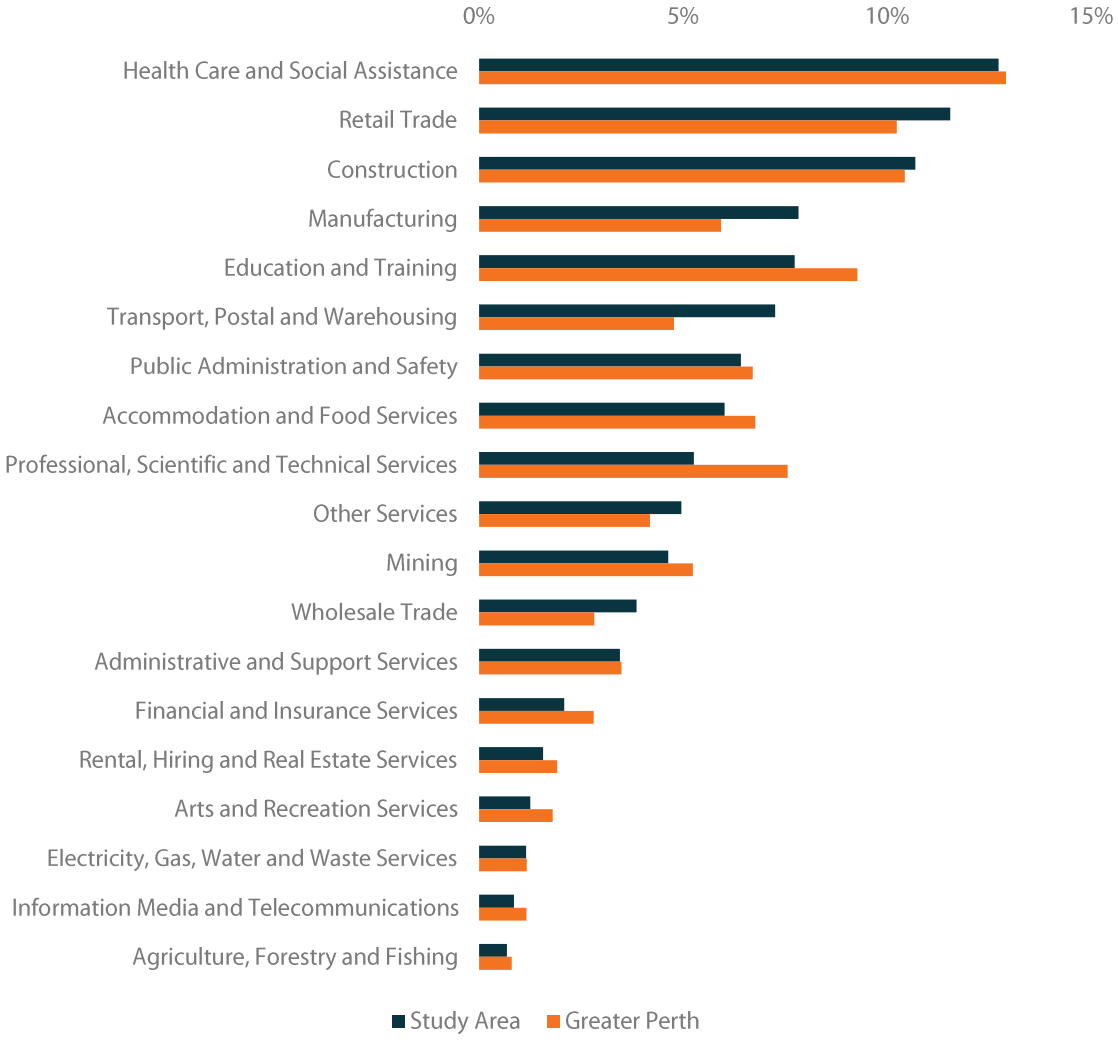
Source: ABS 2016

[5] ABS 2017, 6523.0 – Household Income and Wealth, Australia, 2015-2016

Residents Industry of Work

The study area has a higher-than-average proportion of workers employed in Retail Trade, Manufacturing, Transport, Postal and Warehousing and Wholesale Trade, whilst having less Professional, Scientific and Technical Services and Education and Training. This is likely due to the area's proximity to the Crossroads, Maddington, Cannington and Welshpool industrial areas; Forestdale Business Park; and, the ease of access to Perth Airport and the surrounding logistic nodes, afforded by Tonkin Highway. Should the KTC develop into a Transport Orientated Development there would likely be greater capacity for office-based employment opportunities such as professional services. Residents would need to have access to appropriate education (for younger persons) and training (for those in the workforce already) to take advantage of these opportunities or skilled workers would need to be attracted to the area. High quality amenity will be required to retain and attract skilled workers to the KTC, ensuring the centre's liveability is maintained or improved as population and the local workforce grows.

Figure 7. Industry of Employment of Residents

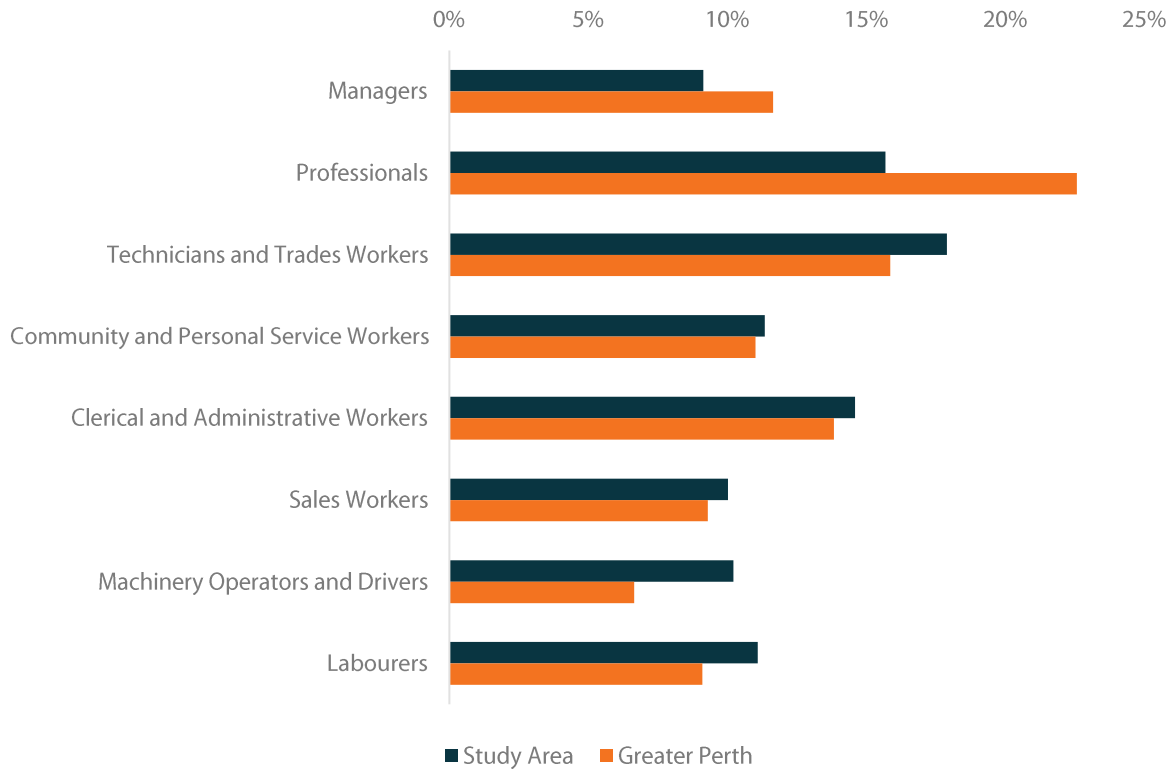


Source: ABS 2016

Occupation

The study area has a higher proportion of individuals employed in technical and trades roles with a considerably lower amount of managers and professionals that in the Greater Perth region. Automation is creating greater demand for managerial roles and occupations with IT skills. There is a shift in the nature of many occupations that require manual labour that is creating skills gaps, particularly in industries such as manufacturing. Planning for the KTC needs to consider the likely increase in demand for education and training that will be required to support the current and future workforce in developing the skills required for future occupations. Opportunities to support managerial occupations by targeting the office-based elements of businesses in nearby industrial and logistics areas should also be considered.

Figure 8. Occupation of Residents in Study Area Ordered by Descending Skill Level

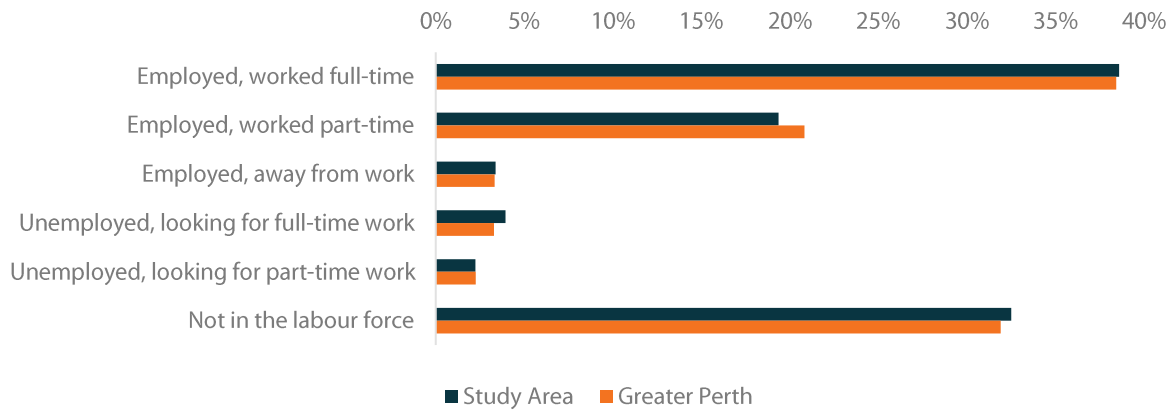


Source: ABS 2016

Labour Force Status

The study area has similar labour force status statistics as Greater Perth. Notably, the study area has a lower proportion of part time workers and a higher proportion of those unemployed and looking for work. The study area also has a higher proportion of those not in the labour force which may reflect the relatively higher proportion of children in the study area. Accommodation and food services, retail trade and administrative and support services are the industries with the highest proportion of part time workers.

Figure 9. Labour Force Status

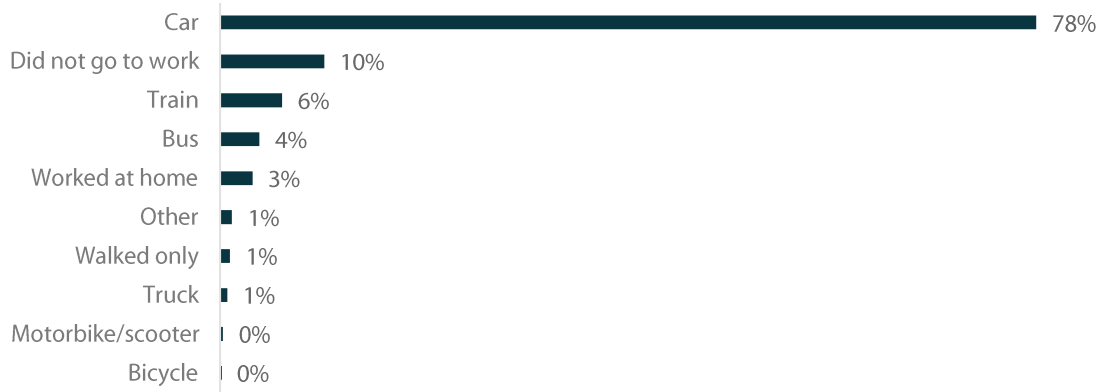


Source: ABS 2016

Travel to Work

The primary mode of transport for study area residents to work is by car. Although Kelmscott and the City of Armadale are located along the Armadale train line, only 6% of residents indicate they use the train to commute to work. Approximately 8% of City of Armadale workers work in the City of Perth suggesting that individuals are choosing to drive rather than take public transport. This is common in outer suburban areas which are characterised by greater reliance on private vehicles, even where access to public transport is available. Increased density around the train station would accommodate a population that is more likely to use public transport as they would be within a walkable catchment. Higher rates of usage could provide the scale required to increase the frequency of trains and make public transport more attractive to surrounding residents, raising the overall usage rate. It is noted that in the short term train patronage will be negatively affected by the Armadale line shut down in 2023 but should return to the long term trend upon completion.

Figure 10. Mode of Transport for Study Area Residents



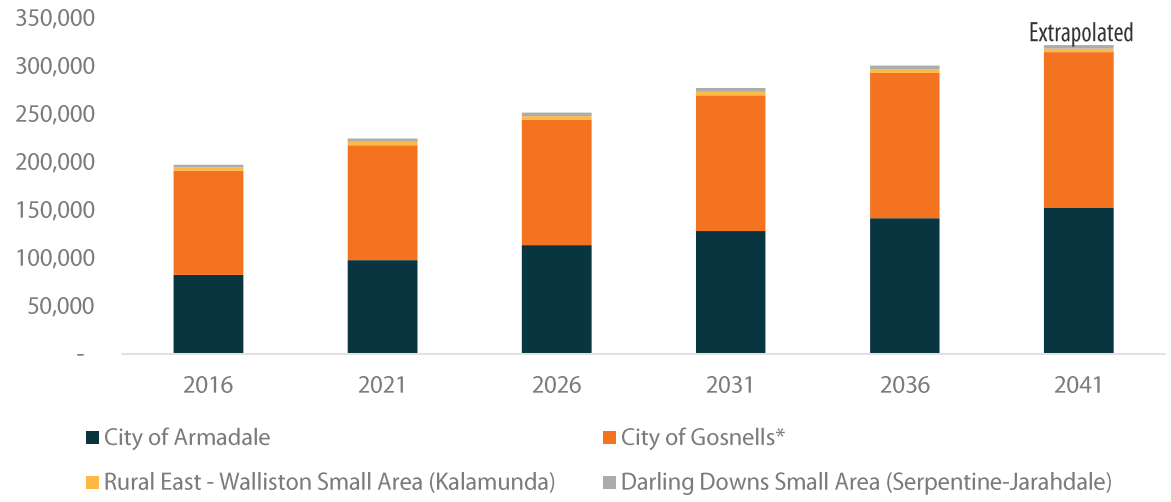
Source: ABS 2016

Note: Transport mode counts accounts for those that use more than one mode of transport per journey i.e. those that drive to the train station will count against both car and train.

3.1 Population Growth

The study area has an estimated population in 2021 of 224,100[6]. Forecast.id small areas were aligned as closely as possible to the identified catchment to provide an estimated projection; the Study Area is expected to reach approximately 300,000 by 2041.

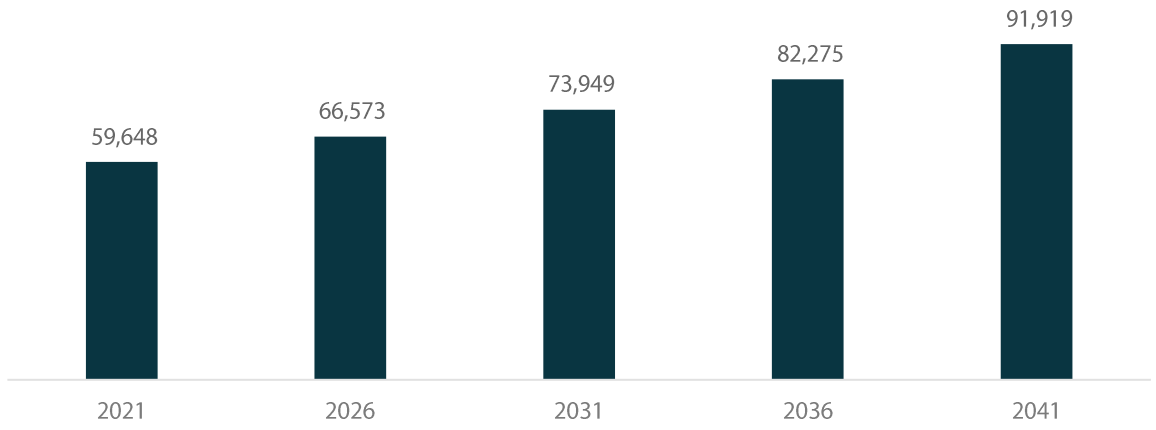
Figure 11. Study Area Population 2016 - 2041



Source: Forecast.id 2021, Pracsys 2021 * City of Gosnells excludes the small areas of Beckenham and Langford

WA Tomorrow projections were used in the Gravity modelling as they use ABS spatial areas which align with the more detailed ABS Statistical Area Level 1 spatial areas that are used for gravity modelling. Between 2021 and 2041, there is an estimated 54% growth in the number of dwellings (Figure 12).

Figure 12. Study Area Dwellings 2021 - 2041



Source: WA Tomorrow 2018, Pracsys 2021

[6] Forecast.id 202. The population estimate is high as the Forecast.id areas do not fit within the identified 10km catchment. Dwelling estimates are used in the gravity modelling and are more closely aligned to the catchment as they used more detailed ABS SA1 spatial areas. Darling Downs and Rural East make up a very small proportion of residents with 3,356 and 3,439 residents respectively.

This high growth rate is expected to be concentrated within the greenfield developments of Forrestdale, Harrisdale, Haynes, Hilbert, Piara Waters and Seville Grove, located between 5 to 10km from the KTC. The KTC Precinct Structure Plan is expected to increase the number of dwellings in the KTCs walkable catchment, which will increase demand for goods and services in the KTC (this is investigated further in Section 7.4, Estimated Retail Potential.

4 EMPLOYMENT ANALYSIS

This section examines the study area and KTC in terms of business and worker userbase. Understanding the type of workers and business operations in the KTC will help develop a vision and interventions that suits their requirements. This could include initiatives to obtain specific infrastructure to support the growth of business or extra floorspace of varying types to support growth. An understanding of the types of industries that exist in the KTC can inform what types of infrastructure and urbanisation initiatives may work best. Similarly, deficits in desired types of activity can be examined and initiatives identified in attempting to reduce the deficit.

4.1 Employment Quality

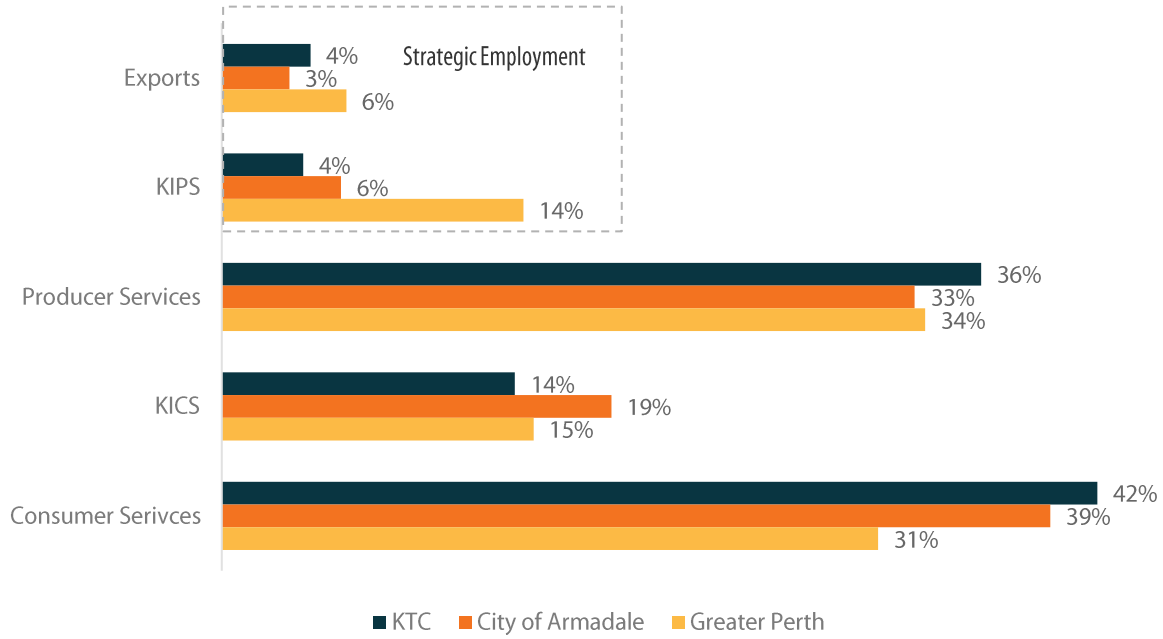
Employment Quality relates to both the skill level required of an employee and the drivers for the industry:

- Population driven employment caters to the needs of the local population (i.e. residents, workers, visitors, etc.). This activity includes; retail and hospitality, construction and industrial services, civic, healthcare and education, and the business-to-business supply chains that service these industries. This type of activity is largely catered for in activity centres.
- Strategic employment results from economic activity focused on the creation and transfer of goods and services to an external market. Employment resulting from this activity may be distinct, in industries where there is little or no local demand (e.g. iron ore mining), or in the same industries as population-driven activity but with a different focus (e.g. manufacture of food/wine, higher education, tourism).

Based on these factors a set of Employment Quality categories can be defined to understand the factors influencing employment in the KTC and study area. These include:

- Consumer Services (CS – e.g. retail, food and beverage workers, etc.)
- Knowledge Intensive Consumer Services (KICS – e.g. health, education, etc.)
- Producer Services (PS – e.g. warehousing, wholesaling OR equipment manufacturing, equipment servicing, etc.)
- Knowledge Intensive Producer Services (KIPS – advanced manufacturing, professional services, etc.)
- Export-orientated employment (Exports – e.g. mining, agriculture, etc.)

Figure 13. Employment Quality



Source: ABS 2016, Pracsys 2021

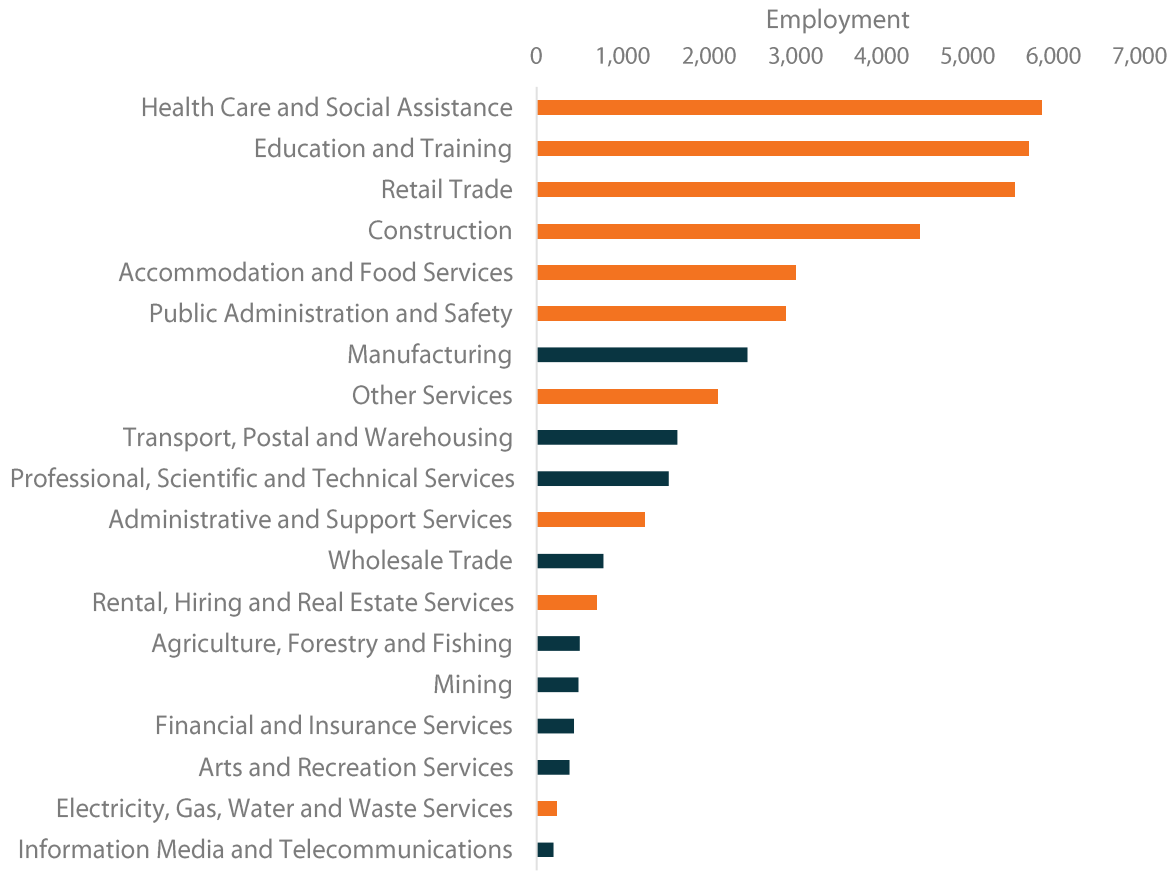
Within the KTC and the wider City, there is a high representation of consumer services (retail and other consumer facing businesses) and KICS (education, health care, etc.) with an under representation in strategic employment. This indicates that growth in employment will require growth in population. The City as a whole appears to provide consumer services and KICS to support the wider region based on the high concentration in these categories. The high overall levels of consumer services in the KTC are related to its location along Albany Highway and along the Armadale trainline. It provides goods and services to residents from the surrounding region (particularly to the East) and passing traffic as they travel to work.

It is unlikely that the KTC will be able to achieve a greater level of Strategic Employment. This is due to its suburban location and the primary function of a District Centre, which is designed to cater to the daily and weekly shopping needs of residents and provide some employment opportunities. Should the KTC develop as a TOD, there could be a shift towards office-based employment that could support higher-levels of KICS, offering higher-skilled job opportunities and providing a greater level of services available locally to residents. The scale of this shift will be affected by private demand and the shift towards working from home. There could be the opportunity to provide localised shared offices to cater to small businesses that work predominantly from home but need an office premises once or twice a week.

4.2 Employment Profile

The top six industries in the Study Area are predominantly population driven (highlighted in orange in the graphic below).

Figure 14. Industry of Employment



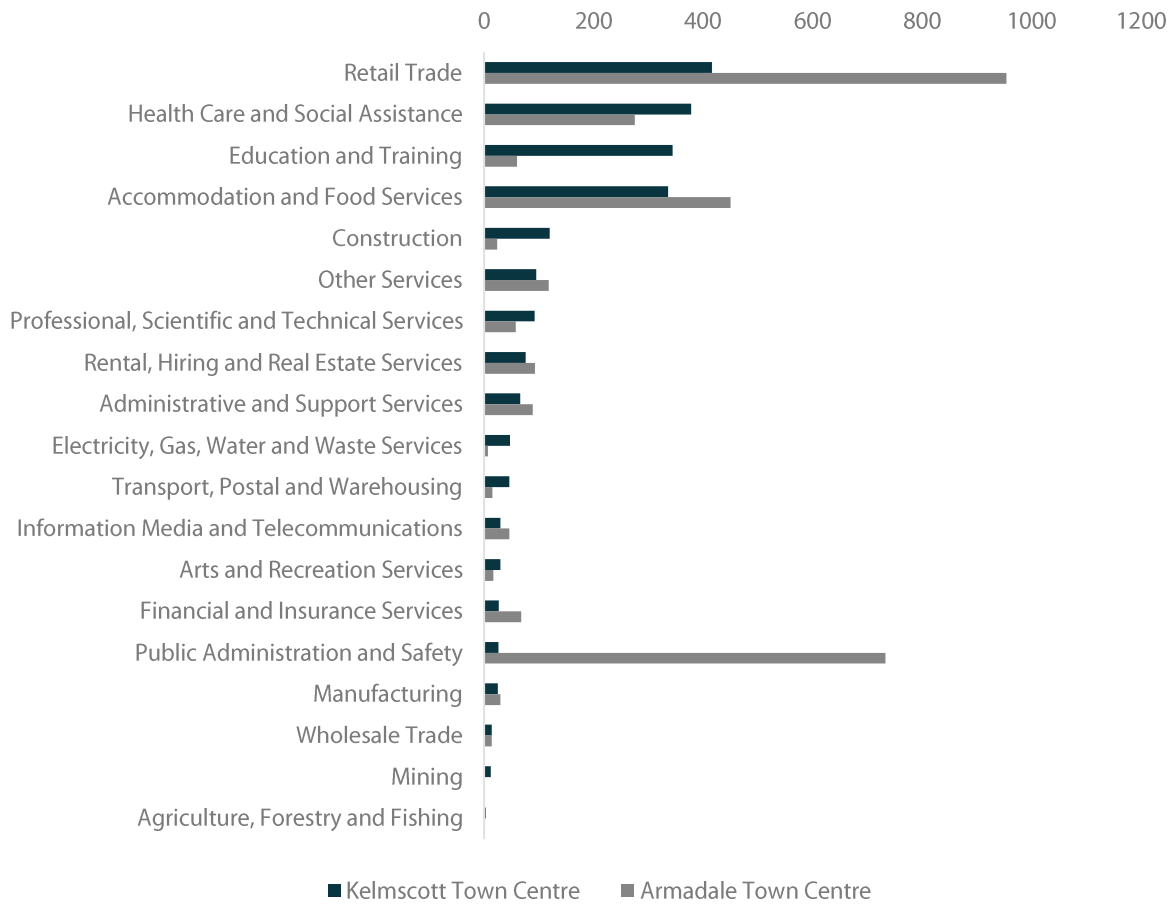
Source: ABS 2016

Note: Orange indicates Population Driven, Dark Blue indicates Strategic employment

Employment Within the Kelmscott Town Centre

The employment profile within the KTC differs in function with the Armadale City Centre. Retail trade is the highest employing industry in both centres, however, Armadale has a greater civic focus, providing employment to support the wider region.

Figure 15. Kelmscott Town Centre Industry of Employment



Source: Pracsys 2021

Note: due to the shape of ABS Spatial Boundaries, the KTC employment figures include some employment that is not within the Notional Town Centre Boundary.

The four main industries in and directly surrounding the KTC provide an almost even mix of consumer service and KICS employment. This means there are both low skill and high skill opportunities. As the KTC develops into a TOD there should be a focus on providing sufficient space for KICS industries such as health and education to locate in the KTC to meet the increased demand from increased residential density.

There are currently limited strategic employment opportunities in the KTC; this is not likely to change to a significant extent unless there is a major catalyst for growth in relevant businesses. The majority of strategic employment in the study area is likely to be accommodated by industrial areas. Should strategic employment in activity centre uses eventuate (i.e. office based strategic employment), this would likely locate, and should locate as a priority, in the Armadale City Centre, given its primacy in the Activity Centre Hierarchy.

Some office-based industries such as specific Professional, Scientific and Technical Services that are population driven (i.e. accounting, legal, etc.) could be attracted to these centres as they evolve. Key attractors for these industries are high-quality amenity, walkability and a diverse offering of day and nighttime activities.

Opportunity Industries

The analysis highlights the KTC's strengths in population driven industries. These industries are likely to continue experiencing high levels of demand as the population within the catchment grows. With the opportunity to develop the KTC as a Transit Orientated Development (TOD) there may be further opportunities in office -based uses, although it is noted the Armadale City Centre is intended as the primary location for these uses in the Activity Centre Hierarchy.

The key industry opportunities for the KTC are in:

- Retail Trade
- Food and Beverage Services
- Health Care and Social Assistance
- Education and Training
- Professional Services

Floorspace analysis has identified gaps within these industries that could be addressed to improve the performance of the KTC in the shorter term (Figure 16).

Figure 16. Detailed Industry Opportunity Uses

Opportunity Industry	Detailed Use
Retail Trade (Activity Centre)	• Clothing retail • Supermarkets and Grocers • Department Stores (includes Discount Department Stores) • Electronic Equipment Retail
Retail Trade (Highway – Bulky Goods)	• Furniture and home furnishings • Electronic Equipment Retail • Hardware retail • Light fittings retail
Health Care and Social Assistance	• Optometry and optical dispensing • Allied Health Services • Dental Practices
Food and Beverage/Tourism	• Restaurant, cafes and function centres • Drinking places (alcoholic beverages) • Function and reception centres • Penny arcades and electronic amusement/arcades • Travel arranging services
Education and Training	• Child day care centres creche and nurseries • Libraries • Special training and schooling services
Professional Services	• Real Estate Operators • Banking • Business and management consulting services • Internet related business

Opportunity Industry	Detailed Use
	• Legal services • Architectural services

Source: ABS 2016, DPLH 2016

These industries will be population driven meaning the potential increase in employment associated with these industries can be tied to population growth.

4.3 Employment Self Sufficiency and Employment Self Containment

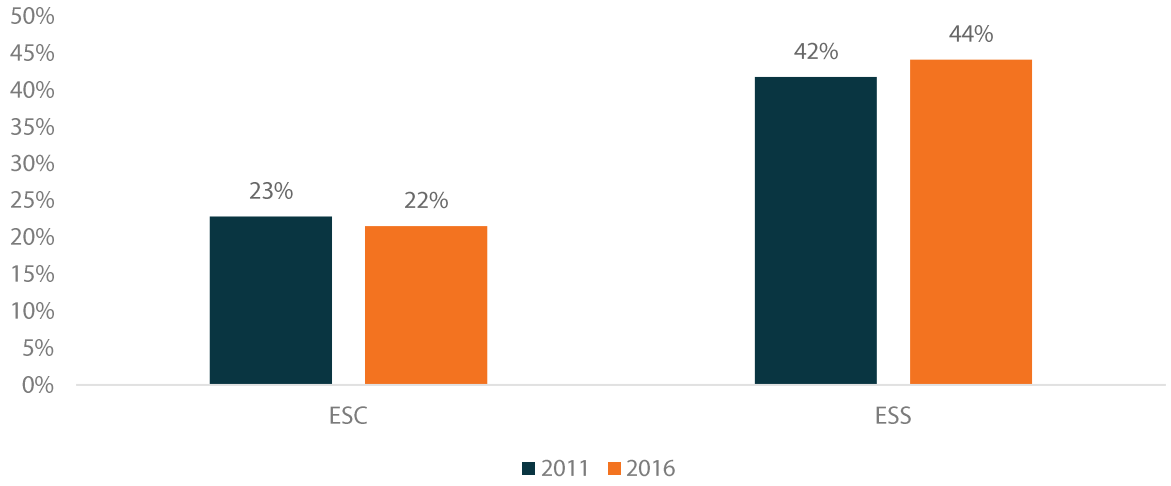
Employment self-sufficiency (ESS) is the ratio of local jobs to local resident workers. A low ESS indicates that there is a larger working population relative to the number of job opportunities within the area. A low ESS is typical of outer metropolitan LGAs whilst a high ESS (over 100%) is typical of central LGAs. Employment Self-Containment (ESC) is the proportion of local jobs filled by local residents and is an important measure of workforce and resident labourforce skill alignment.

The South East Metro target for ESS is 61% by 2051[7] and the current ESS for the City is 44%. Employment in the City will need to grow faster than population if the City and the Sub-region are to meet the 61% target. Although, this task becomes increasingly difficult the faster the population grows, a positive trend in ESS was observed between 2011 and 2016. Ensuring that centres within the City provide a diversity of offering that cater to the goods and service needs of the population will be key to meeting this target.

Over the 2011 to 2016 period, there was a net reduction in residents filling local jobs (ESC). This suggests that the additional employment opportunities created over the period were filled by proportionally higher rates of those living outside the area. There is a potential mismatch between local skills and the skills required by local industry.

[7] 2050 Eastern ESS Target, South Metro Peel Sub Regional Planning Framework, p 105, table 3.1

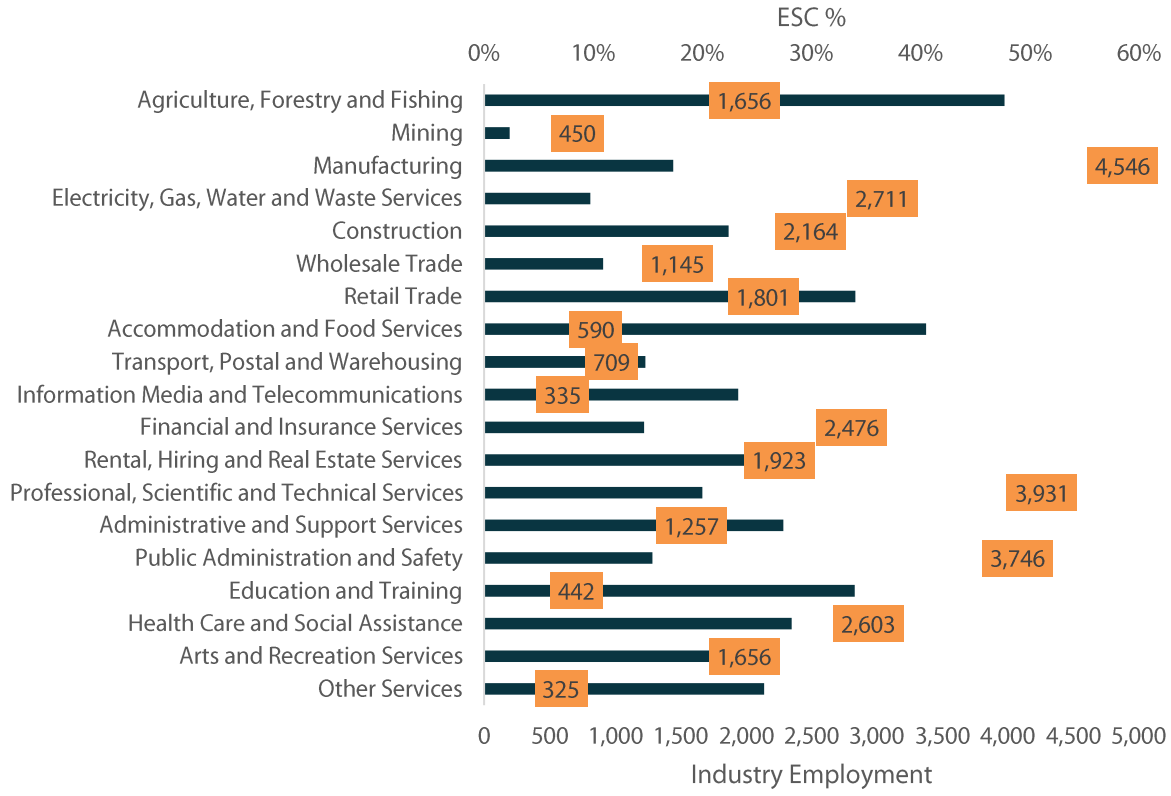
Figure 17. Employment Self Sufficiency and Employment Self Containment



Source: ABS 2011, 2016

Industries were assessed based on their relationship with labourforce mobility. A number of key industries for the local labourforce see significant travel outside of the City for employment, this includes Manufacturing, Professional Services and Financial Services (Figure 18).

Figure 18. ESC by Industry



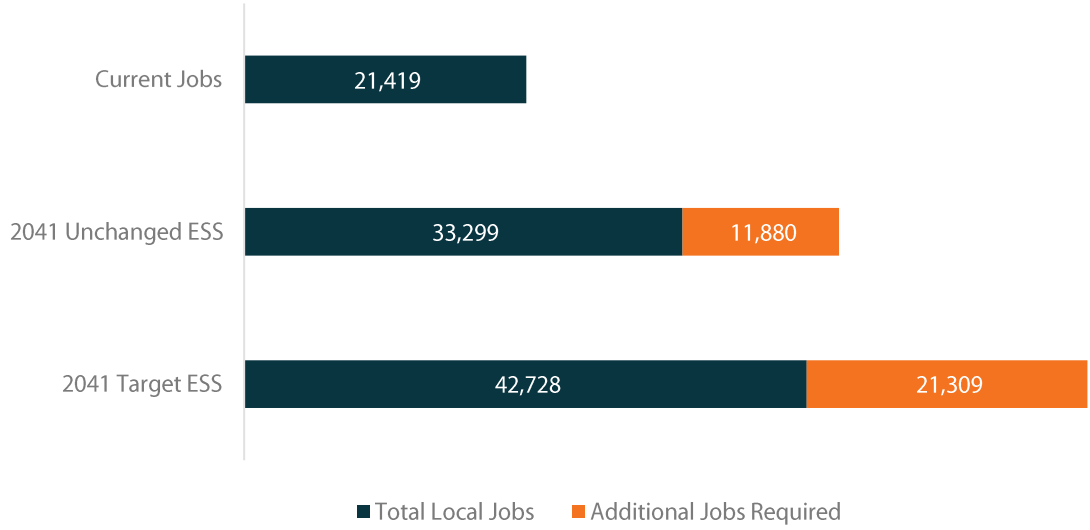
Source: ABS Census 2016

The KTC could support a small additional level of employment aligned with local skills for the office based Professional Services and Financial services. A number of industries highly suited to the KTC also provide high levels of local employment including Retail Trade, Accommodation and Food Services, Health Care and Social Assistance, and Education and Training.

Future Employment Demand

As the City and the surrounding area grow in population, additional jobs will be required to meet ESS targets. If the rate of labour force participation is maintained within the city an additional 11,900 jobs will be required to maintain the current ESS rate. However, 21,300 additional jobs will be required should the City wish to meet the sub-regional 2050 ESS target of 61%.

Figure 19. Employment Demand Scenarios



Source: Pracsys 2021, Forecast.id 2021

Population driven jobs alone will not be sufficient to achieve the ESS as they grow at a constant rate with population. This means that the KTC and other activity centres will contribute to maintaining the current ESS and additional strategic employment will be required to achieve the State target. Activity centres can contribute to reaching the target through the attraction of office based strategic employment and addressing gaps in underprovisioned population driven industries (see Section 6). KTC is unlikely to attract strategic employment due to its primary role in serving the local population however it can address gaps in the provision of goods and services. The contribution of the KTC to achieving the ESS targets is considered in Section 9.

5 CENTRE PERFORMANCE ASSESSMENT

The KTC's performance has been assessed based on feedback from local businesses and analysis of the centre.

5.1 Business Preferences Survey

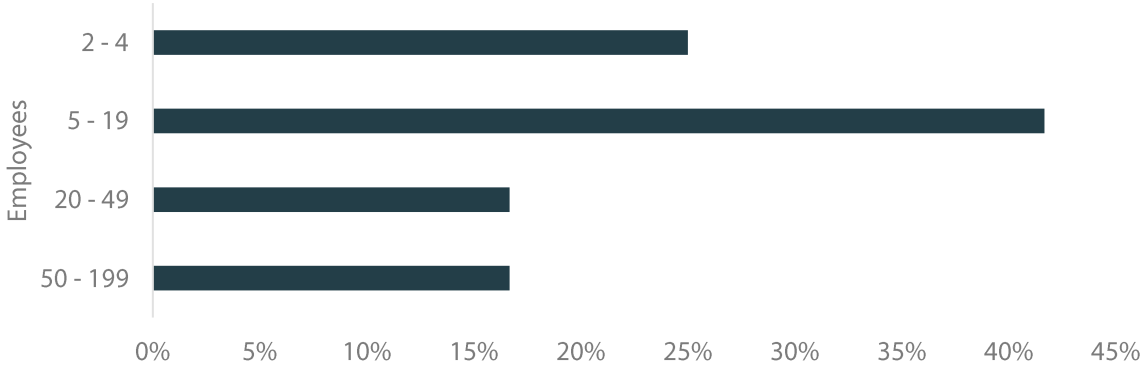
A survey was distributed to the City's businesses to develop a local understanding of the economic context. Twelve respondents completed the survey all of whom represented businesses in population driven industries with 33% indicating tourists were part of their customer base.[8] Eleven of the respondents operated in the KTC itself (Figure 20).

Figure 20. Industries Represented

Source: Pracsys 2021

Responding businesses were all Small and Medium Enterprises with an average revenue of $2.3 million per annum (Figure 21).

Figure 21. Number of Employees

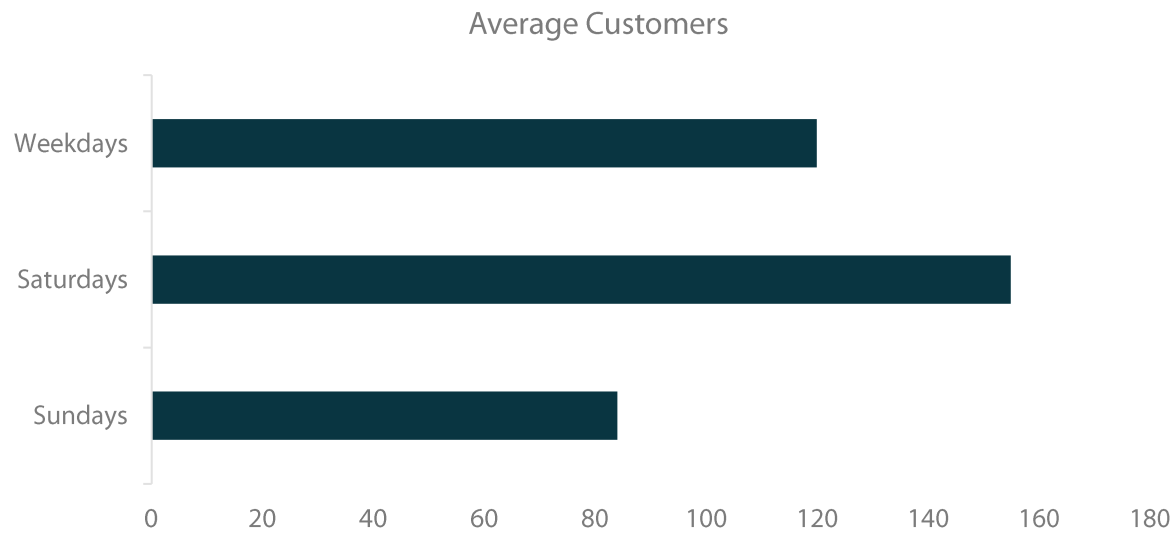


Source: Pracsys 2021

[8] The sample is not large enough to be representative of all businesses within the KTC but can provide evidence, which, combined with other analysis, supports decision-making at a local level.

The results from the survey indicate there is a lack of nighttime activation in the KTC; this is unlikely to be addressed in the short term though could eventually be addressed through a family friendly tavern and small restaurants offering dine-in meals. Saturday's are the busiest day across businesses with mornings being the busiest time on all days. A large majority of businesses in the KTC indicated they are not seasonal (83%) (Figure 22).

Figure 22. Customers Per Day



Source: Pracsys 2021

Respondents were asked to identify advantages and barriers of the KTC. The top three advantages and barriers included:

Advantages

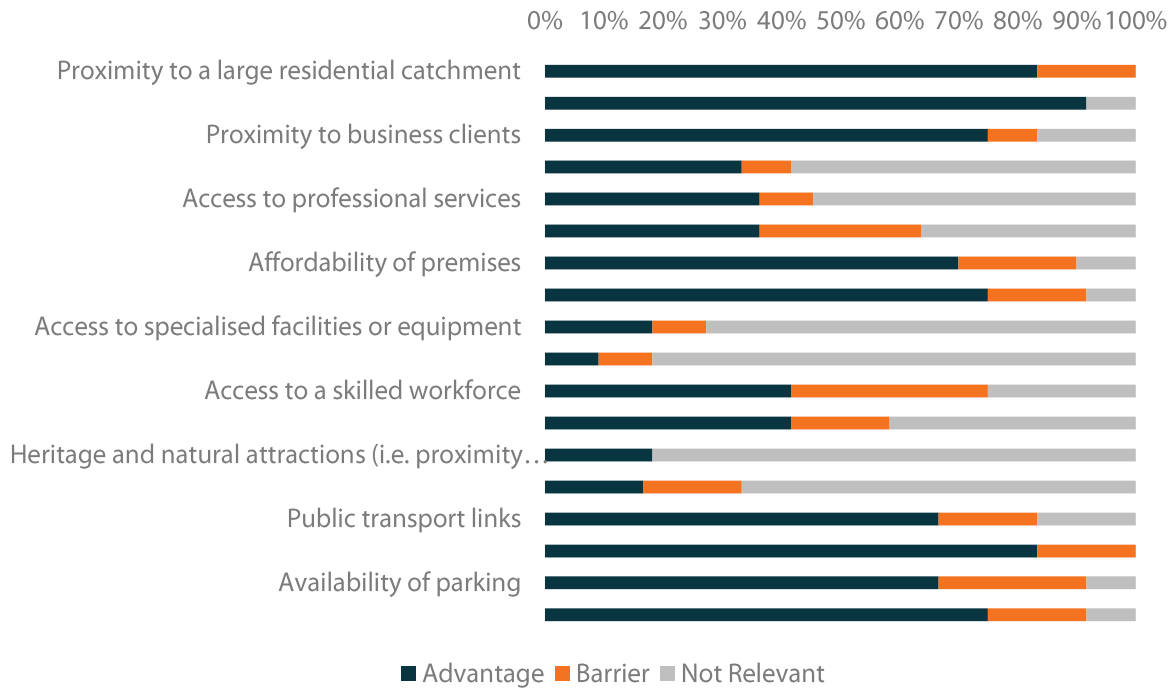
- Proximity to passing traffic
- Proximity to residential population
- Internet Speed

Barriers

- Access to skilled workforce
- Proximity to similar businesses
- Access to parking (was also an advantage for many respondents – this may reflect constraints imposed by Albany Highway in certain areas)

Safety was highlighted by 33% of respondents as an 'other' barrier to business, citing anti-social behaviour and homelessness (Figure 23).

Figure 23. Advantages and Barriers to Business



Source: Pracsys 2021

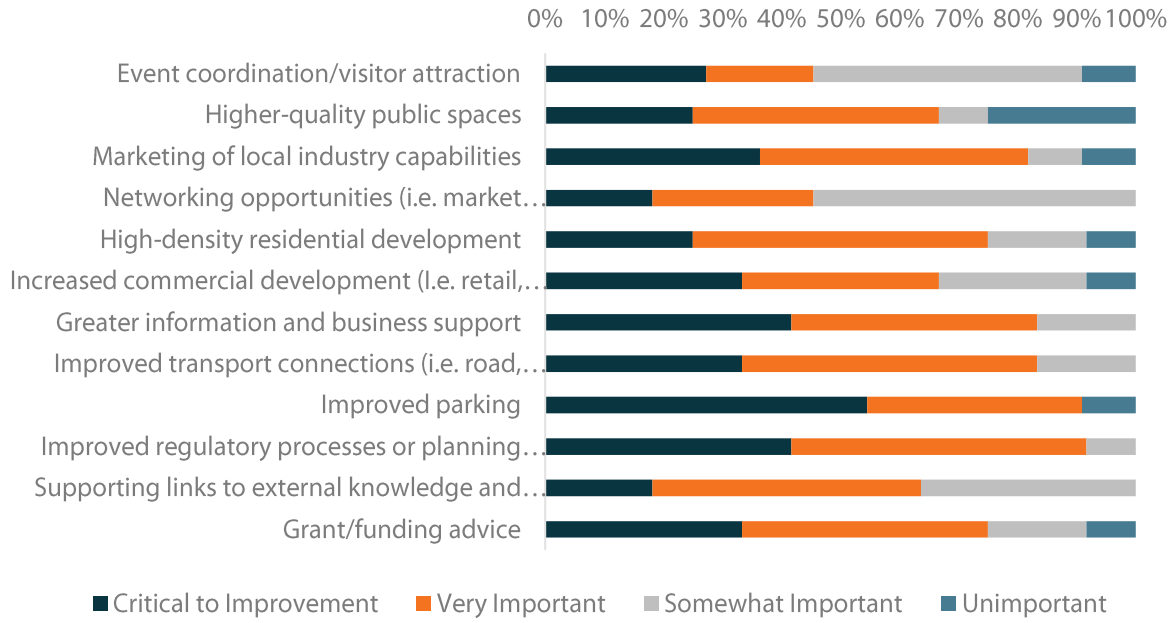
Respondents were asked to indicate the potential initiatives that the City could undertake to support growth in the KTC (Figure 24). The most important activities included:

- Improved Parking
- Improved regulatory/planning processes
- Greater information and business support
- Marketing of local industry capabilities
- Improved transport connections

An open question was provided to allow suggested activities from respondents that the City could undertake. The most common suggestions included:

- Need for more food and beverage offering (i.e. restaurant, tavern, etc.)
- Improve landscaping, trees and lighting for Albany Hwy
- Need to improve safety

Figure 24. City of Armadale - Activities to Support Business Growth



Source: Pracsys 2021

The potential for private investment in the KTC was explored with respondents asked whether they had any planned projects. A third of respondents indicated they were planning either an expansion or other project with an average investment amount of $2.8 million.

5.2 Economic Activation Assessment

In this section we examine the economic sustainability and physical characteristics of the KTC. Many of these aspects can be influenced through urban planning to encourage the growth, or alter the characteristics of the centre. Pracsys uses the Six Principles of Economic Activation to assess the relative performance of the centre from an economic perspective.

Figure 25. Summary of Six Principles of Activation

Principle	Summary
1. Purpose of Place 	**The role of the Centre based on its size and classification:** • Addresses the question – what does this place represent to its target user population (residents, workers, visitors)?
2. Access – Arrival Points 	**This refers to the means by which centres are accessed and the arrival points:** • Decisions about access begin 5km from the place • Do not allow transport networks to bypass the place – ensure the design funnels people and traffic into the core • Congestion and a mix of transport nodes is good • Arrive at the ''front door' of the place, not around the back

3. Origins – Car Parking and Transport Nodes 	**Origins are areas from which pedestrian movements begins:**
	• Parking and transport nodes are the driver of pedestrian movement
	• Strategic distribution of car parks and transport nodes will maximise pedestrian movement
	  ○ Location is more important than numbers
	  ○ Space the car parks around the periphery of centre
	• Street parking is important (for commercial areas)
	  ○ Charge no fees
	  ○ Relax time limits

4. Exposure – Pedestrian Movement	**Exposure indicates Active Frontages that are exposed to high levels of pedestrian traffic:**
	• Economic activation is driven by the frequency and concentration of transactions
	• Channel movements
	  ○ Concentrate transactions by pushing people past as many shop windows as possible
	  ○ Rents and sales are directly related to pedestrian traffic (e.g.: Butcher will pay three-times the rent to be at supermarket entry)
	• Minimise possible routes from origin to destination points (e.g. car park to main attraction) as architectural "permeability" is not always a good thing

5. Destinations – Major attractions	**Destinations are areas that attract high concentrations of customers/people:** • Identify main destination – what will bring users into the core? • Assess user behaviour

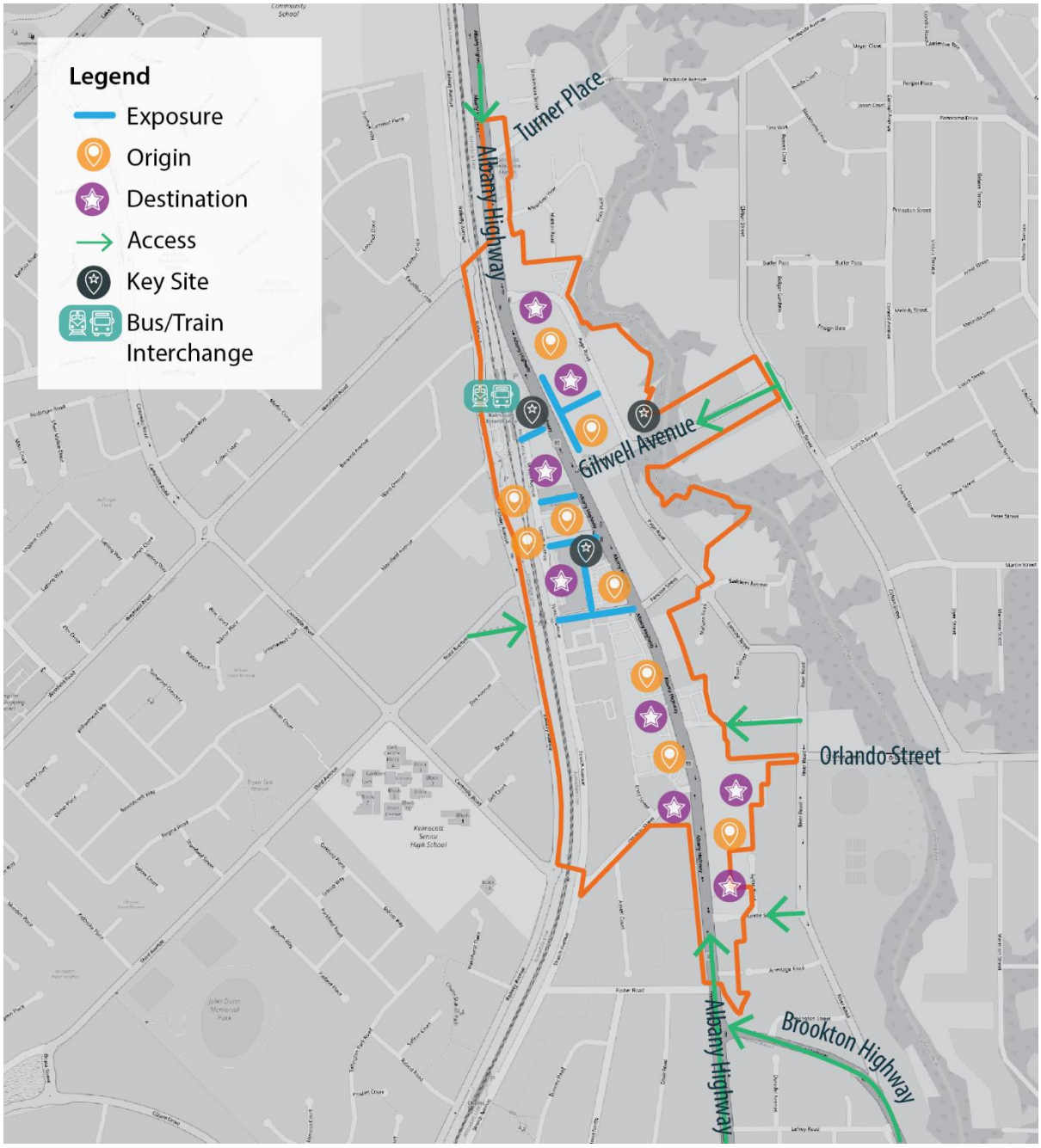
Principle	Summary
	○ Number of visits ○ Timing of visits (time of day, seasonality) • Give major destinations special treatment ○ Understand what they need ○ Build centre around them • Amplify the impact of attractions by creating support amenity and infrastructure to maximise frequency, length of stay and expenditure
6. Control – Strategic Sites	**Key Sites are locations that could be considered as future destinations and/or suitable sites for anchor tenants (i.e. supermarkets). Tenure control is a significant advantage for overall development success** • Tenure control is vital for overall development success – determine which sites (supporting what uses) must stay in public ownership • Identify active frontages and take control of key sites or implement appropriate planning measures • Corner sites drive uses on either side • Not all areas in a place need to be active – be selective

Source: Pracsys 2022

Gaps in the performance of the centre can be reconciled with a centre vision and planning framework aligned to the aspirations and needs of the existing and targeted future user and worker populations of the centre.

Activation within the KTC will be key to ensuring successful businesses can develop as the KTC evolves. The following economic principles have been assessed based on the initial site visit and further desktop review using Google Maps – Street View.

Figure 26. Economic Principles - Spatial Representation



Source: Pracsys 2021

The map highlights the spread of destinations (anchor tenants) and origin points in the KTC. There are limited active frontages connecting these destinations, meaning that there is a missed opportunity for exposure from pedestrian traffic. Future potential exposure sites along Davis Rd and Denny Ave have been included.

The following table describes the principles and summarises initial findings and commentary regarding the KTC. These will be mapped once they are refined.

Figure 27. Principles of Economic Activation Assessment

Principle	Description and Initial Assessment
PURPOSE 	**This is used to determine what the activity centre represents to its target user group (residents, workers, visitors)** The KTC is a District Centre that is meant to provide goods, services and employment opportunities to meet the needs of the community. **Considerations:** The KTC's location on a major road has led to commercial uses (i.e. bulky goods) that cater for the significant volume of passing traffic. These are in addition to those that would generally be relevant to a District centre.
ACCESS Arrival Points 	**This refers to the means by which centres are accessed and the arrival points** The Primary access points for the KTC are via Albany Hwy from the North and South as a pedestrian, by car and by bus; via train from the North and South; via Davis Rd from the West; and, via Canning Mills Road and Gilwell Ave to the East. **Considerations:** • The centre has high levels of access • Public transport users do not have a strong connection to the KTC • The level of traffic along Albany highway creates considerable challenges for connecting the eastern and western sections of the KTC • Individual parking areas encourage visitors use their car within the KTC instead of walking • Ensure pedestrian access via Davis Rd is clear (i.e. good wayfinding), safe and guides people into activated areas within the KTC

Principle	Description and Initial Assessment
	• Ensure that those accessing the Town via train are guided into activated areas of the KTC with activation at Streich Ave where train passengers begin their pedestrian journey • Depending on how the KTC develops, motor vehicles accessing the KTC should be guided to parking lots that maximise the potential for walking within the KTC (see following Principle 'Origin'
ORIGIN Car Parking & Transport Nodes 	**Origins are areas from which pedestrian movements begins** The train station is a key potential origin of pedestrian traffic but is located on the boundary of the centre to the northwest. The Bus transfer is within the train station, limiting the potential for footfall in the KTC. Parking lots are located along most of Albany highway, mostly surrounding shopping centres. **Considerations:** • Future train station parking will be focussed to the west of the train tracks and around the station. Promoting pedestrian movement from the Train Station into the KTC will be key to capitalising on the high number of public transport movements • Providing strategic parking to the East of the KTC would be a means of encouraging foot traffic through a portion of the northern end of the KTC (this appears to be occurring to an extent currently). This creates a challenge as pedestrians are required to cross Albany Hwy • Supermarkets are currently surrounded by parking which means that people are not likely to walk to other parts of the centre. Ideally

Principle	Description and Initial Assessment
	parking would be arranged to encourage walking between shops as the Centre develops • Internalised parking that puts pedestrians into a shopping centre and not into the KTC itself should be avoided where possible when the current shopping centres develop. An example of a less than ideal outcome is in the Wanneroo Town Centre where there is multi-storey parking where a shopper does not have to leave the shopping centre to make all their purchases • Any new parking facilities should be provided at the boundary of shopping areas in the KTC to encourage footfall into the centre via passages that have shop fronts. Multi-storey parking should be considered where greater density is targeted
EXPOSURE Pedestrian Movement	**Exposure indicates Active Frontages that are exposed to high levels of pedestrian traffic** Most Active Frontages are along Albany highway, however the majority are offset by parking. Albany Highway is a major road and does not facilitate pedestrian movement from east to west, limiting the attractiveness of the road for active frontages such as alfresco dining. **Considerations:** • Pedestrian origins generally do not lead to active frontages in the KTC (i.e. the train station) • There are few active frontages that are not separated from footpaths by parking • Many areas where buildings front footpaths, there is no active frontage (i.e. Spudshed

Principle	Description and Initial Assessment
	eastern side on to the footpath along Albany Hwy) • Going forward active frontages should be encouraged with no parking separation in areas where pedestrian movements are likely to be guided (e.g. Davis Road, Streich Ave and potentially Denny Ave.) • Active frontages and passages in the KTC need to be chosen wisely as lots of active frontages and passages can dilute the footfall for businesses. For instance, there is the opportunity to redevelop the shopping centre to the North of Davis Rd (Kelmscott Plaza) with a main street that runs north to south. This provides the ideal situation for active frontage as both sides can be activated. Pedestrians should be encouraged and focused through this area. The section of Streich Ave that runs along Kelmscott Plaza should have limited activation or should be activated with uses that are less attractive to / reliant on footfall. This is due to two factors: Streich Ave can only have one-sided activation; and, reducing activation of Streich Ave would support a greater concentration of footfall through the main street area that has two-sided activation increasing the viability of those businesses • High turnover retail (i.e. news agents) and food and beverage uses (i.e. cafés, small bars, restaurants with alfresco, etc.) should be prioritised for high exposure areas. Some specialty offering is apprioriate (i.e. clothing, jewellery, etc.). Office-based uses and similar (i.e. physio) should be located adjacent to high exposure areas or within commercial premises

Principle	Description and Initial Assessment
	(i.e. a shopping centre, first floor mixed uses, etc.). This will maximise the activation of key exposure areas
DESTINATIONS Major Attractions 	**Destinations are areas that attract high concentrations of customers/people. The main destination must be clearly defined.** The KTC has several anchor tenants, including but not limited to: Coles, Woolworths, and Spudshed **Considerations:** • Key anchors are not well linked • In the long-term as the KTC redevelops, there is a need to encourage pedestrian movements between anchor areas and multiple origins. An example of multiple origins would be pedestrian traffic to an anchor coming from different parking areas and the train station. Currently, few of the anchors would attract pedestrians from the train station and each would have pedestrian traffic from its own parking lot. • Pedestrians should be guided along desired routes to access anchors. Planning the activated frontages and providing wayfinding that moves pedestrians in front of these places as they walk to their desired destination will increase the opportunity for businesses to capture expenditure • Anchors should be encouraged in locations that encourage pedestrian traffic along activated frontages. For instance, should the north/south pedestrian passage develop between Denny Ave and Davis Rd on the Kelmscott Plaza site, there should be an anchor

Principle	Description and Initial Assessment
	to the north and to the South to ensure a driver for pedestrians to move along the space
CONTROL Strategic Sites 	**Key Sites are locations that could be considered as future destinations and/or suitable sites for anchor tenants (i.e. supermarkets). Tenure control is a significant advantage for overall development success** Key sites have been identified based on their importance in contributing to the performance of the KTC as it develops. The sites identified include the pedestrian arrival from the train station (Streich Ave); the new entertainment/recreation offering that is planned in Fancote Park; and, the intersection of Denny Ave and the future main street style passage linking Davis Rd and Denny Ave. **Considerations** • Streich Ave will act as an entry statement for persons entering the KTC via train. This area will be highly activated with pedestrian traffic meaning it is suited to high turnover retail (i.e. cafés) and will need to guide visitors to other key areas in the KTC • The proposed recreation facilities in Fancote Park (i.e. skate park) and entertainment offering will generate additional visitation. The link between Page Rd and Albany Hwy will be key in encouraging this visitation to move through the remainder of the KTC • The identified Denny Ave intersection will be a key site due to the potential for a pedestrian friendly area that has two corner lots and all activated frontages. Corner lots are strategic locations, particularly in pedestrian friendly areas, as they have two activated frontages. The

Principle	Description and Initial Assessment
	intersection is in between two shopping centre offerings that act as anchors, increasing its exposure potential • Long term planning should focus on facilitating/ensuring activated frontages leading to the key sites as they develop. This could include policy regarding setbacks, parking, plot ratios, etc. This is particularly relevant for areas that currently parking which separates pedestrians from shop fronts (i.e. Denny Ave)

5.3 Centre Performance Summary

The KTC currently provides a shopping destination for the local population and passing traffic along Albany Hwy. It is made up of individual shopping centres with parking lots that limit the walkability of the centre. There is a lack of integration of the train station into the KTC that could worsen when all official train parking is to the west of the train tracks. Going forward, the City should focus on consolidating parking as development occurs so that it drives pedestrian traffic through key activated frontages. The design of the centre should promote walkability between major anchors to increase multi-purpose visits and duration of stay in the KTC. This can be achieved through clear wayfinding to guide visitors through the KTC. Key sites include Streich Ave where train/bus passengers alight, future recreation/entertainment uses at Fancote Park, and the intersection of Denny Ave with the planned connection from Denny Ave to Davis Rd. These sites will support increased visitation and opportunities for activated frontages that capitalise on high levels of pedestrian traffic.

6 FLOORSPACE GAP ANALYSIS

The Centre's floorspace mix was assessed using two benchmark centres that exhibit similar characteristics to the KTC but provide key comparison points: Cottesloe Town Centre and Baldivis Town Centre. They were selected based on the following criteria.

Figure 28. Benchmark Centres Comparison

Criterion	Kelmscott	Cottesloe	Baldivis
District Centre	✓	✓	✓
Total Floorspace	55,248[9]	47,381	53,677
Major Highway Location	✓	✓	✓
Passing Traffic	30,127	30,894	24,716
Public Transport Node	✓	✓	**X**
Outer Metropolitan	✓	**X**	✓
Major Competing Centre(s) Proximate	Armadale City Centre Gosnells City Centre	Claremont Quarter Fremantle City Centre	Rockingham City Centre Other District Centres

Sources: DPLH 2016, MainRoads 2021, Pracsys 2021

Cottesloe was chosen for the assessment at it is an established district centre with a train station that is also located on a major highway. It provides a suitable benchmark for understanding the potential uses associated with a Transit Orientated Development that could be achieved through increased residential density and intensity of uses (i.e. smaller store foot prints, more office-based uses, etc.) in the KTC.[10] Baldivis was selected as a high performing outer metropolitan district centre that meets all criteria apart from being a public transport node. It has had some of the highest turnover productivity levels of activity centres in WA that have caused it to expand rapidly; it is seen as an aspirational benchmark for retail uses in a District Centre.

These centres have been used to develop floorspace comparisons to inform the City of potential floorspace gaps that can be addressed as the KTC transitions towards a more Transit Orientated Development (TOD) and grows to support the needs of current and future users.[11]

[9] This is based on the Indicative Kelmscott Activity Centre Boundary and includes the Kelmscott Caravan Park as it forms part of the Armatage centre in LUES that is within the KTC boundary.
[10] No outer metropolitan centres were identified that were suitable benchmarks for this purpose
[11] It is noted that Cottesloe and the KTC are long established centres that have historical layouts that may be more difficult to change. Baldivis is a very recent centre that has been developed to address its suburban location.

6.1 Centre Diversity

KTC is a District Centre that should provide a suitable mix of Shop/Retail (SHP) and Non-SHP uses.[12]

Figure 29. Floorspace by Planning Land Use Category (PLUC)

	ENT	HEL	MAN	OFF	PRI	RES	RET	SER	SHP	STO	UTE
Kelmscott	4,263	217	665	7,923	0	390	4,710	3,510	28,743	993	460

Source: DPLH 2016

The Draft SPP4.2 indicates that a district centre should maintain a diversity ratio of no more than 2:1 SHP to Non-SHP uses. This ratio should be interpreted as a limit for SHP uses.

Figure 30. Diversity Ratio Comparison

Centre	Measured Diversity (SHP/Non-SHP)	Draft SPP4.2 Diversity Ratio
Kelmscott	55%	
Cottesloe	36%	66%
Baldivis	63%	

Source: DPLH 2016, DPLH 2020

The results indicate that the Kelmscott centre is reasonably close to the identified diversity target. Baldivis Town Centre represents a District Centre that has grown to address the retail demand of a rapidly expanding catchment and is close to the defined limit of SHP uses. Cottesloe has a much higher proportion of Non-Shop uses that is likely representative of both the local population (i.e. higher income earners likely create greater demand for office based services such as accountants and architects) and a more Transit Orientated Development. The industry analysis demonstrated that the KTC has a much higher employment concentration in Retail Trade than Greater Perth and the City of Armadale as a whole. As the KTC develops into a TOD it is likely there will be greater demand for Non-SHP uses to meet a greater diversity of population demanded goods and services.

6.2 SHP Gaps

The benchmarks were used to identify gaps in SHP floorspace uses that could be addressed as population grows and the KTC develops. Detailed Western Australian Land Use Categories (WASLUCs) were used to provide specific uses that can be targeted. The analysis has two categories of gaps, those for uses that are already in the KTC but are underrepresented compared to the benchmarks and those that are not currently in the KTC.

[12] Please see Section 14, Appendix 3, for PLUC definitions

Figure 31. Current Use Gaps

WASLUC	Common Gap - Baldivis	Common Gap Cottesloe	Baldivis Gap	Cottesloe Gap
Combined men's & women's clothing stores- retail	-1325	-663		
Beauty salons				-259
Newsagents	-164	-232		
Bicycles - retail				-180
Womens hairdressers (including unisex)	-75	-36		
Supermarkets and grocers			-1285	
Take away food and milk bars			-524	
General merchandise - retail			-184	
Bread and cake stores			-105	
Meats - retail.			-105	

Source: DPLH 2016

There is a significant gap in clothing retail compared to both Cottesloe and Baldivis Town Centres (this is further corroborated by gaps in uses that are not currently in the KTC). Although there is a large gap in supermarket and grocer floorspace when compared to Baldivis Town Centre, this is not seen as a key gap due to the large, well-defined catchment of the Baldivis Town Centre. There is a gap of approximately 500m^2 in take away food and milk bars, which is likely a missed opportunity for the KTC.

The gap in uses not currently provided for in the KTC was also assessed.

Figure 32. Not in Centre Gaps

WASLUC	Common Gap - Baldivis	Common Gap Cottesloe	Baldivis Gap	Cottesloe Gap
Women's,girls' and infants' wear stores - retail	-1,029	-2,740		
Furniture and home furnishings and equipment retail nec	-281	-887		
Footwear - retail	-236	-435		
Health foods	-295	-408		
Watchmakers and jewellers - retail	-203	-333		
Men's and boys' clothing - retail	-310	-168		
Booksellers	-176	-130		
Antiques - retail				-120
Toys and hobbies - retail				-61

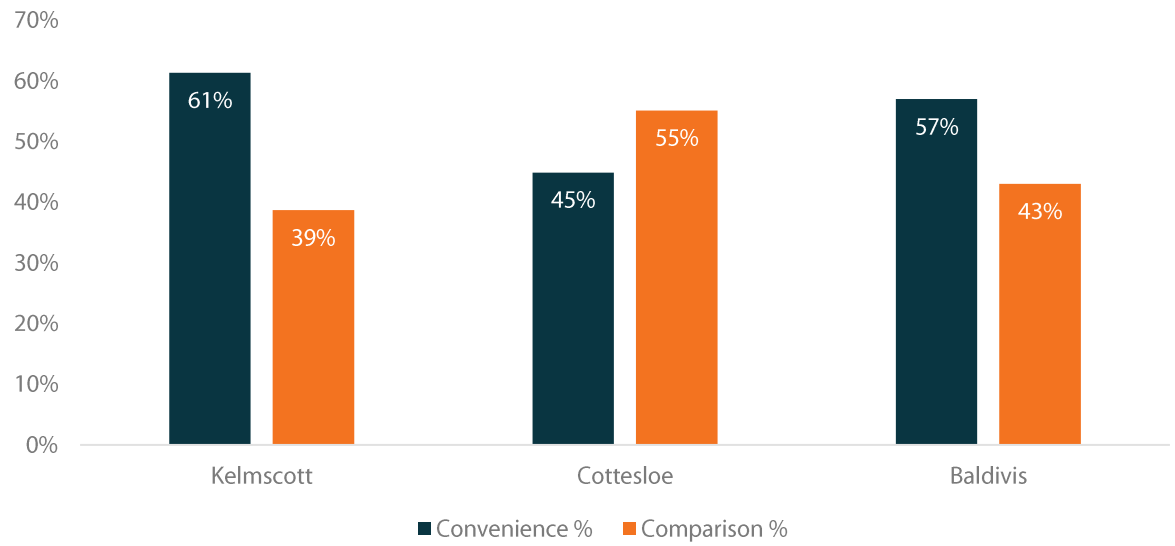
Fabric shop and dressmaking accessories retail				-60
Men's hairdressers	-44	-60		
Department stores - retail			-5,989	
Fuel - retail			-490	
Electronic equipment and parts retail			-446	
Kitchenware - retail			-236	
Accessories retail nec			-103	
Computer software - retail			-93	
Stationers			-87	
Other retail food trade nec			-85	
Confectioners and tobacconists			-56	
Footwear repair services			-20	

Source: DPLH 2016

Note: NEC is defined as Not Elsewhere Classified

There is a recurring gap in comparison offering when considering both the Cottesloe and Baldivis Town Centres. Cottesloe provides this offering through specialty stores while Baldivis Town Centre includes some specialty stores and a Discount Department Store. The KTC currently supports two supermarkets and a Spudshed (essentially a supermarket) with no discount department store type offering and minimal comparison offering.

Figure 33. Comparison and Convenience Benchmark %



Source: DPLH 2016

The KTC has the highest proportion of Convenience floorspace when compared to benchmarks; adjusting the proportion to the Baldivis Town Centre mix would require an additional 2,000m^2 of comparison floorspace. A

centre as large as the KTC should provide for a reasonable amount of comparison retail to achieve a satisfactory level of multi-purpose usage. Comparison floorspace increases visitor dwell times with department stores generally providing and anchor tenant that can be used to direct pedestrian traffic along active frontages and speciality stores locating in those active frontages. It also reduces the amount of travel required for local residents to go shopping, although it should be noted that higher order centres such as the Armadale City Centre will still be the primary location for comparison goods shopping in the area.

While the mix of comparison uses should be based on local consumer demand, the development of additional comparison offering in the KTC is seen as a significant opportunity to improve the performance of the centre as it develops. This does not mean that the centre needs to expand; it is possible that as development occurs some Convenience uses could be replaced by Comparison uses to provide a more diverse tenancy mix.

6.3 Non-SHP Gaps

The benchmarks were used to identify gaps in non-SHP floorspace uses that could be addressed as population grows and the KTC develops. WASLUCs were used to provide specific uses that can be targeted. The analysis has two categories of gaps, those for uses that are already in the KTC but are underrepresented compared to the benchmarks and those that are not currently in the KTC.

Figure 34. Current Use Gaps

WASLUC	Common Gap - Baldivis	Common Gap Cottesloe	Baldivis Gap	Cottesloe Gap
Multiple dwellings - structure of up to and including 3 storeys				-2,530
Hardware - retail.	-1,510	-1,860		
Under cover parking	-120	-1,758		
Single house				-932
Other health services nec	-352	-597		
Real estate operators (except developers and lessors)				-429
Other special training and schooling nec				-395
Banking services	-555	-382		
Laundering,dry-cleaning & dyeing services				-340
Travel arranging services				-328
Veterinary services	-1,339	-283		
Dental practices	-538	-162		
Other professional services nec				-88
Psychology practices				-50
Libraries.			-490	

WASLUC	Common Gap - Baldivis	Common Gap Cottesloe	Baldivis Gap	Cottesloe Gap
General medical practices			-91	
Motor vehicle detailing			-11	

Source: DPLH 2016

The total additional Non-SHP floorspace required to address the above gaps is approximately 8,000m^2. This is not an amount the KTC can expand by but an upper limit of the potential for these Non-SHP commercial uses to be included in the KTC to address population need. The most common uses are in health services with some professional services[13]. While some of these uses are likely provided for in the Armadale City Centre, they are uses that would be consistent with a District Centre and should be allowed to develop, especially as density increases in the KTC. Two non-commercial uses were identified: multi-storey dwelling floorspace in the Cottesloe Town Centre and undercover parking in both centres. Both of these uses are consistent with TODs with the undercover or potentially multi-storey parking enabling better use of land in the KTC to support improved walkability as high-density residential developments occur.

The gap in uses not currently provided for in the KTC was also assessed.

Figure 35. Not in Centre Gaps

WASLUC	Common Gap - Baldivis	Common Gap Cottesloe	Baldivis Gap	Cottesloe Gap
Restaurants, cafes & function centres				-1,748
Business and management consulting services				-1,180
Internet related business				-1,111
Function and reception centres				-865
Building construction - general contractor services				-860
Legal services	-60	-472		
Architectural services				-428
Holding and investment services				-403
Welfare and charitable services nec				-375
Drinking places (alcoholic beverages) - hotels				-326
Motor vehicle mechanical repair services nec	-976	-290		

[13] These uses do not include hospital uses such as Armadale Hospital. It is noted that some health services are provided for just outside of the KTC; there is no data for these uses. The identified gaps are therefore an upper limit that should be used to allow for increased floorspace based on private interest in developing those uses.

WASLUC	Common Gap - Baldivis	Common Gap Cottesloe	Baldivis Gap	Cottesloe Gap
Furniture - retail				-242
Chemical sales - retail.				-231
Real estate developers				-200
Optometry and optical dispensing	-206	-200		
Insurance agents, brokers & serviecs				-160
Art and/or craft centres				-160
Computing services				-150
Petroleum exploration				-120
Engineering services				-110
Other farm and garden supplies retail nec				-110
Advertising services				-109
Building construction - industrial and commercial				-104
Drinking places (alcoholic beverages) - taverns	-1,173	-100		
Male,female & children's clothing mfg				-100
Other business services nec				-84
Art and music schools				-80
Iron and steel basic products mfg				-64
Oil				-60
Dairy products - wholesale/warehousing				-50
Cultural activities nec				-30
Typing, copying & mail services				-30
General markets				-25
Photographic film processing				-20
Light fittings retail			-655	
Penny arcades and electronic amusement/arcades			-652	
Child day care centres creche & nurseries			-600	
Plumbing, heating & refrigeration equipment - retail			-430	
Church & community halls			-307	
Playgrounds			-200	
Conference room			-170	
Swimming pools - retail			-150	

WASLUC	Common Gap - Baldivis	Common Gap Cottesloe	Baldivis Gap	Cottesloe Gap
Cleaning services nec			-42	
Other personal services nec			-35	
Pet services			-17	

Source: DPLH 2016

Activity centres play a role in providing for the shopping, services, entertainment and recreation needs of users. The KTC does not appear to have any Tavern or Hotel floorspace that provides dine-in food and alcoholic beverage options. There is a gap of between 426m^2 and 1,173m^2 for this type of entertainment floorspace based on the benchmarks. This type of floorspace supports multi-purpose centres and contributes significantly towards the nighttime economy in a centre. A good example of these types of uses that can contribute to the overall vibrancy of a centre are the small bars that have been allowed in the Perth CBD where alcohol sales are permitted when there is a food offering. Providing appropriate levels of these uses can contribute to greater visitation and spend in a centre and a greater sense of safety in the evenings due to passive surveillance.

The Cottesloe Town Centre has a significant amount of office related floorspace supporting professional services such as architecture, investment and consulting services. These are likely supported by the design of the centre which is well connected to the train station; has a diversity of retail, food and other services; and, supports high levels of walkability between uses. As the KTC develops into a TOD, the concepts of walkability, diversity of offering and connection to the train station will be key in attracting non-retail uses and supporting them by providing suitable amenity for their employees.

The Baldivis Town Centre provides a number of uses that should be considered in the KTC, namely: childcare services, playgrounds and arcades. These are all relevant to a younger population and would be suitable to the KTC based on the above average levels of persons under the age of nine (9) in the catchment.

6.4 Floorspace Gap Summary

The assessment considered floorspace gaps for Shop/Retail and non-SHP (including Bulky Goods Retail) uses. The identified gaps do not sum to a total gap that can be addressed in the KTC; they provide a detailed understanding of uses that may be under provided in the KTC that could be included either additionally or through transition from some current uses.

There are a number of gaps in Shop/Retail uses within the KTC, including convenience retail (i.e. takeaway food providers) and comparison retail (i.e. clothing retail, department store, etc.). The KTC currently supports two supermarkets and a Spudshed (essentially a supermarket) with no department store and minimal comparison offering. It is estimated up to 2,000m^2 of comparison floorspace could be appropriate in the KTC; this does not necessarily need to be additional floorspace, it could be achieved through turnover of current uses.

Non-retail gaps were identified with the most common uses being in health services with some professional services[14]. While some of these uses are likely provided for in the Armadale City Centre, they are uses that would be consistent with a District Centre and should be allowed to develop, especially as density increases in the KTC. As the KTC develops into a TOD, the concepts of walkability, diversity of offering and connection to the train station will be key in attracting these types of non-retail uses and supporting them by providing suitable amenity for their employees.

Two non-commercial uses were identified as gaps: multi-storey dwelling floorspace in the Cottesloe Town Centre and undercover parking in both centres. Both of these uses are consistent with TODs with the undercover or potentially multi-storey parking enabling better use of land in the KTC to support improved walkability as high-density residential developments occur.

The KTC does not appear to have any Tavern or Hotel floorspace that provides dine-in food and alcoholic beverage options. There is a gap of between 426m^2 and 1,173m^2 for this type of entertainment floorspace based on the benchmarks. There is also a gap in restaurant, café and function centre floorspace. This type of floorspace supports multi-purpose centres and contributes significantly towards the nighttime economy in a centre. Other key gaps include childcare services, playgrounds and arcades. These are all relevant to a younger population and would be suitable to the KTC based on the above average levels of persons under the age of nine (9) in the catchment.

[14] It is noted that some health services are provided for just outside of the KTC; there is no data for these uses. The identified gaps are therefore an upper limit that should be used to allow for increased floorspace based on private interest in developing those uses.

7 RETAIL NEEDS ASSESSMENT

This section identifies retail trends and their potential implications for the KTC. Current and future retail supply and demand for the Study Area and the KTC is then analysed. Retail Gravity Modelling is used to estimate the amount of viable retail floorspace that can be incorporated within the KTC. Further details on the assumptions and methodology used in the gravity model are presented in Appendix 2 - Gravity Model Assumptions and Methodology.

7.1 Shopping Patterns and Trends

The retail landscape is rapidly changing, with the success of retailers highly dependent on their ability to adapt to the latest trends. An understanding of the retail climate is required to underpin future retail centre design and ensure centres meet the changing needs of consumers. This section summarises the retail market trends that are currently impacting or could be expected to impact activity centres in the future.

Online Retail

E-commerce is quickly growing as a popular shopping medium for most goods.[15] Today, most major brands have an online presence. Online shopping in Australia reached 8 per cent of total traditional retail sales at the end of 2017, with the top three online products being consumer electronics, clothing and books. Marketplaces and discount department stores were the favourite destination sites for shoppers. Supermarket giants Woolworths and Coles have also made ventures into online retailing and invested in faster click-and-collect models and predictive data analytics software to better cater for customer demand.[16]

Approximately 12 per cent of all retail sales in Australia are now conducted online, with this number estimated to increase to 18 per cent due to the ongoing COVID-19 pandemic.[17] Based on international trends, it is also likely that online grocery shopping will soon have a much higher penetration rate. The KTC will need to allow for a flexible approach to development that allows businesses to adjust their size and design to ensure they can achieve sustainable turnover levels to compete with and account for leakage to online retail.

Retailers must have a consistent offering on an integrated ecosystem across online and in-store spaces in order to effectively compete and grow.

Retailtainment

The increasing popularity of online retail has made it critical for physical stores to differentiate themselves through the provision of retail and social experiences. Retailtainment refers to the convergence of shopping and entertainment, with the purpose of delivering enticing in-store customer experiences.[18] The shopping

[15] Wertz 2018, '5 Trends That Will Redefine Retail in 2019', *Forbes*
[16] Mitchell 2018, 'Woolworths, Coles and Other Retailers Boost Online Shopping Investment', *Australian Financial Review*
[17] AusPost 2020, *Inside Australian Online Shopping 2020 - eCommerce Industry Report*
[18] Mi9 Retail 2018, 'Is Retailtainment the Secret to Success for Today's Retailers?', *Mi9*

centres that thrive in the current market are those which provide extensive food and entertainment options alongside retail.

For example, the Waterford Plaza in South Perth along Manning Hwy was redeveloped to include an internal 'Main Street' with restaurants and a large entertainment venue (Restaurant/Bar). The internal 'Main Street' provides the opportunity for a pedestrian friendly environment activated frontages on both sides that is away from the multi-lane highway. While Waterford Plaza is a smaller centre than the KTC, it provides an example of the type of businesses and centre development that could be encouraged in the KTC to create improved connections between strategic sites (i.e. anchors) in the KTC.

Retailers must provide additional value to the shopping process: emotions, impressions, memories and leisure.

Experiential Shopping

When shopping in stores, consumers report wanting to see or try on something as a primary motivation. As face-to-face interactions cannot be replicated by online stores, it is crucial that retailers use human engagement and interactive elements to create in-store moments that are both memorable and unique. Examples include:

- *Sephora*, *Mecca* and other beauty retailers provide styling, makeovers and sampling services in store
- *Nike*'s New York store features an indoor basketball court, treadmill, running simulator, small soccer enclosure and shoe bar[19]
- Certain IGA stores, gourmet grocers and food retailers increasingly use testers to entice customers to buy their products
- *Build-A-Bear Workshops* allow customers to personalise and create a plush toy bear

Consumers will continue to visit physical stores as long as there are new and interesting reasons to do so.

Personalisation

Personalisation can impact how consumers view brands or retailers. It has been found that 63 per cent of consumers would regard a brand more favourably[20] if it gave them content that was more valuable, interesting or relevant. Personalised recommendations were highly regarded amongst these surveyed consumers. A further 64 per cent of consumers revealed they were willing to share personal data in exchange for benefits like loyalty points and automatic credits for coupons.[21] Examples of retailers personalising customer experience include:

- *Mimco* offers in-store engraving services provided for purchases

[19] Nike News 2016, 'First Look: Inside Nike Soho', *Nike*
[20] Howland et al. 2019 '10 Retail Trends to Watch in 2019', *Retail Dive*
[21] Ibid.

- *Priceline* utilises the 'Priceline Sisters Club' to build brand loyalty, where customers can accrue loyalty points and receive discounts once they spend over a certain amount
- *Myer, Coles* and *Woolworths* offer rewards programs
- *Apple*'s 'Genius Bar' offers personalised customer service through side-by-side assistance, tailored to the needs of the customer

A potential point of differentiation for the KTC in future could be the establishment of a loyalty program for residents of future development in the KTC. Further investigation into the feasibility of such a program would be required.

75 per cent of consumers are more likely to buy from a retailer that recognises them by name, recommends options based on past purchases or knows their purchase history.

Virtual Reality (VR), Augmented Reality (AR) and Artificial Intelligence (AI)

Augmented reality is an emerging trend that could be important for future centres. Retailers that leverage augmented reality can make it easier for customers to engage with their brand. The increasing ease of employment, availability and improved quality of artificial intelligence gives retailers the opportunity to utilise this kind of technology to supplement human customer support. Examples of retailers using VR, AR and/or AI include:

- *IKEA* has developed augmented reality apps that have the ability to place fully rendered three-dimensional models of the store's furniture into customer homes. The digital furniture is resizable to fit a room's dimensions and is observable from any angle and in any light.[22]
- *Woolworths* have introduced virtual supermarkets in Sydney and Melbourne. These virtual supermarkets are billboards displaying images of real supermarket shelves containing grocery items. Customers can purchase products by scanning the barcodes on these billboards with their smart phones.[23]

While these types of technology in retail might not be a priority for current centres, they will likely become much more common in the future. It is advisable that the planning for the KTC is flexible enough to accommodate such technologies acknowledging that progress is dependent on business uptake.

Virtual and augmented reality can drive consumer engagement, especially with younger shoppers.

Sustainable Retail

Consumers are now demanding transparency as they take an increased interest in the ethical practices of the brands they buy from. Retailers that showcase clear sustainability goals, corporate responsibility and social consciousness are more likely to emerge as commercial winners, particularly amongst younger shoppers.

Examples include:

[22] Ridden 2013, 'IKEA Catalogue Uses Augmented Reality to Give a Virtual Preview of Furniture in a Room', *New Atlas*
[23] Food Retail Industry Australia n.d., 'Levels of Operation and Mechanisation'

- *Cotton On Group* have introduced a philanthropic program through The Cotton On Foundation, dedicated to empowering youth globally. The company has an ethical business program which guides the sourcing, manufacturing and supply of its products, combined with a website that offers full transparency of the programs, initiatives and commitments the retailer engages in.[24]
- Luxury fashion retailers *Gucci, Calvin Klein, Tommy Hilfiger, Armani* and *Ralph Lauren* have all joined the Fur Free Alliance[25], which abstains from the use of animal fur in fashion products

Should the City want to attract a higher proportion of younger couples and families in the future, these consumers are more likely to consider sustainability when making purchases; therefore, it is important that the planning for the KTC supports sustainable development and the attraction of vendors who meet the description of sustainable operators.

The rise of the conscious consumer has meant that buying decisions are now based on factors beyond price.

Residential Co-Location

An emerging local trend for retail activity centres is the co-location of residential developments. Local planning strategies in Perth are continuing to encourage development around activity centres, affirming that policy should support high and medium density residential developments within and on the edge of activity centres. The co-location of residential uses provides a series of advantages such as:

- Walkable multi-purpose trips
- More viable activity centre operators
- Improved access to public transport
- Opportunities for age-appropriate housing that allows residents to age in place

The potential for high and medium density residential development to be delivered at and adjacent to the KTC will play an important role in supporting a more liveable town centre. Locating higher density dwellings in proximity of commercial centres enhances the walkability of a centre, increasing the likelihood of local residents engaging with the centre – especially for restaurants and cafés.

A walkable catchment is generally considered to be within 400 metres of a centre, with a certain level of walkability maintained up to 800 metres. Concentrating residential development around the KTC will likely increase the viability of businesses and reduce the reliance on motor vehicles to access the centre. Strategic location of developments, high levels of pedestrian access and activated frontages will be key to encouraging residents to engage with the KTC and its businesses.

The co-location of high and medium density residential uses adjacent to retail and recreational floorspace can assist in creating a more liveable centre with viable businesses.

[24] Cotton On Group 2019, 'Sustainability'
[25] Shannon 2017, 'Gucci Bans Fur: 'It's Not Modern', *Business of Fashion*

COVID-19 Pandemic Impact

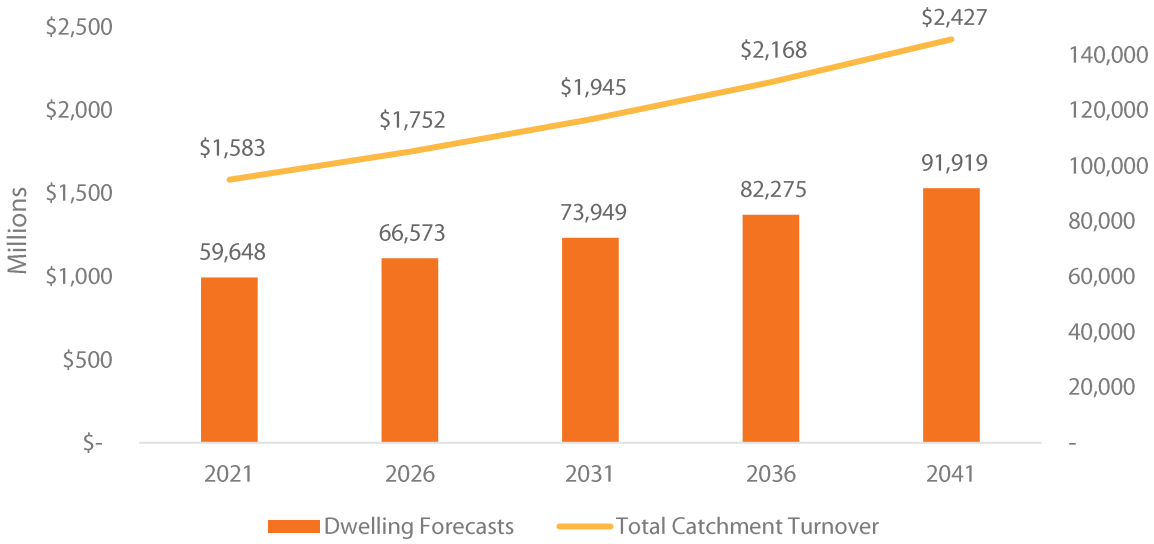
According to the State Government's economic profile of Western Australia, record high retail turnover during the COVID-19 pandemic was in part supported by consumers diverting the spending from overseas and interstate travel into retail goods.[26] Significant rises in spending included spending on cafes, restaurants and takeaway food services, department stores and clothing, footwear and personal accessories. Retail expenditure may decline now that borders are again open, as there may be more demand for travel out of Western Australia than into it. Changes in retail spending at a local level should be monitored to identify opportunities to work with key stakeholders and support centres through events and activation if necessary.

Monitor retail expenditure in centres and work with key stakeholders to identify opportunities for activation of centres if necessary.

7.2 Retail Demand

The demand for shop / retail floorspace has been estimated based on the growth in expected population and dwellings within the catchment. Retail expenditure is expected to grow by 53% between 2021 to 2041, from $1.58 billion to $2.42 billion. This reflects the considerable growth in dwellings that is to occur over the same period.

Figure 36. Catchment Expenditure



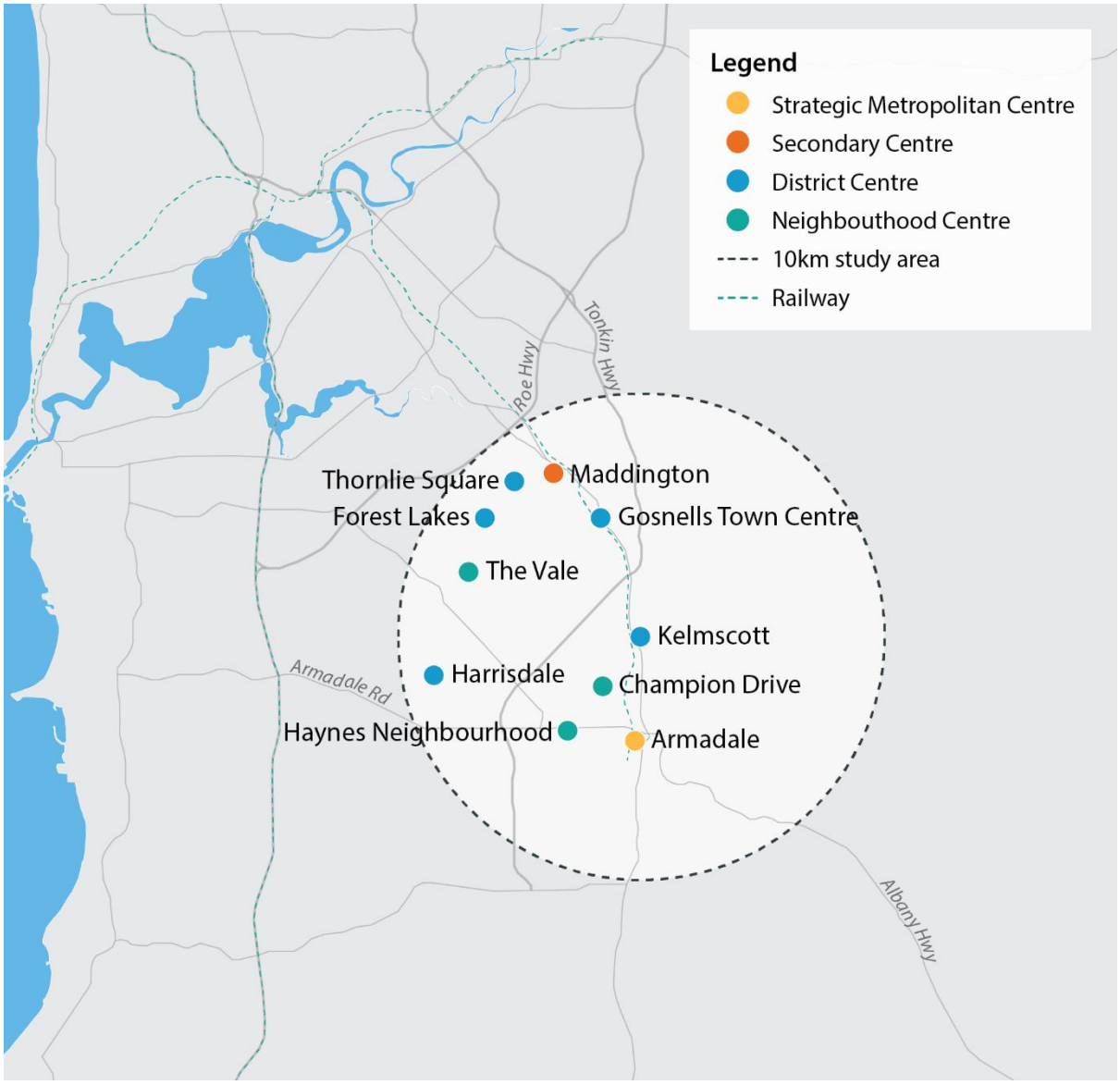
Source: Pracsys 2021

[26] Department of Jobs, Tourism, Science and Innovation 2021, WA Economic Profile – March 2022. Available from: https://www.wa.gov.au/government/publications/western-australias-economy-and-international-trade

7.3 Retail Supply

The current and future supply of shop / retail floorspace within the catchment area has been compiled through analysis of Land Use Employment Surveys developed by the Department of Planning, Lands and Heritage; and through analysis of the City of Armadale's ARC Strategy and the City of Gosnells' Activity Centre Planning Strategy 2019 (Figure 37).

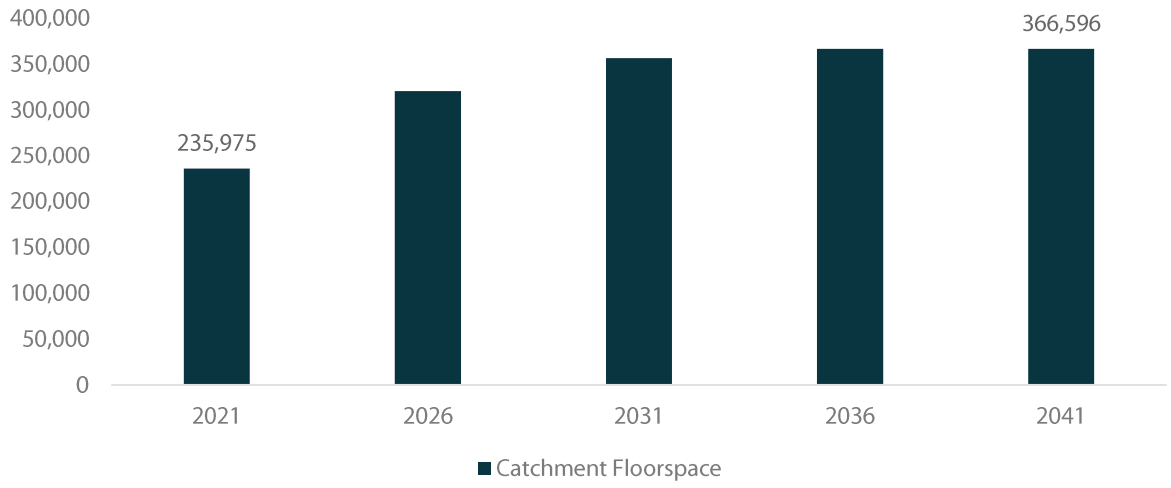
Figure 37. Largest Ten Centres in Catchment



Source: DPLH 2016

Current floorspace projections are expected to increase by 55% between 2021 and 2041. However, this is likely to be underestimate due to the limited information on future floorspace within the City of Gosnells (current planning finishes in 2031).

Figure 38. Catchment Floorspace (2021 to 2041)



Source: Pracsys 2021

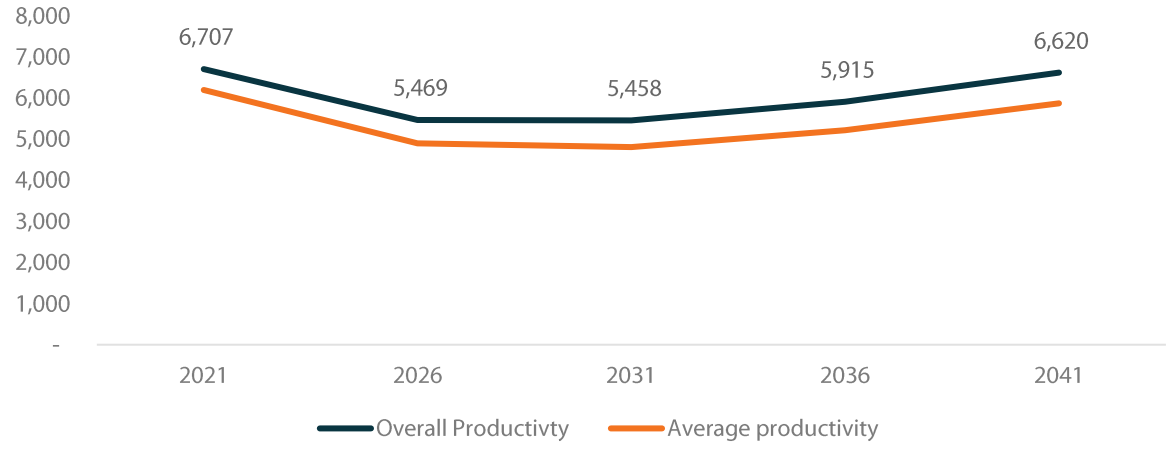
7.4 Estimated Retail Potential

Base Case Retail Need Estimate

Turnover estimates can be used to verify if there is sufficient expenditure within the Catchment to support the proposed development. It is possible to estimate the potential turnover of retail centres using average floorspace productivity estimates for WA. Estimates and benchmarks have shown that the average shopping centre in WA has a floorspace productivity level of $7,400m^2$.[27]

Based on results from retail gravity modelling (Figure 39), overall productivity fluctuates due to supply increases but returns to the current level throughout the catchment between 2021 and 2041.

Figure 39. Catchment Productivity 2021 - 2041

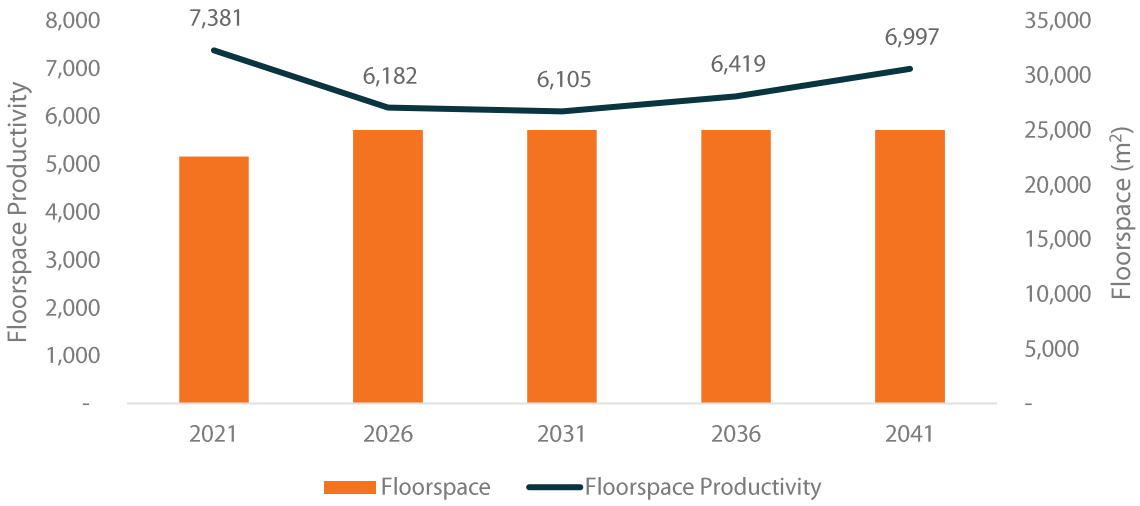


Source: Pracsys 2021

[27] Urbis 2015, Australian Shopping Centre Industry.

Within the KTC, productivity remains higher than the overall catchment productivity over the study period (Figure 40). There is an initial dip in productivity between 2021 and 2026 caused by an increase in floorspace within the centre and an increase in floorspace in surrounding areas over the same time period. However, by 2041, productivity increases to nearly $7,000m^2$. This suggests that at there is sufficient floorspace to meet demand within the centre out to 2041 based on current population projections and the planned supply of $25,000m^2$. [28]

Figure 40. Kelmscott Town Centre Floorspace Productivity



Source: Pracsys 2021

Development Scenario Testing

Floorspace growth has been assessed by including the proposed increases in dwelling density from the Plan into the gravity model. Two development scenarios have been provided:

- Potential Scenario: an additional 885 dwellings
- Full Scenario: an additional 3,259 dwellings[29]

The increase in dwellings within the KTC will create higher demand for Shop/Retail goods and services at a localised level. The following criteria were used to inform the modelling:

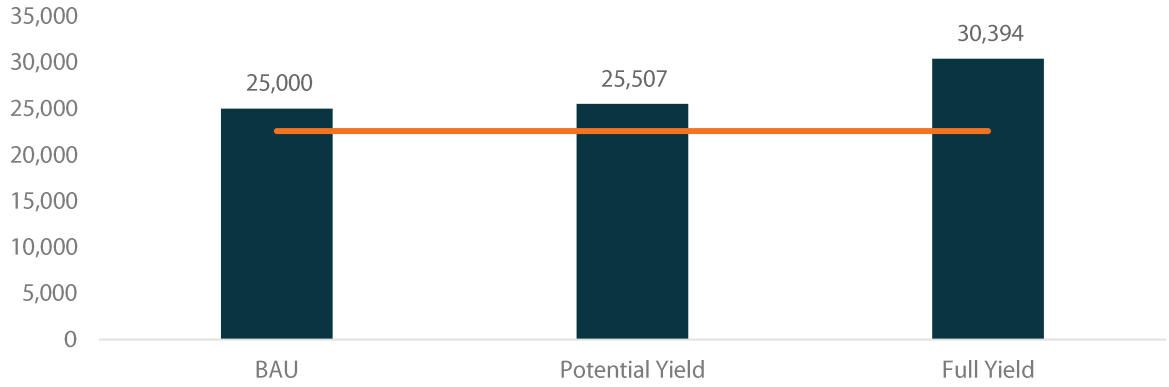
- In a Business as Usual scenario there is no additional development in the KTC and the KTC floorspace increases to 25,000 in 2031, in line with the draft ARC Strategy)
- Any further increase in floorspace from development within the KTC would only occur once the centre achieves a productivity level higher than its current level of $7,381
- Scenario development is complete by 2041; this is the year at which floorspace increase is tested

[28] There is some Shop/Retail floorspace within the KTC boundary that does not appear to be accounted for in the draft ARC Strategy, which has guided the analysis. The bulk of the missing floorspace is at the River Rd Centre and has been assumed to remain constant in future. This means that the total SHP floorspace at any time point is $+5,620m^2$

[29] This scenario provides an upper limit of the development that is possible in the KTC based on the Plan. It is unlikely that this level of development will be achieved within the timeframe being considered in this analysis.

The scenarios could support from 2,900m² to 7,800m² additional SHP floorspace at the KTC (Figure 41).[30]

Figure 41. SHP Floorspace Scenarios 2041[31]



Source: City of Armadale 2021, DPLH 2016

It is recommended the following timeline of Shop/Retail floorspace be applied to the KTC based on the different Scenarios (Figure 42). The upper limit for SHP floorspace would result in a 5,394m² increase compared to the ARC Strategy.

Figure 42. Scenario Floorspace Timeline (m²)

	2021	2026	2031	2036	2041
BAU					25,000
Potential Scenario	22,573	22,573	25,000	25,000	25,507
Full Scenario					30,394

8 NON-SHP FLOORSPACE ASSESSMENT

The demand for Non-SHP floorspace in the KTC has been initially assessed using dwelling growth from the Retail Gravity Model. It is estimated that population growth would support an additional 12,300m² of Non-SHP floorspace at the KTC by 2041 based on the current floorspace provision of 22,573m².

Figure 43. Additional Non-SHP Floorspace KTC – Growth from 2021 to 2041 (m²)

PLUC	2026	2031	2036	2041
ENT	495	1,022	1,617	2,306
HEL	25	52	82	117
MAN	77	159	252	360
OFF	920	1,900	3,006	4,287
RES	45	94	148	211
RET	547	1,129	1,787	2,548

[30] Includes the additional Shop/Retail floorspace from the draft RAC Strategy

[31] There is some Shop/Retail floorspace within the KTC boundary that does not appear to be accounted for in the draft ARC Strategy, which has guided the analysis. The bulk of the missing floorspace is at the River Rd Centre and has been assumed to remain constant in future. This means that the total SHP floorspace at any time point is +5,620m²

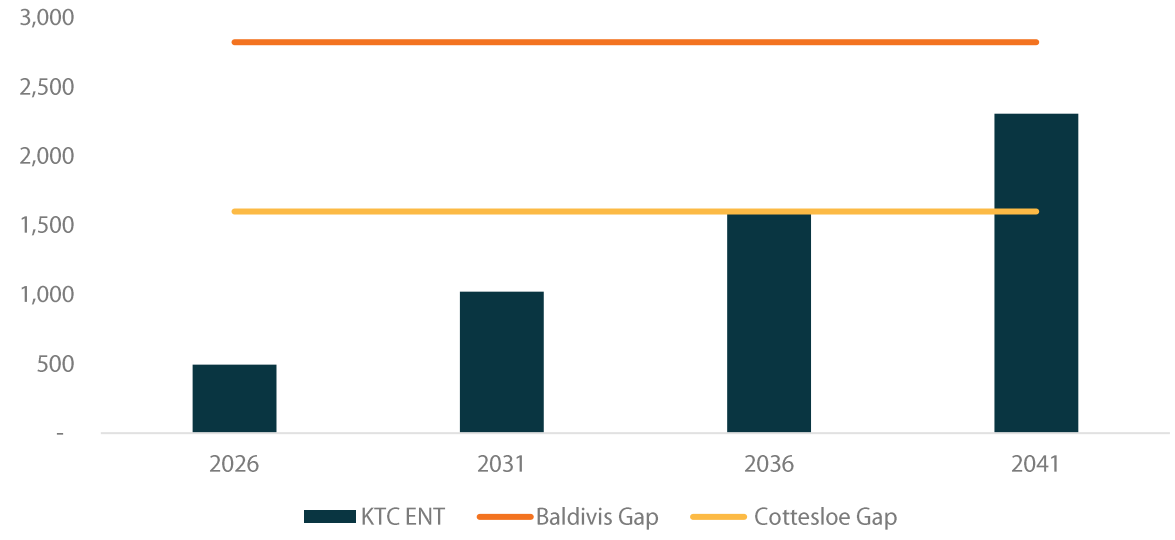
PLUC	2026	2031	2036	2041
SER	408	842	1,331	1,899
STO	115	238	377	537
Total	**2,632**	**5,436**	**8,600**	**12,266**

Source: DPLH 2016

These projections are based on the current size of the KTC, allocating demand for floorspace assuming the current distribution of floorspace across the City's activity centres. They do not account for additional floorspace provision at other activity centres, meaning they are likely overstated.[32] These estimates have been used to assess the gap analysis findings as they provide an indication of demand from the catchment as a whole. The base Non-SHP floorspace projections are provided in the following section: Floorspace Growth Based on Draft ARC Strategy.

WASLUC gaps have been aggregated into PLUCs for each of the benchmarks (gaps for uses already in KTC have been summed with gaps for uses not currently in KTC). The benchmark ranges have been compared to population demand to provide an indication of the time point at which population growth would support development to the level of identified gaps (MAN, PRI, STO and UTE floorspace uses were not analysed as they are not suitable to the KTC and only had 100m^2 of gap combined).

Figure 44. Kelmscott Town Centre ENT Floorspace Gap

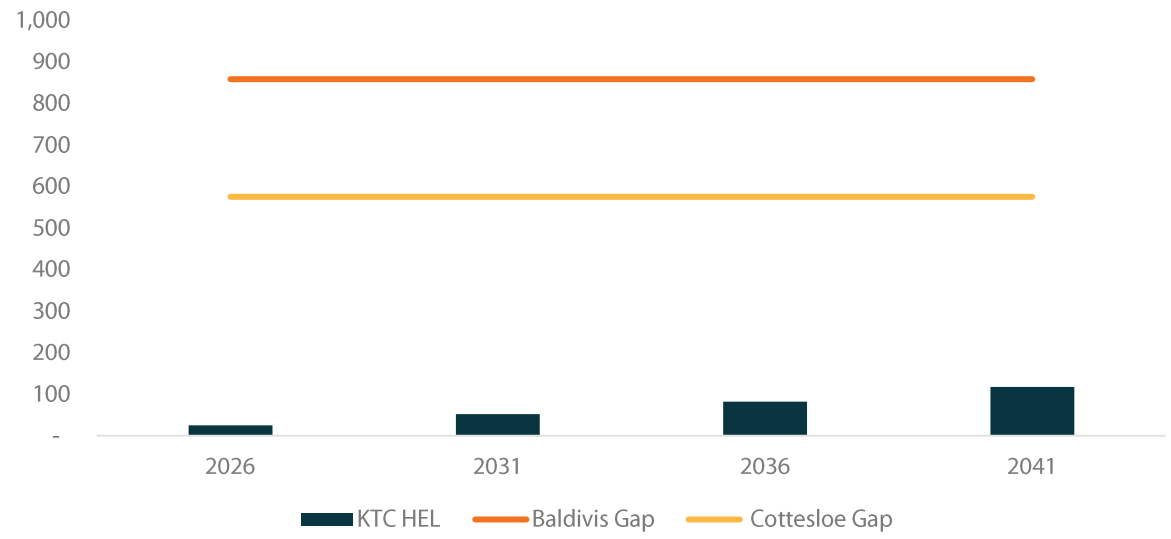


Source: DPLH 2016

The gap in Entertainment floorspace is expected to be addressed between 2036 and 2041 based on population growth only. Addressing this gap sooner would create opportunities for improved performance of the KTC and provide the higher levels of liveability that would be needed to support residential development within the KTC.

[32] These projections are to illustrate demand based on the current activity centre hierarchy, they are not used for the scenario demand estimates.

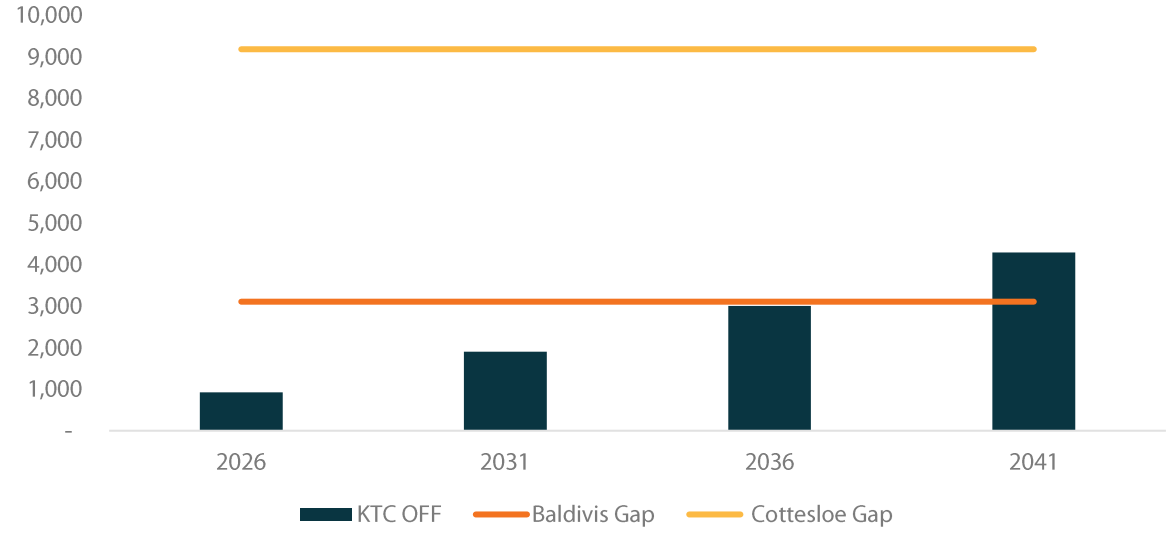
Figure 45. Kelmscott Town Centre HEL Floorspace Gap



Source: DPLH 2016

The HEL floorspace gap will not be addressed by population growth. This gap is an upper limit as some healthcare uses are provided for just outside of the KTC for which there is no data. The KTC should be allowed to accommodate this floorspace as it arises based on private market interest. These uses will enable both workers and future residents to undertake multi-purpose visits that increase the frequency and duration of visits to the KTC and expenditure available to businesses. Certain uses such as childcare provide critical amenity and should be facilitated in the short term to encourage a greater diversity of uses in the KTC.

Figure 46. Kelmscott Town Centre OFF Floorspace Gap

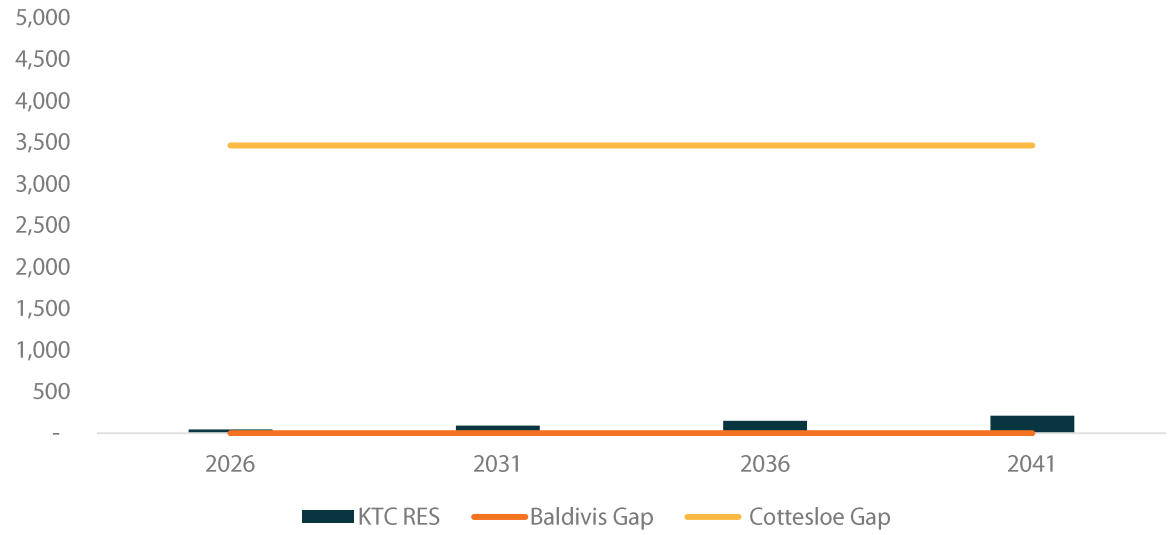


Source: DPLH 2016

OFF based uses would grow to address the lower range of the identified gap between 2036 and 2041 based on population growth. These uses will be attracted by increased amenity within the centre, greater walkability

and nighttime activation; if the gap were to be addressed earlier it would be more appropriate to do so in the medium term once other uses such as HEL and ENT have increased. Opportunities for additional office space are more likely to succeed within walking distance of the train station and in close proximity to food and beverage offerings. Office floorspace can be used strategically to provide day time activation to areas that are also nighttime orientated.

Figure 47. Kelmscott Town Centre RES Floorspace Gap

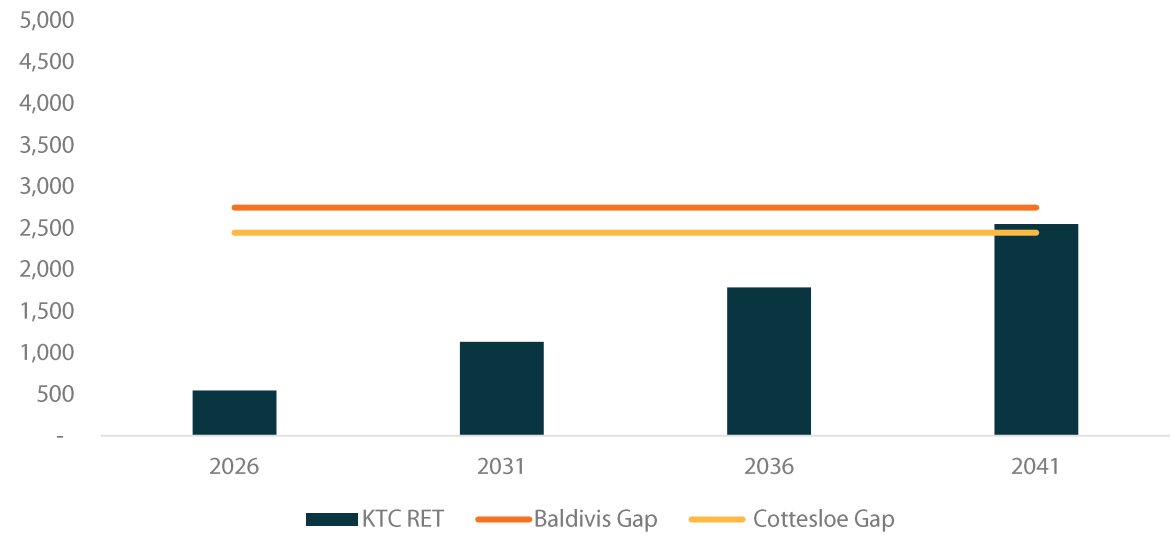


Source: DPLH 2016

The KTC currently addresses the lower end of the gap analysis findings with minimal RES floorspace, which is in alignment with many traditional District Centres. RES floorspace includes both commercial and non-commercial residential uses. Draft SPP4.2 encourages greater density in activity centres and the Plan will provide medium to high density non-commercial residential floorspace in the KTC that will likely surpass the identified gap. In additional to non-commercial residential uses, commercial residential floorspace such as short stay accommodation or hotels/motels, should be allowed to develop as private market interest arises. This would align with the businesses surveyed of whom 33% indicated tourists where part of their customer base. This type of commercial floorspace is more suited to the medium to long term once there is day and nighttime activation with a greater residential population base within the KTC.

Note: the graph uses DPLH LUES data from 2015/16. The data for the KTC indicates there is approximately 45m^2 of RES floorspace at the KTC. This appears to be underestimating the total residential floorspace as there are a number of multi-dwelling residential developments within the KTC such as those along Davis Rd (there are approximately 45 dwellings). It is likely that the KTC is currently close to achieving the upper estimate of the identified gap through residential floorspace. The proposed residential floorspace will therefore allow the KTC to surpass the identified RES gap; the proposed residential dwellings are aligned with the draft SPP4.2 recommended density targets for district centres and this target should be used to gauge the level of provision beyond the identified gap.

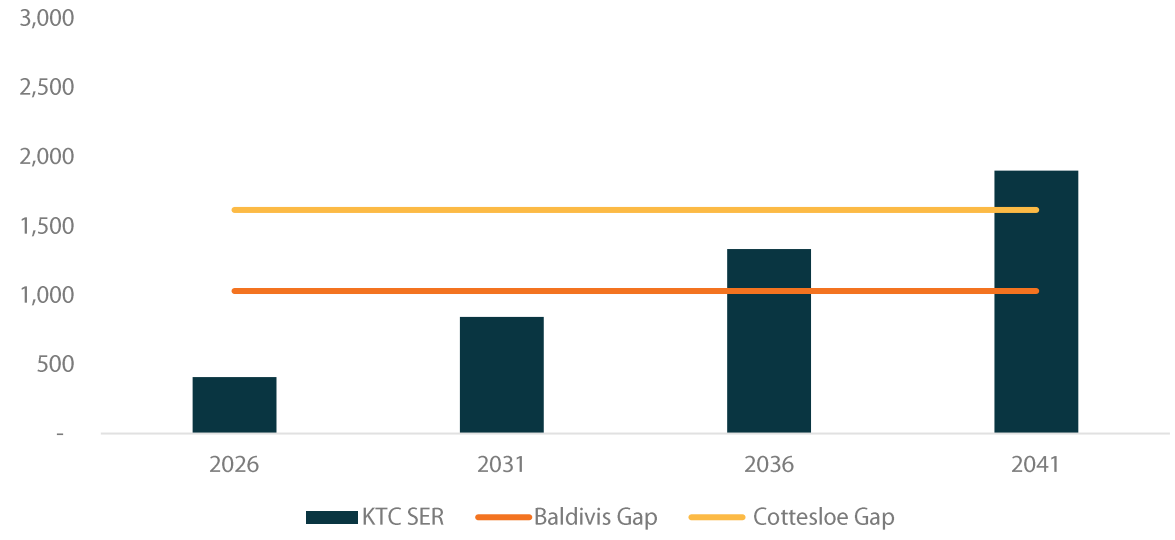
Figure 48. Kelmscott Town Centre RET Floorspace Gap



Source: DPLH 2016

The RET gap would be addressed by 2041 based on population growth. This floorspace use is linked to the KTC's location along Albany Hwy and the high levels of passing traffic. It is recommended that these uses remain outside the core shopping area of the KTC (i.e. north of Davis Rd) as they generally require individual parking for shops. This gap is not necessary to address to achieve the Plan.

Figure 49. Kelmscott Town Centre SER Floorspace Gap



Source: DPLH 2016

The SER gap would be addressed between 2031 and 2036 based on population growth. This floorspace use is linked to the KTC's location along Albany Hwy and the high levels of passing traffic. It is recommended that these uses remain outside the core shopping area of the KTC (i.e. north of Davis Rd) as they generally require

individual parking for shops and are less compatible with residential and Shop Retail uses. This gap is not necessary to address to achieve the Plan.

Floorspace Growth Based on Draft ARC Strategy

The proposed increase in SHP floorspace in the draft ARC Strategy has been used to quantify the potential growth in floorspace of Non-SHP floorspace types without further residential development in the KTC. SHP floorspace in the KTC is proposed to grow by approximately 11%; this has been applied to the current Non-SHP floorspace (Figure 50).

Figure 50. Floorspace Projection Based on draft ARC Strategy (m^2)

PLUC	Current	Additional	Total
ENT	4,263	458	4,721
HEL	217	23	240
OFF	7,923	852	8,775
RET	4,710	506	5,216
SER	3,510	377	3,887

Source: DPLH 2016, City of Armadale 2021

These floorspace gaps have been combined with the gap analysis and development scenarios to enable scenario analysis of Non-SHP floorspace uses in the KTC.

8.1 Development Scenario Testing

Scenarios have been developed through a combination of the ARC Strategy, gap analysis results and development scenarios. The following assumptions have been used by floorspace type (Figure 51):

Figure 51. Non-SHP Scenario Assumptions

PLUC	Assumptions	Justification
ENT	BAU: • Increases proportionate to draft ARC Strategy; • and, average benchmark gap Potential Scenario: • BAU increase; • and, increase from Potential dwelling yield Full Scenario: • BAU increase; • and, increase from Full dwelling yield	This is a key floorspace type that will support improved function of the KTC and allow it to support the planned residential and commercial development.
HEL	BAU: • Increases proportionate to draft ARC Strategy; • and, average benchmark gap Potential Scenario: • BAU increase;	This is a key floorspace type that will support improved function of the KTC and allow it to support the planned residential and

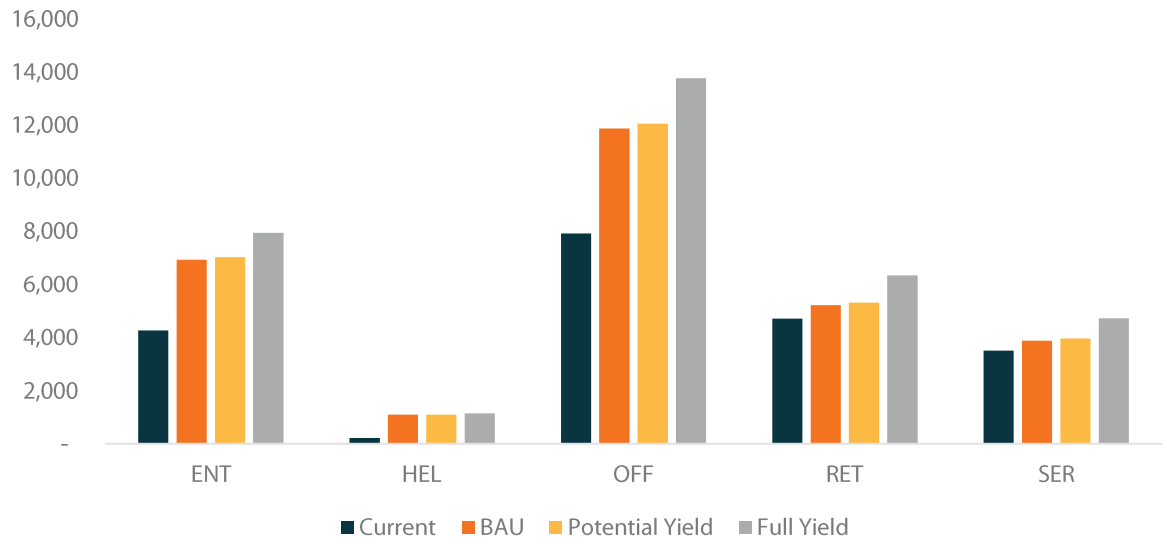
PLUC	Assumptions	Justification
	• and, increase from Potential dwelling yield Full Scenario: • BAU increase; • and, increase from Full dwelling yield	commercial development.
MAN	No change	Manufacturing is not suited to the KTC and future increases are assumed to be absorbed in more appropriate employment centres
OFF	BAU: • Increases proportionate to draft ARC Strategy; • and, average benchmark gap Potential Scenario: • BAU increase; • and, increase from Potential dwelling yield Full Scenario: • BAU increase; • and, increase from Full dwelling yield	This is a key floorspace type that aligns with the KTC's potential to develop as a TOD.
RES	No change: it is seen as unlikely for accommodation style offering to develop in the KTC in the short to medium term. It is also seen as possible that short stay accommodation and/or aged living facilities could be included with high density non-commercial developments as a mixed-use offering as development occurs. For this reason, it is assumed that the additional dwellings in the development scenarios include potential additional commercial related residential uses.	
RET	BAU: • Increases proportionate to draft ARC Strategy; Potential Scenario: • BAU increase; • and, increase from Potential dwelling yield Full Scenario: • BAU increase; • and, increase from Full dwelling yield	This use is suited to certain highway commercial areas in the southern parts of the KTC. It is less aligned with the future potential of the KTC as a TOD and no current gap has been applied.
SER	BAU: • Increases proportionate to draft ARC Strategy; Potential Scenario: • BAU increase; • and, increase from Potential dwelling yield Full Scenario: • BAU increase; • and, increase from Full dwelling yield	This use is suited to certain highway commercial areas in the southern parts of the KTC. It is less aligned with the future potential of the KTC as a TOD and no current gap has been applied.
STO	No change	Storage is not suited to the KTC and future

PLUC	Assumptions	Justification
		increases are assumed to be absorbed in more appropriate employment centres

Note: increases proportionate to draft ARC Strategy means that the current floorspace of a specific PLUC was grown based on the identified increase in Shop/Retail floorspace (see previous section)

It is estimated there could be demand for between 8,400m^2 and 13,300m^2 additional Non-SHP floorspace depending on the scenario (Figure 52).

Figure 52. Non-SHP Floorspace Scenarios 2041



A recommended timeline for Non-SHP has been developed based on the following assumptions (Figure 53):

- ENT and HEL uses could be targeted sooner to support higher levels of amenity and activation in the KTC
  - It is assumed the current gap is addressed by 2026 for ENT and 2031 for HEL
  - It is assumed the increase aligned to the draft RAC Strategy occurs by 2031
  - It is assumed the increase associated with development scenarios occurs by 2041
- OFF floorspace is not likely to develop until greater amenity is provided in the centre
  - It is assumed that 50% of the current gap is achieved in 2031 and 50% is achieved in 2036
  - It is assumed the increase aligned to the draft RAC Strategy occurs by 2031
  - It is assumed the increase associated with development scenarios occurs by 2041
- RET and SER floorspace will increase with population demand:
  - It is assumed that the increase aligned to the draft RAC Strategy occurs by 2031
  - It is assumed that the increase associated with development scenarios occurs by 2041

Figure 53. Scenario Floorspace Timeline (m²)

PLUC	Scenario	2021	2026	2031	2036	2041
ENT	BAU	4,263	6,474	6,932	6,932	6,932
	Potential Scenario					7,028
	Full Scenario					7,951
HEL	BAU	217	217	1,098	1,098	1,098
	Potential Scenario					1,103
	Full Scenario					1,150
OFF	BAU	7,923	7,923	10,327	11,880	11,880
	Potential Scenario					12,058
	Full Scenario					13,773
RET	BAU	4,710	4,710	5,216	5,216	5,216
	Potential Scenario					5,322
	Full Scenario					6,342
SER	BAU	3,510	3,510	3,887	3,887	3,887
	Potential Scenario					3,966
	Full Scenario					4,726

This timeline has been constructed based on an understanding of the uses that are relevant to the KTC and that can be targeted to achieve a higher performing centre over time. The demand from the population will likely be greater than this however this timeline accounts for new centres and other centre expansions and their likely uptake of Non-SHP floorspace over time. Demand for Non-SHP floorspace may occur at different timepoints and in different quantums than those suggested; the identified floorspace amounts should be considered as a guide for decision making with input required from proponents to demonstrate the demand / viability of their proposed uses within the KTC.

9 EMPLOYMENT SCENARIOS

Employment scenarios were developed based on the identified additional floorspace (including both SHP and Non-SHP) and floorspace to employment ratios (Figure 54). The KTC current floorspace to employment ratios were used apart from HEL for which there was no employment data available and the ratio was taken from the Armadale City Centre (Figure 54).

Figure 54. Floorspace to Employment Ratios

PLUC	Floorspace to Employment Ratio (m^2/Employment)
SHP	29
ENT	60
HEL	19
OFF	32
RET	86
SER	80

Source: DPLH 2016

Note: Employment is total employment (full-time plus part-time). This allows comparison with employment targets.

The ratios were applied to the PLUC floorspace types that were expected to grow. It is estimated that the KTC will support between 310 and 600 additional jobs by 2041 (Figure 55).

Figure 55. Employment Growth Scenarios

	Additional Floorspace	Additional Jobs	ESS Contribution
BAU	8,391	310	1.46%
Potential Scenario	8,854	338	1.59%
Full Scenario	13,320	601	2.82%

Source: DPLH 2016

The KTC will contribute between 1.5% and 2.8% of the total additional jobs required to meet the ESS target set by the Perth & Peel @ 3.5 million sub-regional planning framework.

10 IMPLEMENTATION

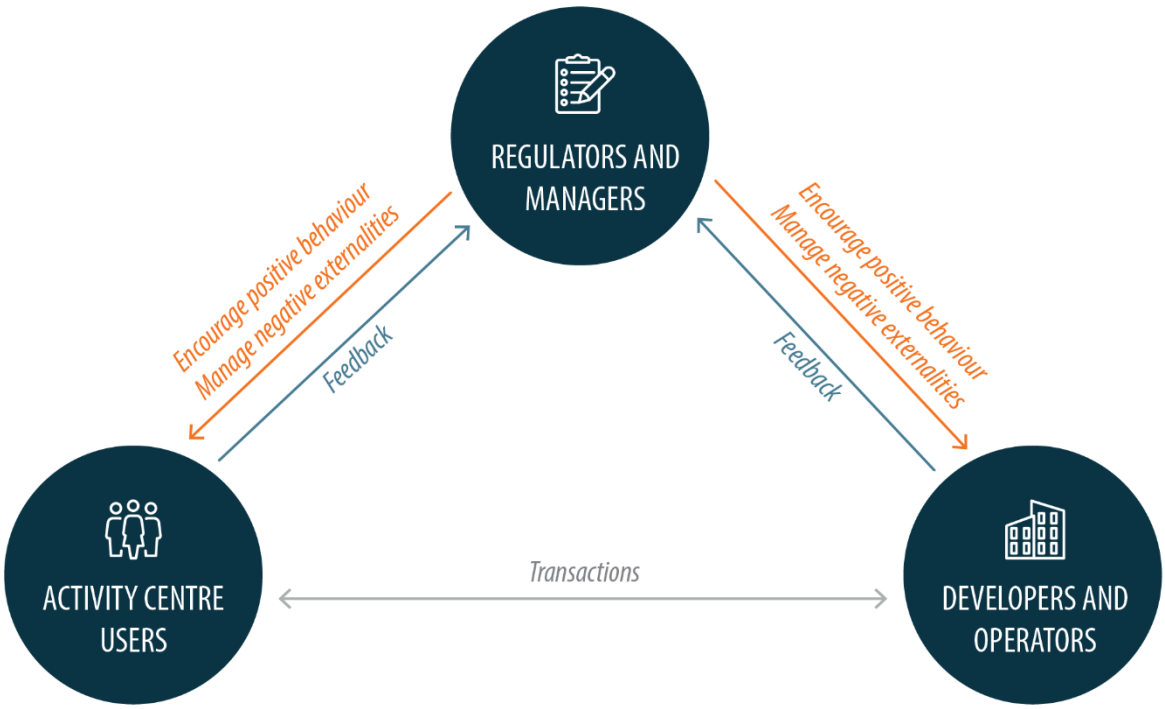
The Strategy will provide a guide to establishing the capacity for future SHP and Non-SHP floorspace development. It is assumed the City will facilitate employment growth through an understanding of the key drivers that attract businesses to the Centre.

Any strategy to reimagine the function, scale or use of the KTC should respond to the 'felt needs' of the user groups it is catering for, including:

- Activity centre users;
- Enterprise developers/operators (and the workers); and
- Regulators/managers.

Decisions are made to benefit one or more of the user groups in the context of an overarching strategy vision.

Figure 56. User group interactions



The KTC Precinct Structure Plan will work to benefit all three of these user groups. Understanding the drivers of user behaviour is require to achieve the vision for the KTC. Regulators and managers (e.g. State and Local government and other authorities) can generally only encourage or influence certain behaviours, rather than control them. Ultimately the market and centre users will decide what activity is viable for the centre, with regulators and managers able to exert influence toward a desired approach. It is therefore paramount that the planning for the KTC aligns with desired outcomes of users and employment providers.

There are a number of key drivers for population driven industries that need to be considered when planning an activity centre (Figure 57 and Figure 58).

Figure 57. Example demand drivers for population-driven businesses

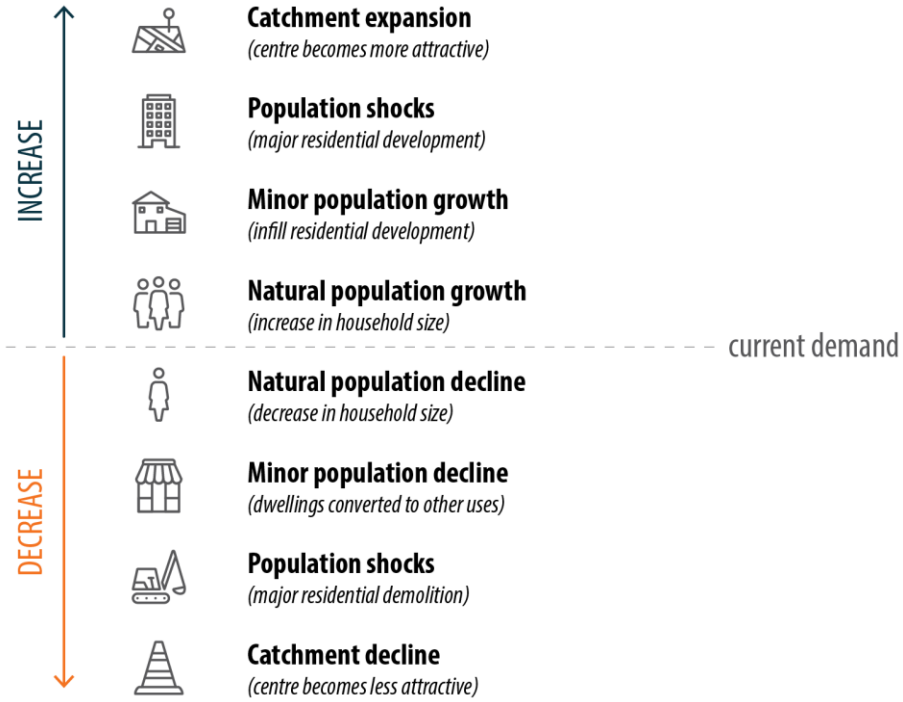
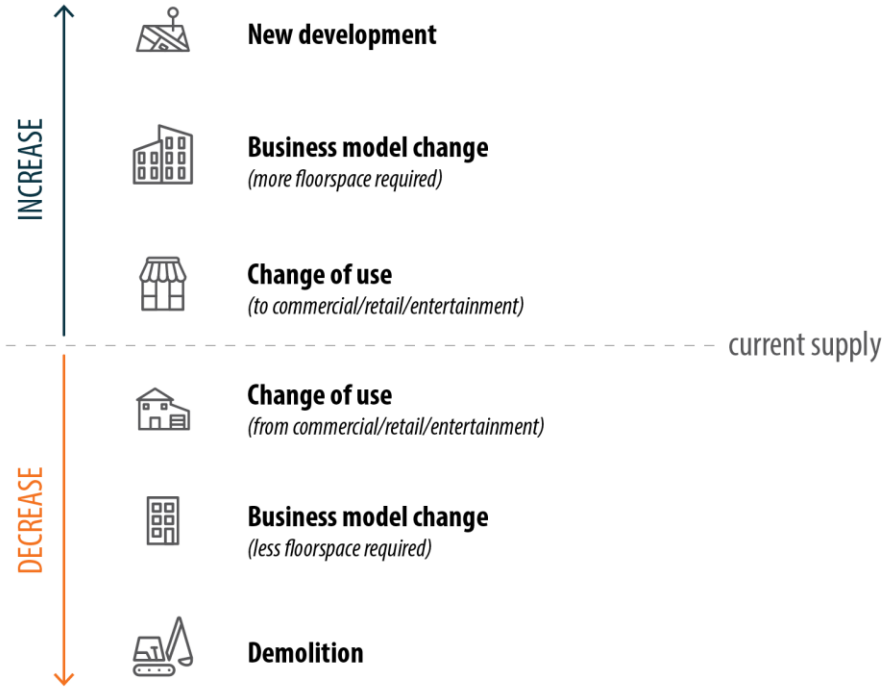


Figure 58. Example supply drivers for population-driven businesses



A change in any of the above characteristics will promote a change in floorspace and interest from the market for redevelopment. For example, on the demand side, an increase in the level of density surrounding the centre increases the effective userbase and proportion of expenditure that is likely to be directed and

captured by the centre, this will provoke a competitive response from developers in which investment will be made to capture this extra expenditure pool.

Similarly, a change in the urban fabric (on the supply side) that makes the centre more attractive will increase the catchment of the centre. This could, for example, be improved streetscaping or connectivity, activation and event strategies within the centre or improved connection to the local tourism areas. This will provoke a similar competitive response from developers wishing to take advantage of the extra expenditure pool.

When considering strategic employment, these drivers are largely exogenous to changes in these drivers and principally rely on the individual decisions of businesses. Changes in strategic employment can be affected through promoting the unique advantages of the area to business, encouraging business collaboration and other business friendly policies. Typical considerations include travel time to the CBD (to access clients), travel time to work for employees and the cost of the premises.

10.1 The City's Role

In creating an attractive business environment within the KTC, the role of the City is to act as a central regulator, coordinator and facilitator, working to understand the challenges facing local businesses including; linking businesses with appropriate resources, advocating on behalf of local businesses, and supporting specific projects where appropriate. The levers available to the City can be described under the following hierarchy:

CONTROL

e.g. Establishing local policy and regulation, directing internal resources, utilisation of local government-controlled land and assets, implementing programs and events, and supporting projects with seed funding

INFLUENCE

e.g. Facilitating the strengthening of networks that encourage the sharing of knowledge and investment opportunities, and supporting communication with State and Federal governments regarding the influence of wider policy, projects or funding decisions

MONITOR

e.g. Tracking economic performance indicators and collecting feedback from businesses regarding current issues or opportunities which relies on communication channels with industry and the broader community

Using these levers, the City can actively attract and retain local businesses through an understanding of the relative strengths and weaknesses of the KTC and how they relate to a business's locational preference drivers and hence it's operational productivity. These considerations differ depending on the nature of a business, with population/consumption-oriented businesses having different needs to those that operate business-to-business or are export driven.

The factors identified through the Business Preferences Survey should be assessed within the context of the City's overarching strategic goals, such as the prioritisation of high-quality employment. The development of a set of strategically aligned goals forms a natural starting point to attracting desired businesses to the KTC, which should incorporate both local business feedback and established business locational preference principles. The City should focus on controlling and influencing the attractors that are suited to population-driven industries as population growth continues in and around the KTC (Figure 59).

Figure 59. Opportunities for Control and Influence

Lever	Action	Source
Control	Require active frontages for key sites and exposure areas as redevelopment occurs	Centre Performance Assessment
	Providing clear wayfinding between destinations	
	Require that future multi-storey or internalised parking provides primary access via a Main St and not directly into a shopping centre	
	Require key active frontages without separation from footpaths when redeveloped (i.e. along Denny Ave)	
	Simplify regulatory/planning process	Business Survey
	Provide increased support and information to local businesses	
Influence	Encourage parking to be external to the KTC (around the perimeter)	Centre Performance Assessment
	Identifying priority uses for important active frontages (i.e. food and beverage, high turnover retail, etc.) and allowing for some specialty uses in these locations (i.e. clothing and footwear retail, jewellery retail, etc.)	
	Encourage development of destination operators (i.e. supermarkets, large entertainment facilities, etc.) in locations that promote pedestrian traffic along activated frontages	

Lever	Action	Source
	Market local industry capabilities to attract opportunity industries	Business Survey
	Lobby State Government for improved transport connections	

Export-orientated industry drivers are not as strong in the KTC (i.e. agglomeration economies, resources, etc.) and the City should use a monitoring approach to identify potential growth in these industries. This would include:

- Tourism opportunities
- Education opportunities (i.e. vocational, tertiary, etc.)
- Officed-based business that is not driven by population (i.e. headquarters for large businesses)

11 CONCLUSION

This report provides the Retail and Employment assessment to support the development of the Kelmscott Town Centre Precinct Structure Plan (the Plan). The analysis considers a ten-kilometre catchment around the centre including demographic context, employment context and consideration of competing activity centres. Analysis has been developed in alignment with the City of Armadale Retail (Commercial) Activity Centres Strategy (the draft RAC Strategy).

The Kelmscott Town Centre (the KTC) plays an important role in meeting the goods and services needs of the surrounding population and those driving along Albany Hwy. The Centre is planned to increase to 25,000m^2 by 2031 with a number of other key centres developing to support most of the population growth in the City. The Armadale City Centre is planned to expand significantly to meet its role as a Strategic Metropolitan Centre. This means that further growth (above that in the draft RAC Strategy) in the KTC is only required to support increased residential density and commercial activity that is identified in the Plan.

The KTC is a large district centre that supports almost exclusively population driven industries. There are a number of opportunity industries going forward including:

- Retail Trade
- Food and Beverage Services
- Health Care and Social Assistance
- Education and Training
- Professional Services (population orientated)

These industries can be targeted to improve the viability of all businesses in the centre and the vibrancy of the centre.

Floorspace analysis identified specific gaps in detailed floorspace uses based on relevant benchmarks. There were three gaps that should be addressed through the Plan, including:

- Entertainment, Recreation and Cultural (ENT) uses
- Health, Welfare and Community Service (HEL) uses
- Office (OFF) uses

It is recommended that ENT and HEL uses be targeted in the shorter term to provide the amenity required to support OFF uses and residential development in the medium to longer term.

The gaps have been combined with projected increases in floorspace required based on residential development scenarios from the Plan. Retail gravity modelling was used to inform increases in Shop/Retail floorspace, accounting for current and future supply in surrounding activity centres. This method ensures the KTC supports additional local residential populations while respecting the activity centre hierarchy proposed by the draft RAC Strategy.

The floorspace development scenarios are as follows (Figure 60).

Figure 60. Floorspace Development Scenario Summary[33]

PLUC	Scenario	2021	2026	2031	2036	2041
SHP	BAU	22,573	22,573	25,000	25,000	25,000
	Potential Scenario					25,507
	Full Scenario					30,394
ENT	BAU	4,263	6,474	6,932	6,932	6,932
	Potential Scenario					7,028
	Full Scenario					7,951
HEL	BAU	217	217	1,098	1,098	1,098
	Potential Scenario					1,103
	Full Scenario					1,150
OFF	BAU	7,923	7,923	10,327	11,880	11,880
	Potential Scenario					12,058
	Full Scenario					13,773
RET	BAU	4,710	4,710	5,216	5,216	5,216
	Potential Scenario					5,322
	Full Scenario					6,342
SER	BAU	3,510	3,510	3,887	3,887	3,887
	Potential Scenario					3,966
	Full Scenario					4,726

It is estimated there could be demand for between 2,900m^2 and 7,800m^2 additional SHP floorspace and 8,400m^2 and 13,300m^2 additional Non-SHP floorspace at the KTC. The upper limit for SHP floorspace would result in a 5,394m^2 increase compared to the ARC Strategy.

Employment scenarios were developed based on the identified additional floorspace to understand the potential contribution of the KTC to the City's ESS target, established in the sub-regional planning framework. It is estimated that the City will require 21,000 jobs to meet the target by 2050. It is estimated that the KTC will support between 310 and 600 additional jobs by 2041. This equates to a contribution of between 1.5% and 2.8% of the total additional jobs required to meet the ESS target.

There are a number of actions the City can use to implement the Plan to achieve a high-performing and activated KTC that supports local business needs. These include:

- Require active frontages for key sites and exposure areas as redevelopment occurs
- Providing clear wayfinding between destinations

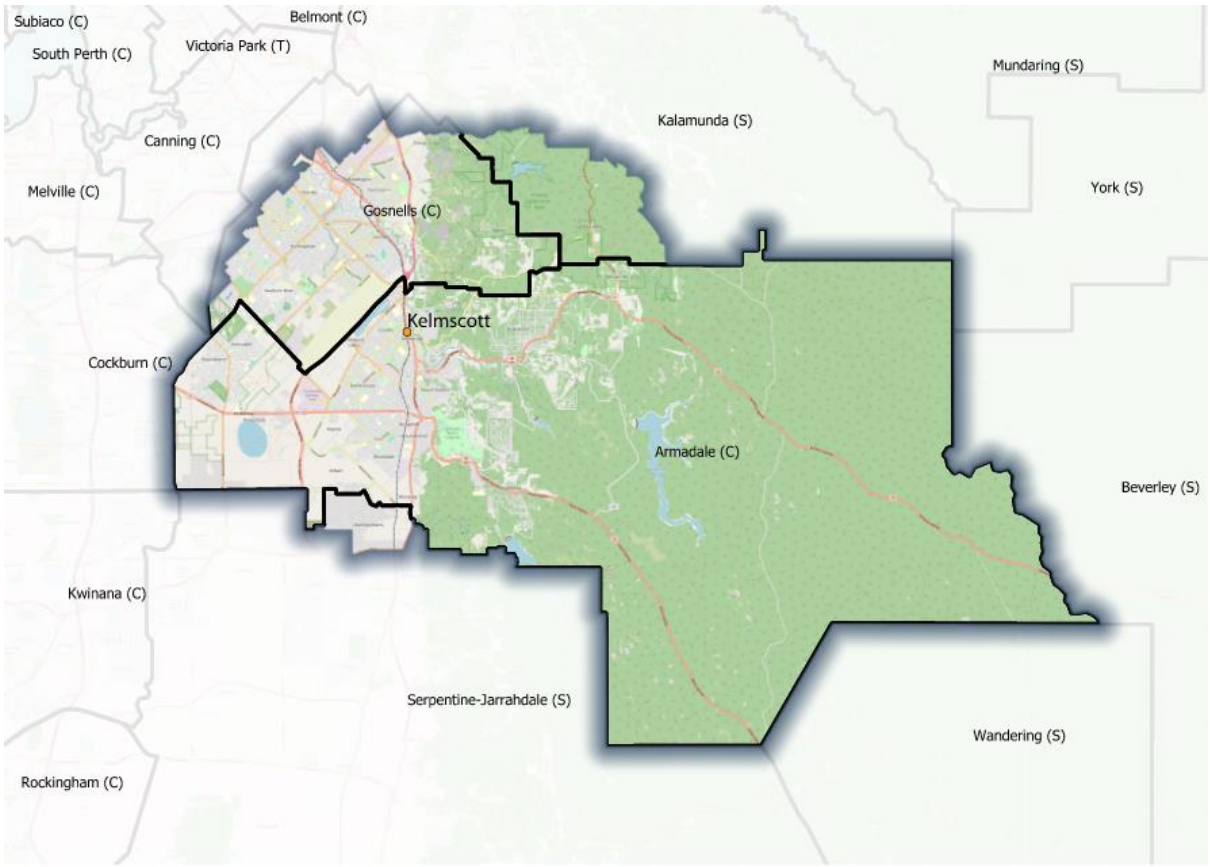
[33] There is some Shop/Retail floorspace within the KTC boundary that does not appear to be accounted for in the draft ARC Strategy, which has guided the analysis. The bulk of the missing floorspace is at the River Rd Centre and has been assumed to remain constant in future. This means that the total SHP floorspace at any time point is +5,620m^2

- Require that future multi-storey or internalised parking provides primary access via a Main St and not directly into a shopping centre
- Require key active frontages without separation from footpaths when redeveloped (i.e. along Denny Ave)
- Simplify regulatory/planning process
- Provide increased support and information to local businesses
- Encourage parking to be external to the KTC (around the perimeter)
- Identifying priority uses for important active frontages (i.e. food and beverage, high turnover retail, etc.) and allowing for some specialty uses in these locations (i.e. clothing and footwear retail, jewellery retail, etc.)
- Encourage development of destination operators (i.e. supermarkets, large entertainment facilities, etc.) in locations that promote pedestrian traffic along activated frontages
- Market local industry capabilities to attract opportunity industries
- Lobby State Government for improved transport connections

12 APPENDIX 1 – STUDY AREA

The modelled study area was constructed based on all ABS level 1 statistical areas (SA1) within 10km radius of the KTC. ABS SA1s are constructed based on population rather than geography, with the average SA1 having 400 people within its boundaries. Therefore, although the larger SA1 areas in the east and southeast increase the geographical radius of the modelled catchment, there low population does not significantly alter the results of the modelling.

Figure 61. Modelled Study Area



Source: Pracsys 2021

13 APPENDIX 2 - GRAVITY MODEL ASSUMPTIONS AND METHODOLOGY

Methodology

Gravity models allow for the measurement of spatial interaction as a function of distance to determine the probability of a given customer shopping at a centre and provide an approximation of trade area and sales potential for a development. This modelling technique uses the distance between a household and each centre, and a measure of 'attractiveness' to define the probability model. The 'attractiveness' of a centre has been defined by total floorspace and the distance has been calculated by measuring straight-line distances between each centre and population. The gravity model probability formula is shown in Figure 62.

Figure 62. Gravity Model Probability Formula

$$P_{ij} = \frac{\frac{A_{jk}{}^{a}}{D_{ij}{}^{ß}}}{\sum_{j=1}^{m} \frac{A_{jk}{}^{a}}{D_{ij}{}^{ß}}}$$

P_{ij}	=	Probability of customer living/working in statistical area i shopping at complex j.
A_i	=	Area of floorspace in centre, j in square metres, according to the type of supply, k.
D_{ij}	=	Distance between statistical area of households, i and complex j.
a	=	Area exponent
ß	=	Distance exponent
k	=	Type of supply or expenditure, either Convenience or Comparison
i	=	Statistical area (i=1,...,n)
j	=	Complexes (j=1,...,m)

Source: Carter, C (1993) 'Assumptions Underlying the Retail Gravity Model', *Appraisal Journal,* Vol 61, No 4, pp510; Pracsys (2020)

Figure 63. Gravity Model Demand Formula

$$D_{kj} = \sum_{i=1}^{n} (P_{ij} * E_i)$$

D_{kj} = Demand for retail category k, at centre j.

E_i = Expenditure pool of statistical area i.

Source: Carter, C (1993) 'Assumptions Underlying the Retail Gravity Model', *Appraisal Journal,* Vol 61, No 4, pp510; Pracsys (2020)

Figure 63 shows that the demand for retail category k[34], at centre j, is equal to the sum of the probabilities of customers living in statistical areas i to n, multiplied by the expenditure pool of statistical area i. In other words, the demand for retail is a function of the probability of customer from particular statistical area attending the centre multiplied by the expenditure pool of that statistical area. The expenditure is pool is derived through the population multiplied by its income distribution.

In its core form gravity modelling provides a clearer, reproducible outcome that can be easily assessed. However, it does not consider local factors, including:

- The comparative value proposition of centres (e.g. the presence of an 'anchor' attractor that draws significant market share);
- The brand preference of users; or
- The efficiency of transport networks, as well as geographical barriers (e.g. in some cases it may be easier for customers to access a centre that lies physically further away).

[34] Retail categories are determined by their PLUC code and whether they are convenience or comparison goods. Convenience goods are day-to-day items such as groceries, pharmaceuticals and fast food. Comparison goods are items where consumers are willing to travel further distances, and are bought less frequently such as clothing, furniture, electronics, or other household items.

13.1 Gravity Model Assumptions

Current and Future Supply

The following schedule of floorspace supply by activity centre was modelled within the gravity model.

Activity Centre	2021	2026	2031	2041
Kelmscott	22,573	25,000	25,000	25,000
Maddington	31,202	60,000	60,000	60,000
Gosnells Town	15,702	18,868	18,868	18,868
Southern River	4,500	16,000	25,000	25,000
Ashburton Village	1,810	1,810	1,810	1,810
Corfield SC	1,640	1,640	1,640	1,640
Thornlie Square	13,133	13,133	13,133	13,133
Forest Lakes	15,204	15,204	15204	15,204
The Vale	9,722	9,722	9,722	9,722
Huntingdale Forum	2,089	2,089	2,089	2,089
Westfield Street (Maddington Village)	3,165	4,531	4,531	4,531
Armadale	60,261	70,000	90,000	100,000
Harrisdale	11,855	22,000	25,000	25,000
Hilbert	7,500	20,000	20,000	20,000
Camillo	4,022	4,022	4,022	4,022
Haynes	6,200	6,200	6,200	6,200
Piara Waters	3,900	3,900	3,900	3,900
Roleystone	1,961	1,961	1,961	1,961
Champion Drive at Seville Grove	4,045	4,045	4,045	4,045
Hilbert South	6,000	6,000	6,000	6,000
Hilbert East	-	-	3,500	3,500
Hilbert South West	-	400	400	400
River Road	550	600	600	600
Connell Avenue	100	100	100	100
Armstrong Road	290	290	290	290
Schruth Street	300	300	300	300
Challis	400	400	400	400
Pioneer Village	1,539	1,539	1,539	1,539
Gwynne Park	143	143	143	143
Seventh Avenue	345	345	345	345
Brockton / Soldiers	490	490	490	490
Forrestdale	500	500	500	500
Forrest Road	1,114	1,114	1,114	1,114
Harber Drive	100	100	100	100
Strawberry Drive	100	100	100	100

Activity Centre	2021	2026	2031	2041
Seville Drive	100	100	100	100
Erade Village	370	2,000	2,000	2,000
Haynes South West	-	200	200	200
Haynes South East	1,200	1,200	1,200	1,200
Haynes North	400	400	400	400
Hilbert North	-	700	700	700
Hilbert South East	-	1,500	1,500	1,500
Armadale High School	-	-	-	-
Champion Lakes	300	500	750	1,000
Karragullen	350	350	350	350
Churchmans Brook Estate (Bedfordale)	-	-	300	300
Tudor Road	200	200	200	200
Anstey Road	500	500	500	500
Champion Lakes (North)	100	100	100	100

Source: Department of Planning Lands and Heritage (LUES) 2015/17, City of Armadale Draft Local Commercial Strategy 2020, City of Gosnells Activity Centres Planning Strategy 2019

Floorspace Productivity

The floorspace productivity rates required to ensure reasonable retention rates by shop type are shown in Figure 64.

Figure 64. Required Floorspace Productivity for Business Retention

Retail Category	Productivity ($/m^2)
Take Home Food	$ 10,000
Take Home Liquor	$ 9,000
Dine Out Food	$ 6,500
Clothing/Footwear	$ 5,000
Convenience Retail	$ 7,000
Bulky Goods Retail	$ 5,500

Source: LandCorp 2017

Calibrated Floorspace Productivity

Estimates of centre turnover were utilised to calibrate the gravity model. These were developed through reports from shopping centre managers and operators with turnover estimated at the activity centre level. The below centres were used for calibration.

Centre	Floorspace (NLA m^2)	Turnover ($)	Productivity ($/m^2)	Note
Armadale	60,261	413,405,567	6,860	Based on turnover reported for Armadale Central and Armadale Shopping Centre

Maddington	31,202	235,620,987	7,551	Based on turnover reported for Maddington Central.
Harrisdale	11,855	76,444,253	6,448	Based on turnover reported for Stocklands Harrisdale
Forest Lakes	13,683	80,000,000	5,846	Based on turnover reported for Forest Lakes Shopping Centre

Source: Pracsys 2021, Shopping Centre Directory 2018

14 APPENDIX 3: PLUC DEFINITIONS

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 (for example car sales yard or 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

Government, government-subsidised and non-government activities that provide the community with a specific service, including 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.

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.

UTE – Utilities/Communications

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

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.