Creamery Road Retail and Employment Analysis

City of Greater Geelong

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1. Executive Summary

Creamery Road is one of nine precincts set to be built across the Northern and Western Geelong Growth Areas (NWGGA), located in the City of Greater Geelong (COGG). These growth areas are part of the broader *Northern and Western Geelong Growth Areas Framework Plan* (*Framework Plan)* which was released in August 2020.

Key features of the Creamery Road Precinct Structure Plan (PSP) under the Framework Plan include two neighbourhood activity centres (NACs) along Geelong-Ballan Road, servicing both the Creamery Road PSP and the adjacent Batesford North PSP. Each NAC is expected to be around 7-8,000 sqm, with additional social infrastructure and a possible train station to the north. In November 2021, a draft Future Urban Structure (FUS) for Creamery Road was provided, which presented the City's revised position on location of key land uses in the Creamery Road precinct. The FUS considers splitting the NAC identified for Creamery Road into two Local Activity Centres (LACs). These LACs are shifted into the centre of Creamery Road, rather than the periphery, with the existing Batesford North NAC shifted westward. The population and social infrastructure are expected to remain the same, though the proposed train station has been shifted into Batesford North.

This study aims to provide a robust evidence base surrounding the location, size and scale of Creamery Road's future activity centres, based on four configurations:

- Scenario 1: Two NACs, located along Geelong-Ballan Road in between the Creamery Road (CR) and Batesford North (BN) precincts. For the purposes of modelling, this is split evenly between CR and BN precincts.
- Scenario 2: The southern NAC is split into two LACs and shifted into the centre of Creamery Road. The northern NAC is shifted westward into the centre of Batesford North.
- Scenario 3: The southern NAC is not split but is still shifted into the centre of Creamery Road. The northern NAC is shifted westward into the centre of Batesford North.
- Scenario 4: The southern NAC is split into a NAC and LAC and is shifted into the centre of Creamery Road. The northern NAC is shifted westward into the centre of Batesford North.

For each configuration, walkability modelling, as well as retail and employment demand modelling has been undertaken to determine the optimal configuration, size and location.

The walkability analysis determined that Scenario 1 had a high number of dwelling densities within an 800 metre single trip (1,600 metre round trip) to the NACs, but with a noticeable gap in connectivity in the north-eastern corner. Under Scenario 2 and Scenario 4 (where the centres are in the same location), there is greater walkability due to the centres shifting from the edge of the precinct into the centre. Scenario 3 (which has only a single centre), shows greater gaps there in medium and high-density connectivity within an 800 metre single trip, as well as gaps in low density residential in the north-western corner, however this may be mitigated through the strategic positioning of the Batesford North NAC or with the introduction of Integrated Development Areas (IDAs) along the CCC.

The retail analysis found that Scenario 1 would deliver high amounts of retail demand of around 20,654 sqm (10,327 sqm in each precinct) and a retail gap (demand greater than the planned supply) of around

13,654 sqm (7,377 sqm in each precinct). This is due to the location of the two NAC's located on Geelong-Ballan Road and broadly servicing both Creamery Road and Batesford North equally. Scenarios 2-4, sees the centre configurations shifted towards the middle of each precinct, resulting in localisation and greater self-containment of the trade areas. As such, retail demand for Creamery Road drops to 7,430 sqm (with Batesford North exclusively capturing around 6,902 sqm upon completion after Creamery Road). The drops are a result of the localisation of the trade area (away from the arterial roads in the centre), as well as the consideration of an additional bulky goods centre which is expected to draw away additional trade.

Relying on retail to understand activity centre demand is insufficient, as it does not consider non-retail floorspace. Therefore, an **employment analysis** was undertaken, with the aim to firstly estimate total employment for Creamery Road and then to estimate non-retail floorspace demand that would be derived from the centres. The analysis found that Creamery Road would generate around 1,180 total jobs under the Scenario 1 and between 1,047-1,147 under the other scenarios. Non-retail jobs in activity centres were estimated to be between 298 and 430 jobs, resulting in non-retail floorspace demand of between 6,340 and 9,101 sqm.

Once non-retail demand was calculated, it could be added to retail demand to create **total centre demand**. These numbers mean that centre supply can feasibly be built up to these estimates. Under Scenario 1, there is around 29,754 sqm of total centre demand. Scenario 2 has total centre demand of 13,771, which when divided across the two LACs equates to around 6,885 sqm. Scenario 3 has 13,796 sqm, whilst Scenario 4 has 15,521 sqm across the two centres. As the recommendations will detail, keeping supply less than demand may be a useful method in creating a vibrant activity centre.

A high-level **case study analysis** was undertaken to see if there were any common themes that could encourage greenfield centres to become more pedestrian-friendly. Key points that emerged were centres that had large land holdings, a value capture policy, private-public partnerships, design guidelines (such as masterplans) and additional developer incentives.

Key recommendations finds that Scenario 2 and 4, whilst having high walkability, are less likely to be commercially viable. An additional centre has been created in a smaller and more localised trade area. Essentially, there is greater competition competing for a smaller customer base. At the same time, an additional bulky goods precinct reduces demand even further. This report recommends a single NAC, such as Scenario 3. Whilst less walkable, it can concentrate activity within one area. This would be of greater interest to the private sector, which, when combined with various incentives to encourage walkability, could achieve more pedestrian-friendly outcomes.

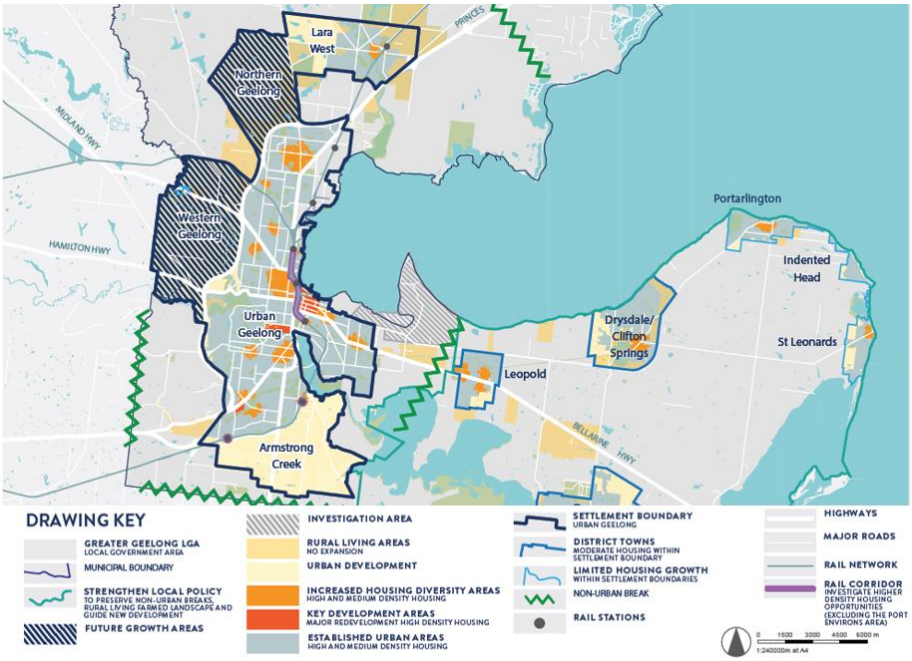
Scenario 3 has demand of 13,796 sqm and supply of 7,500 sqm, resulting in a gap of around 6,296 sqm. It is recommended that the City leverage this retail gap by restraining initial supply to 7,500 sqm and introduce new supply gradually (such as in mixed use/IDAs along the CCC). Another option is to allow supply to increase up to approximately 11,017 sqm (at this level demand remains 25 per cent higher than supply), for proposals that meet certain design outcomes. This still leaves a higher level of demand, which still provides as buffer given any macroeconomic shocks, whilst retaining some supply to be introduced strategically into mixed use/IDAs in the future.

Additional recommendations include shifting the medium and high-density precincts southward into the single NAC, introducing a 25 per cent non-retail floorspace cap and the utilisation of social infrastructure to create vibrancy and amenity. It is estimated that the NAC should be coming online in 2031, with the bulky goods precinct to be coming online around 2036.

2. Introduction

Greater Geelong is the largest of Victoria's regional cities and provides the largest contribution to non-metropolitan population growth in the state. It is estimated to have around 268,984 residents in 2021[1] It currently is home to around 10 per cent of regional Victorians, with this expected to grow to 50 per cent by 2050[2]. Much of this population growth is underpinned by the strong performance of the local economy where employment growth grew at twice the rate of population growth[3]. In order to plan for the long term, an estimated 2.5 per cent annual population growth rate has been applied, meaning a population of around 500,000 residents by 2050[4]. In recognition of this future, there is a need to examine future residential, employment and infrastructure requirements. New growth areas were also identified as a key component to addressing this change. The result was the identification of the Northern and Western Geelong Growth Areas (NWGGA). These areas were selected due to their proximity to major urban areas, employment, access to infrastructure and ability to integrate to existing services and communities[5] (See Figure 1).

FIGURE 1: GREATER GEELONG INFILL AND GROWTH AREA BOUNDARIES



Source: Northern and Western Geelong Growth Areas Framework Plan – August 2020, pg.26

[1] City of Greater Geelong |population forecast. Forecast.ID. https://forecast.id.com.au/geelong
[2] City of Greater Geelong 2019, *Northern & Western Geelong Growth Areas Framework Plan*, p.16. https://www.geelongaustralia.com.au/common/Public/Documents/8d85e3f534f7876-nwggaframeworkplan-august2020finaladopted.pdf
[3] Ibid., p.12
[4] Ibid., p.16
[5] Ibid., p.18

The NWGGA is expected to be home to around 112,000 residents by 2050. Around 42 per cent of residents are expected to be located in the Northern Geelong Growth Area (NGGA), with 57 per cent of residents expected to be found in the Western Geelong Growth Area (WGGA).

2.1 About the study

Creamery Road is one of nine precincts set to be built across the NWGGA, located in the City of Greater Geelong (COGG). These growth areas are part of the broader *Northern and Western Geelong Growth Areas Framework Plan* which was released in August 2020. A draft Precinct Structure Plan for Creamery Road (CRPSP) was created soon after. Within the CRPSP are the creation of two neighbourhood activity centres (NACs) of approximately 7,500 sqm each. These NACs are expected to serve both the CRPSP and the upcoming Batesford North Precinct Structure Plan (BNPSP).

The NACs within the NWGGA will play a key role in achieving the vision of establishing vibrant and walkable 20-minute neighbourhoods (a 20-minute neighbourhood equates to a 10-minute/800m single trip, or a 20-minute/1,600m return trip). Achieving this outcome is part of broader State government guidelines for liveability in new greenfield precincts. Other initiatives to this vision include concentrating residential dwellings along a tree-lined "Clever and Creative Corridor", additional social infrastructure and a potential future train station to the north. In November 2021, a draft Future Urban Structure (FUS) was prepared for the Creamery Road Precinct, to further inform the CRPSP. Under the FUS, the southern NAC was split into two LACs and shifted further into the centre of Creamery Road Precinct, with the northern NAC shifted further into Batesford North Precinct. The amount of residential population and corresponding social infrastructure is expected to remain the same, though the proposed train station has been shifted westwards into Batesford North.

Purpose

This study aims to further inform the CRPSP surrounding the location, size and scale of Creamery Road's retail centres, based on four configurations: (i) two NACs (as per the original Framework Plan, known as Scenario 1) (ii) two LACs within Creamery Road (Scenario 2) (iii) A single Creamery Road NAC (Scenario 3) and (iv) one NAC and one LAC for Creamery Road (Scenario 4). Walkability modelling, as well as retail and employment demand modelling has been undertaken for each scenario to determine whether the centre sizes are appropriate and which configuration is deemed the most appropriate. This report will take the following structure:

1. Background
2. Policy review
3. Catchment analysis
4. Retail demand
5. Employment demand
6. Total centre demand
7. Elements of well-designed centres (case study analysis)
8. Recommendations

3. Background

Greater Geelong Population

The population of Greater Geelong has grown by 38 per cent since 2001[6]. This is faster than the Rest of VIC at 21.7 per cent growth, but behind the growth of Greater Melbourne at 47.4 per cent. An analysis of annual growth rates shows that Greater Geelong has reached the same levels of growth as Greater Melbourne (see Table 1). Between 2001-2011, the difference in growth was around -0.7 per cent and around -0.4 between 2011 and 2016. By 2016-2019, Greater Geelong had overtaken Greater Melbourne. The pandemic has seen retained levels of growth for Greater Geelong. The latest ABS data (released 30th March 2021) finds growth of around 2.3 per cent for Greater Geelong, whereas Melbourne has fallen to 1.6 per cent. Future data will determine whether this Greater Melbourne will be able to return to its historically high pattern of growth, post pandemic.

TABLE 1: POPULATION GROWTH 2001-2020

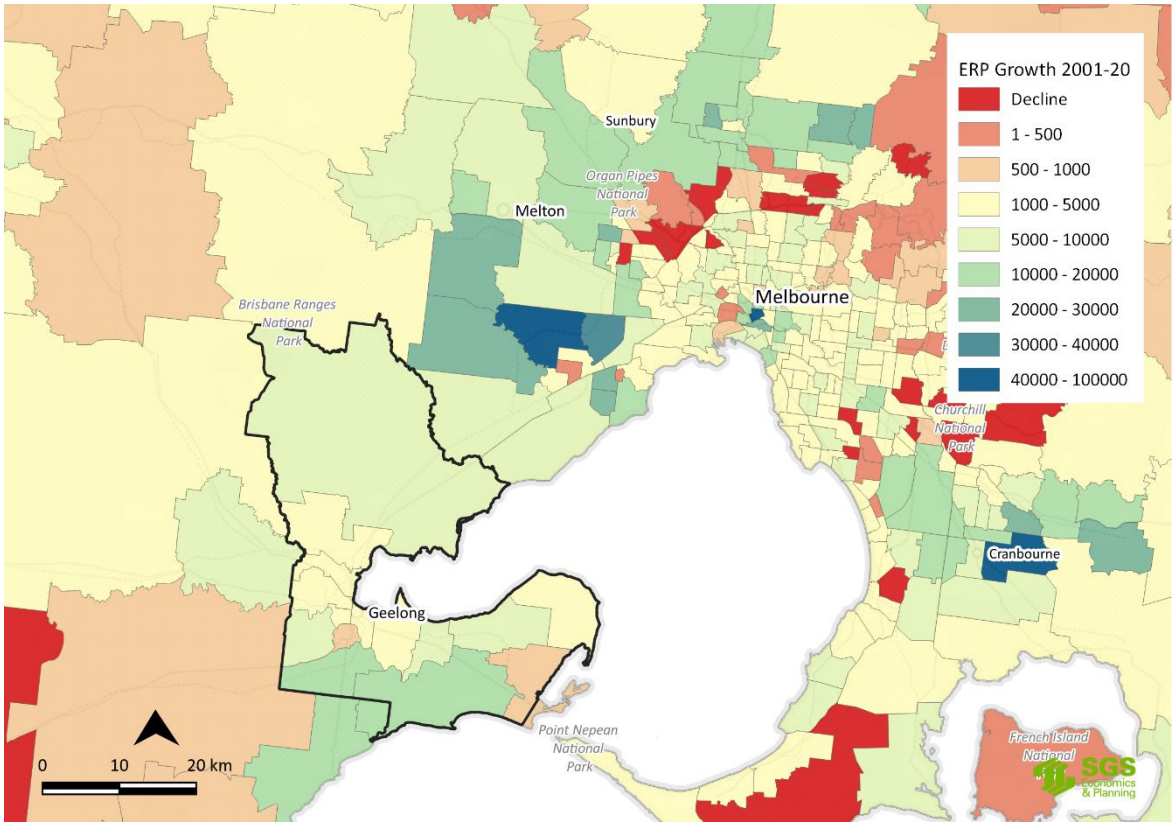
Year	Greater Geelong	Rest of VIC	Greater Melbourne
2001	194,898	1,263,366	3,500,249
2006	204,822	1,300,506	3,760,760
2011	219,107	1,368,451	4,169,366
2016	242,682	1,458,785	4,714,387
2019	262,191	1,517,757	5,079,123
2020	268,180	1,537,459	5,159,211
Growth 2001-2020	37.6%	21.7%	47.4%
Annual Growth 2001 – 2011	1.2%	0.8%	1.9%
Annual Growth 2011 – 2016	2.2%	1.3%	2.6%
Annual Growth, 2016-2019	2.7%	1.3%	2.6%
Annual Growth, 2020	2.3%	1.3%	1.6%

Source: ABS 2021. Regional Population Growth 2019-20

[6] Australian Bureau of Statistics 2021, *Regional Population 2019-20.* https://www.abs.gov.au/statistics/people/population/regional-population/latest-release

A spatial view of this growth shows that Geelong has experienced growth across its entire LGA, with the highest levels occurring along its southern boundary of between 10 and 20,000 people. Smaller levels of growth are found in areas such as Grovedale and Queenscliff.

FIGURE 2: ERP GROWTH BY SA2 2001-2020



Source: ABS 2021. Regional Population Growth 2019-20

In context with this level of growth, the City of Greater Geelong has identified the NWGGA as playing a key role in managing Geelong's fast-changing future. It is estimated that these two growth areas will hold a population of around 112,000 residents, equating to around 40,000 new homes.

TABLE 2: POPULATION CHARACTERISTICS OF THE NWGGA

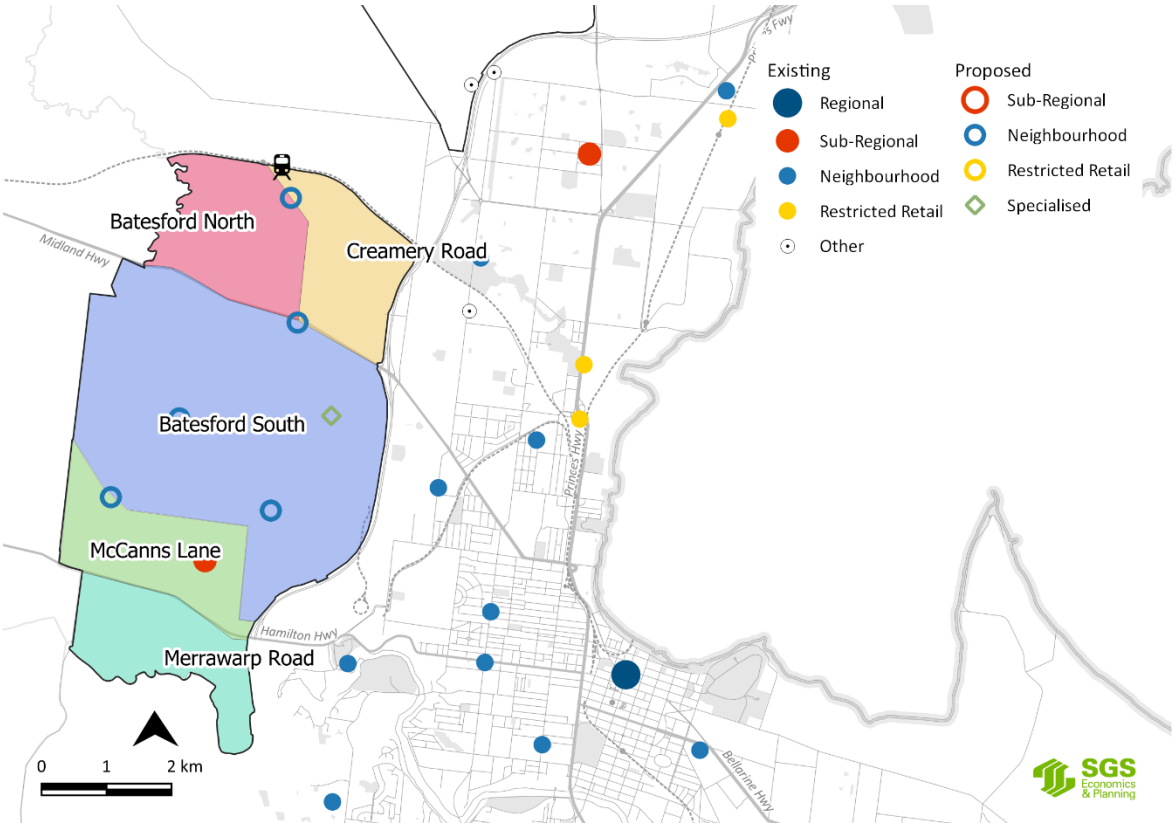
Characteristics	NGGA	WGGA	Total
Anticipated Dwellings	17,075	22,953	40,028
Anticipated Population	47,809	64,269	112,078

Source: City of Greater Geelong, Northern and Western Geelong Growth Areas Framework Plan – August 2020

The WGGA is expected to hold around 64,269 new residents across 22,953 homes. It has been split into five precincts, with Creamery Road precinct located in the north-east corner. (See Figure 3) In total, the WGGA is around 3,241 hectares, which is made up of mostly residential (1,864 hectares), non-

developable area (1,377 ha) and employment (117 ha). Several new activity centres are to be introduced in line with the level of population growth. A summary of each precinct's key statistics is found in Table 3 below. The precinct with the largest expected residential population is Batesford South with around 30,000 residents. The precinct with the largest expected employment is McCann's Lane, due to it holding land set aside for a strategic employment precinct.

FIGURE 3: WGGA PRECINCTS AND CONTEXT MAP, 2020 FRAMEWORK PLAN



Source: SGS Economics and Planning, 2021

Creamery Road is considered more of a residential precinct. Under the Framework Plan, around 67.4 per cent is designated for residential land. It also has no strategic employment land allocated. With an anticipated population of 8,433 residents, it is expected to contribute to around 13.1 per cent of the total population across the WGGA. Under the Framework Plan, two NACs were expected on the border of Creamery Road and Batesford North – one to broadly serve each precinct. Other social infrastructure assets include: (i) a multi-purpose community centre (ii) a maternal and child health centre (iii) kindergarten (iv) long day care centre (v) two primary schools and (vi) one emergency hub. These assets will all complement the WGGA's Clever and Creative Corridor (CCC)[7]. This corridor aligns with the City's vision for a heavily localised and knowledge-based economy, and it will connect key social, economic and natural services and amenities throughout the Northern and Western Geelong Growth Areas. Under the draft FUS, prepared in November 2021, Creamery Road is reconfigured to become a more localised precinct (See Figure 6). The NAC for Creamery Road has been split into two LAC's, with the

[7] Ibid.

CCC now expected to run through the centre of the precinct, rather than on the edges and along the arterial roads. Another change is that residential land allocations have been reduced to around 42.0 per cent. The population of Creamery Road under the FUS is expected to remain the same, meaning that the population under a lower residential land allocation is expected to occur through increased residential densities.

TABLE 3: SUMMARY STATISTICS FOR THE PRECINCTS WITHIN THE WGGA

	Creamery Road	Creamery Road (FUS)	Batesford North	Batesford South	McCann's Lane	Merrawarp Road	Western Growth Corridor
Total Growth Area	350 ha	344 ha	430 ha	1,676 ha	410 ha	375 ha	3,241 ha
Residential Area	236 ha	145 ha	331 ha	869 ha	247 ha	181 ha	1,864 ha
Future Residential	-	-	65 ha	-	-	-	65 ha
Employment Area#	-	-	-	32 ha	85 ha	-	117 ha
Non-Dev Area	114 ha	-	99 ha	775 ha	78 ha	194 ha	1,377 ha**
Res Area: Total Area	**67.4%**	**42.0%**	**77.0%**	**51.8%**	**60.2%**	**48.3%**	**57.5%**
Emp Area#: Total Area	**0.0%**	**0.0%**	**0.0%**	**1.9%**	**20.7%**	**0.0%**	**3.6%**
Anticipated Dwellings	3,012	3,012	3,799	10,689	3,148	2,306	22,953/21,788
Anticipated Population	8,433	8,433	10,638	29,928	8,814	6,456	64,269/61,007
Population: Res Area	**35.7**	**58.2**	**32.1**	**34.4**	**35.7**	**35.7**	**34.5**
Proportion of Total Pop	**13.1%**	**13.1%**	**16.6%**	**46.6%**	**13.7%**	**10.0%**	**100.0%**

Source: City of Greater Geelong, Northern and Western Geelong Growth Areas Framework Plan – August 2020
Employment Area refers to strategic, industrial-style employment lands and excludes employment that may occur within centres.
** The sum of the individual precincts equates to 1,260 ha of non-developable area, indicating that there is an additional 117ha of non-developable area that is not attributed to specific precincts.

4. Policy Review

4.1 Plan Melbourne and Precinct Structure Planning Guidelines

At a state level, *Plan Melbourne* and the *Precinct Structure Planning* Guidelines aim at aligning the outcomes of PSPs with the concept of the 20-minute neighbourhood. The 20-minute neighbourhood is about 'living locally' – giving people the ability to meet most of their daily needs within a **20-minute return walk (i.e., a 10-minute single trip)**. Daily needs may include accessing local health facilities and services, schools and shopping centres.[8]

Plan Melbourne asserts the significance of utilising a hierarchy of activity centres to consolidate the ideals of the 20-minute neighbourhood. National Employment and Innovation Clusters, as well as Metropolitan, Major and Neighbourhood Activity Centres, see the clustering of employment, education and entertainment uses at different scales. They are intended to be supported by efficient transport networks and higher-density housing.[9]

The Precinct Structure Planning Guidelines provide an adaptive framework, which is particularly relevant for planning in a post-pandemic environment. It argues for a heightened need for local services, different uses of open space and a variety of residential densities[10]. They also advocate for planning to be carried out with a greater focus on *place* and *purpose.*[11]

These state planning documents play a key role for PSPs across the NWGGA. It means that the PSPs will have at their core, a focus on walkable, 20-minute neighbourhoods with well-defined retail and employment centres. The adaptive framework identified in the Guidelines for Precinct Structure Planning is also highly relevant as Australia emerges from Covid-19. Having flexibility built in ensures that the precinct is able to adapt to changing living and working environments.

4.2 G21 Regional Growth Plan (2013)

The G21 alliance and subsequent G21 Regional Growth Plan were created as a way to sustainably manage the growing levels of population growth across Greater Geelong by 2050. Within this plan, the NWGGA was identified as a key measure to achieve the levels of population growth. The NWGGA was selected due to its position in proximity to major urban areas, employment nodes, access to infrastructure and the ability to integrate and connect to existing services and communities[12] (See

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[8] DELWP, 2017, *Plan Melbourne 2017-2050. 20-minute neighbourhoods.* https://www.planning.vic.gov.au/policy-and-strategy/planning-for-melbourne/plan-melbourne/20-minute-neighbourhoods

[9] Ibid.

[10] VPA, 2021, *Precinct Structure Planning Guidelines: New Communities in Victoria*. DELWP. https://vpa-web.s3.amazonaws.com/wp-content/uploads/2021/12/VPA-Precinct-Structure-Planning-Guidelines-New-Communities-In-Victoria-October-2021.pdf

[11] Ibid.

[12] Ibid., p.18

Figure 1). Other elements to the plan include the need to support diversity, knowledge and innovation as key drivers to help build the economy. In particular, the plan identifies the key education and research hubs at Waurn Ponds and Central Geelong with Deakin, CSIRO, The Gordon and Barwon Health. It also asserts a need for ensuring diversity and growth within these fields, and a range of housing types to cater for different worker populations.

Creamery Road has been formed out of the G21 Regional Growth Plan. Whilst key strategic assets of Creamery Road are not found directly within the site itself, the precinct benefits from having close proximity to transport corridors (such as the Geelong Ring Road and Geelong-Ballarat Railway corridor), health, higher education/research facilities (Deakin, CSIRO) and a major watercourse (Moorabool River).The precinct must therefore be planned with consideration to its surroundings and ensure that local employment opportunities are well-connected to external assets, networks and infrastructure. This means that current and future residents of the Creamery Road precinct must be able to access external employment and retail centres with ease. As the City aims to reduce dependence on private motor vehicle usage, this must be achievable through the support of adequate integrated, public and active transport networks.

4.3 Settlement Strategy, City of Greater Geelong (August 2020)

The last major review of Greater Geelong's housing and settlement policies was undertaken in 2006-07. Given the levels of population growth that have occurred, as well as the future growth trends, an updated Settlement Strategy was needed in order to articulate the preferred direction for the future. The Settlement Strategy is a review of existing policies, an estimate of current and future population growth and housing trends as well as a strategy to deal with the newly identified levels of growth. The Strategy identified that growth has gradually accelerated from around 0.6% in 1991-2001 to 2.5% as of 2014-16. The study also investigated levels of housing stock, housing diversity across a range of spatial geographies. Assuming this continued level of growth, Greater Geelong is estimated to reach around 500,000 residents by 2050.

In order to sustainably meet this level of future housing demand in a way that meets the demands of residents, a combination of measures was recommended. These included urban consolidation (such as infill, existing activity centres), continued development of broad-hectare land (such as Bellarine Peninsula, Ocean Grove, St Leonards, Drysdale/Clifton Springs and Leopold), continued development of the Armstrong Creek growth area as well as the long-term development of the newly defined NWGGA. It was identified that the NWGGA would be capable of accommodating around 110,000 additional residents. These two growth areas once completed put them at a similar size to the current populations of Ballarat and Bendigo. Given the levels of growth occurring across Greater Geelong, the Settlement Strategy notes that need to commence development in one of the precincts by 2025.

Creamery Road has been identified as the first precinct within the growth areas to be moved forward, in a sequence of nine precinct across the NWGGA. Given the population pressures of Greater Geelong, which seem to be accelerating, it is considered important that this precinct moves forward in line with

the 2025 target. A large part of the Creamery Road precinct has been proposed as Developable Area[13] (15.4 dwellings per hectare), which can accommodate the vision laid out in this strategy. A smaller portion, in the north-eastern corner of the precinct has been identified as lower density developable area (6.4 dwellings, per hectare), with the remainder being retained as a conservation area (along Cowies Creek).

Amendment C395

Both the NWGGA Framework Plan and the Settlement Strategy have been gazetted and integrated into the Greater Geelong Planning Scheme through Amendment C395. This amendment seeks to formalise the approach to cater for a significant increase in Geelong's population through the application of the Framework Plan. The Settlement Strategy is now implemented into Clauses 21.04 (Municipal Framework Plan), 21.06 (Settlement and Housing), 21.08 (Development and Community Infrastructure) and 21.14 (The Bellarine Peninsula). It has also proposed a new Clause, 21.20, to ensure land and development in the NWGGA are in accordance with the Framework Plan. The Urban Growth Zone is applied to sections of the NWGGA. This seeks to manage the transition of rural land into urban land which will encourage well-planned future urban development to occur within each of the precincts.

4.4 Clever and Creative Future, City of Greater Geelong 2017

The 2017 Clever and Creative Future strategy is a community-led blueprint for the future of Greater Geelong. Over 16,000 residents and stakeholders contributed to creating a list of community aspirations that include (i) a prosperous economy, with jobs and education opportunities (ii) a leader in developing and adopting technology (iii) a creative culture (iv) a fast, reliable and connected transport network (v) a local and international destination (vi) a place to feel safe (vii) an inclusive and diverse community (viii) a sustainable environment (ix) and sustainable solutions[14].

A number of items within the document provide relevance to Creamery Road and its future trajectory. The document identifies that a prosperous economy (Aspiration 1) will be achieved by urban and residential infrastructure to support economic growth, employment and lifestyle. Similarly, it references the need for spaces for start-ups to interact and work. This is something that aligns with the need for a high-quality centres-based approach as well as what the City of Greater Geelong has identified through its *Clever and Creative Corridor* (to be discussed in subsequent chapters). Aspiration 4 references the need for high quality pedestrian and cycling networks, and accessible transport options, with over 50 per cent of journeys to work made by public transport, walking or cycling. Vibrant and well-defined centres can assist in ensuring this, as it means development is focussed on transit to and from these centres. High quality centres can work towards Aspiration 5 (local and international tourism destination) by being local and vibrant drawcards as well as Aspiration 6 (a safe city) as it can activate areas in a concentrated area as part of a day and night-time economy. Finally, a well-defined

[13] City of Greater Geelong 2020. *Settlement Strategy.* https://www.geelongaustralia.com.au/common/Public/Documents/8d848164a97b196-settlementstrategyfinalupdatedfeb2021.pdf

[14] City of Greater Geelong, 2017, *A Clever and Creative Future.* https://www.geelongaustralia.com.au/clevercreative/default.aspx

centre strategy means that it is more sustainable, as the number of travel trips that need to be done by car can be reduced, given most goods and services are located in one central location.

4.5 COGG Retail Strategy 2020-36

SGS Economics and Planning was engaged by the City of Greater Geelong to create the *City of Greater Geelong Retail Strategy 2020-36.* Its aim was to analyse Greater Geelong's retail environment and model its future requirements in a manner that can achieve the City's broader policy outcomes. A large focus of the report is centred on ensuring that any future retail development is built to reinforce the existing structure and function of the Geelong retail network. It advocates statutory changes to the Greater Geelong Planning Scheme including: (i) a new policy context that aims to deliver better convenience for shoppers, (ii) an updated retail hierarchy (iii) Economic Impact Assessments for centres that challenge the retail hierarchy and (iv) the use of floorspace caps.

All four items are critical to good retail planning. A well-structured retail hierarchy is economically and environmentally efficient, as it minimises the cost of travel to consumers and the environment. It also protects existing centres (and infrastructure) from the erosive effects of out-of-hierarchy developments, which can lead to dilapidated centres. Thus, any proposed out-of-hierarchy developments are recommended to require an economic impact assessment. A revision to the retail development objectives to prioritise convenience for shoppers will also lead to more sustainable and vibrant centres. Most notably, the retail strategy advocates the need for a dense network of convenience-based local and neighbourhood centres within walking distance (800m) of medium and high density residential. Finally, floorspace caps are useful in centre planning, as they can sharpen the definition of the preferred retail hierarchy. They also support co-location of services resulting in a more consolidated urban centre[15]. A summary of the retail hierarchy is provided below. Of interest are the definitions around Neighbourhood Activity Centres (NACs), Local Activity Centres (LACs) and Restricted retail/bulky goods.

TABLE 4: RETAIL HIERARCHY, GEELONG RETAIL STRATEGY

Hierarchy	Role/Function
Regional (100,000 sqm +)	Serves a wide catchment, anchored by department stores, discount department stores (DDS), supermarkets, often found near the core of a retail centre, more successful when associated with entertainment and leisure such as cinema, restaurants, or niche retail precincts.
Sub-Regional (15-50,000 sqm)	Major retail centre serving a wide catchment. Is anchored by one or more DDS, supermarkets and specialty stores. They have fewer higher-order activities and the range of shopping is less extensive.

[15] City of Greater Geelong 2020, *City of Greater Geelong Retail Strategy 2020-2036*, p.49. https://www.geelongaustralia.com.au/common/Public/Documents/8d48cb94b5949c5-retailstrategy201636finalaug2020.pdf

Specialised (15-60,000 sqm)	Traditional major centres that have grown from strip shopping. Typically located along main roads/public transport nodes. Tend to capture niche trade from wider catchments and play an import community role.
Town Centre (2-20,000 sqm)	Major community shopping locations. They provide weekly grocery shopping for the local township, in combination with specialty store shopping that also services visitors.
Neighbourhood / NAC (2-15,000 sqm)	Retail centre that serves a neighbourhood catchment and is anchored by one or more supermarkets, plus specialty stores.
Local / LAC (up to 5,000 sqm)	Small groups of shops, serving a limited catchment and typically providing for the daily convenience needs of residents in the surrounding area.
Restricted retail/Bulky Goods (50,000 sqm)#	Collection of restricted retail stores, generally furniture, white goods, electrical, lighting, hardware, etc. Can be adjacent to core retail, or in stand-alone precincts.

Source: City of Greater Geelong Retail Strategy 2020-2036, p.26-28.
#A size likely seen in more established areas (future chapters will illustrate a lower floorspace area for Creamery Road)

The Retail Strategy was not able to estimate floor space for Creamery Road, though it did calculate an initial demand estimate of approximately 20,813 sqm across the WGGA between 2016 and 2036. This was based on the introduction of a single Sub-Regional centre and a single Town centre across the WGGA (the release of the NWGGA Framework Plan has since identified 7 centres, or 8 centres through the Creamery Road draft FUS).

Nevertheless, the Strategy outlines the need for retail floorspace across the NWGGA, with the aim to ensure that there is sufficient supply available within a reasonable walking distance. It also aims to prioritise a level of self-sufficiency and that the new centres all fit within the retail hierarchy. Finally, it discusses the need to strategically time the introduction of new centres (specifically the sub-regional centres), so that nearby centres have sufficient time plan for the injection of new floorspace.

4.6 Northern and Western Geelong Growth Areas Framework Plan (2020)

The Framework Plan is the key document to guide the strategic development of the NWGGA. It was established out of the G21 Regional Growth Plan, which identified these areas for 'further investigation due to their proximity to major urban areas and employment nodes, access to infrastructure and ability to integrate and connect efficiently to existing services and communities[16]. It builds off the community-led blueprint that envisages Geelong's Clever and Creative Future.

The framework (pg.37) outlines a vision for the growth areas:

[16] City of Greater Geelong 2020, *Northern & Western Geelong Growth Areas Framework Plan*, p.18. https://www.geelongaustralia.com.au/common/Public/Documents/8d85e3f534f7876-nwggaframeworkplan-august2020finaladopted.pdf

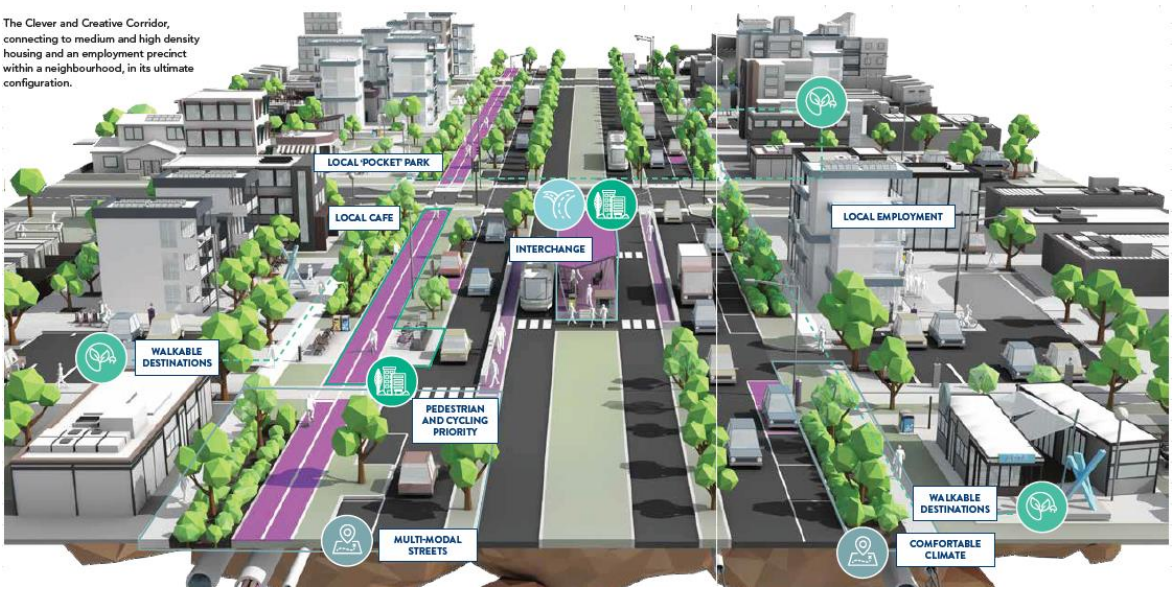
> *The Northern and Western Geelong Growth Areas will exemplify Geelong's transformation as a clever and creative city by building diverse, localised and sustainable neighbourhoods that prioritise self-sufficiency whilst maximising connections to the Geelong community, economy and identity.*

A number of elements are found within this Framework Plan that have implications for Creamery Road and neighbouring precincts.

A Clever and Creative Corridor

The report introduces the concept of the Clever and Creative Corridor (CCC), which is a key design feature of the Framework Plan. These are tree-lined style transit corridors that prioritise public and active transport between activity centres and community facilities. They are intended to act as a focal point for liveable neighbourhoods[17] and achieve the benchmark of the 20-minute neighbourhood. The Framework Plan aims to roll out individual CCCs across all nine precincts, with the intention to integrate them all into a single CCC. This is largely dependent on securing land to accommodate the corridors at the right stage of development. Upon development, they will be divided into 'interim' and 'ultimate' configurations, where the latter is a high quality, well designed active transport corridor.

FIGURE 4: ULTIMATE CONFIGURATION OF A CLEVER AND CREATIVE CORRIDOR



Source: *Northern & Western Geelong Growth Areas Framework Plan*, p.57

The CCC is considered to have a catchment of 400m (See Figure 5). Under the Framework Plan, this means that it encompasses a large proportion of the western and southern boundary, where a large portion of medium and high-density housing will occur. Under the FUS, the CCC now operates more

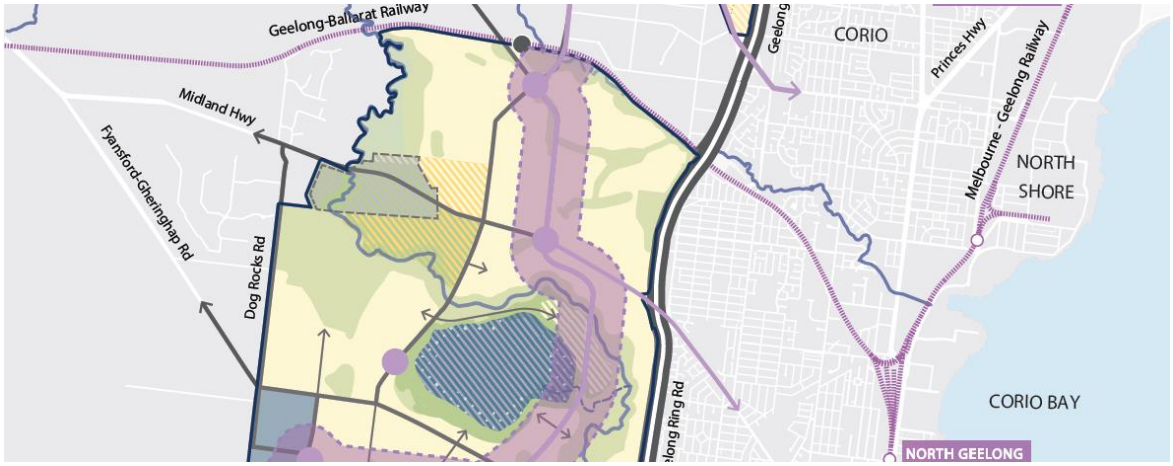
[17] City of Greater Geelong 2020, *Northern & Western Geelong Growth Areas Framework Plan*, p.49. https://www.geelongaustralia.com.au/common/Public/Documents/8d85e3f534f7876-nwggaframeworkplan-august2020finaladopted.pdf

through the middle of the precinct. The remaining non-CCC space will be the location of more traditional densities away from key corridors.

One key element of the CCC is the idea that it prioritises connectivity between activity centres and community facilities. In this respect, the CCC will seek to enhance the viability of retail and employment centres within the PSPs, by ensuring that these corridors act as a gateway to centres, rather than being centres of sprawl themselves. Under this interpretation, it suggests that rather than encouraging retail and employment development along the corridors, they serve to connect residential populations instead. This is an essential element to activity centre planning, as it ensures that centres are kept as the primary destination and that their ability to attract is not diluted along an arterial road. It ensures that activity is concentrated leading to a positive feedback process that encourages more activity, leading to higher levels of economic growth. In effect, by encouraging little activity between activity centres helps to reinforce the viability of the activity centres, which is ultimately beneficial to Creamery Road retail and employment.

The combination of CCC principles, with the strategic allocation of floorspace (as discussed in the recommendations) helps to ensure that development is steered towards a fine-grained format, rather than concentrated into a singular car-dominated shopping centre.

FIGURE 5: CLEVER AND CREATIVE CORRIDOR, UNDER THE FRAMEWORK PLAN



Source: City of Greater Geelong 2020, Northern and Western Growth Areas Framework Plan, p. 48

Activity Centres

The Framework Plans makes note of the important role that activity centres play as focus points for the community. Furthermore, a functioning activity centre hierarchy ensures that it is set up appropriately for how residents live, work and shop. The Framework Plan, in planning for the growth areas, has identified the need to consider activity centres in the context of Geelong's existing retail hierarchy – with Central Geelong at its core (regional centre), surrounded by existing sub-regional centres at Corio, Belmont, Leopold and Waurn Ponds and a future sub-regional centre at Armstrong Creek.

Framework Plan centre configuration

Both the NGGA and WGGA will each have one new sub-regional centre. Four neighbourhood centres will be introduced within the NGGA, whereas the WGGA will have five, in addition to a specialised

lakeside dining precinct. The result is that the WGGA will have seven activity centres. There is also scope to introduce local convenience centres in locations beyond activity centre catchments, such as within the Integrated Development Areas along the CCC.

Draft FUS centre configuration

Under the draft FUS prepared in November 2021, the activity centre configurations are adjusted to become more localised. A total of eight activity centres are now found within the WGGA. The southern NAC has been split into two LACs, which are now anticipated to be located within the centre of the Creamery Road precinct. The northern NAC is not split, but instead shifted further into the Batesford North precinct (See Figure 6). A new bulky goods precinct is also introduced. There is no change to the sub-regional centre or specialised lakeside dining precinct. The result is that the amount of floorspace remains the same under both scenarios (82,000 sqm), though just redistributed in a slightly different configuration.

FIGURE 6: SHIFTING OF ACTIVITY CENTRES UNDER THE FUS

Source: City of Greater Geelong, 2021

TABLE 5: ACTIVITY CENTRES ACROSS THE WGGA, BY POLICY

	Framework Plan		Draft FUS	
	Number of Centres (WGGA)	Floorspace per Centre (WGGA)	Centres (WGGA)	Floorspace per Centre (WGGA)
Sub-Regional	1	42,500	1	42,500
Neighbourhood	5	7,500	4	7,500
Local	0	0	2	3,750
Specialised	1	2,000	1	2,000
Total	**7**	**82,000**	**8**	**82,000**

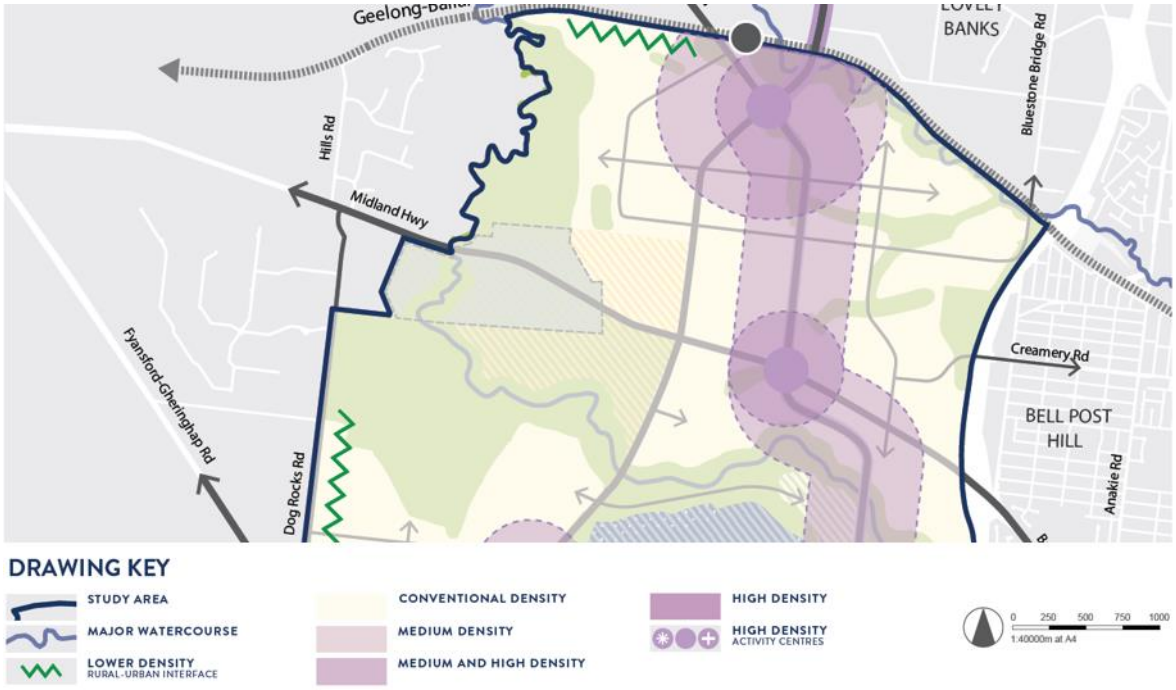
Source: City of Greater Geelong, 2021; SGS Economics and Planning, 2021

Housing

To achieve its vision of a vibrant and activated public realm, the Framework Plan highlights the need for implementing a diverse mix of housing types and densities. Developments of a compact and high-density nature will be located alongside the identified CCC and associated activity centres. This serves a number of benefits such as enabling sufficient diversity in housing stock, most notably that of medium-density or 'missing middle' housing. Secondly, it serves to create more vibrant local neighbourhoods, as higher densities along the CCC will help to activate the streetscape and walkable communities. This in turn helps to improve the sustainability of the growth areas by reducing car dependency. By encouraging higher density helps to reduce overall urban sprawl and ensures that growth doesn't encroach upon the settlement boundary.

Under the Framework Plan, much of the incoming medium density housing stock will be found alongside the CCC, with medium and high-density housing to be found in the immediate proximity of the two neighbourhood centres. Under the FUS, much of the medium and high-density housing will be found within what is termed an 'Integrated Development Area' (IDA), which are found in close proximity to the new LAC's and located along the CCC. IDAs will provide a form of mixed-use development. Under both layouts, the remaining majority of Creamery Road will be made up of conventional housing density.

FIGURE 7: INTENDED HOUSING LOCATIONS WITHIN CREAMERY ROAD



Source: City of Greater Geelong 2020, Northern and Western Growth Areas Framework Plan, p. 152

Social Infrastructure

The Framework Plan emphasises a broad range of social infrastructure as a fundamental component to a healthy neighbourhood. This includes cultural, health, recreation and community centres, as well as childcare, kindergartens, schools, open space reserves and parks, and emergency hubs. Social infrastructure is expected to be dispersed appropriately across the NWGGA. Within Creamery Road, a number of social infrastructure items have been identified, namely:

- 1 x multi-purpose community centre, incorporating a neighbourhood house, flexible community meeting space, community gardens and co-located with other uses such as seniors and youth centres and/or men's shed (to support multiple precincts)
- 1 x maternal and child health centre
- 1 x kindergarten
- 1 x long day care centre
- 2 x primary schools (to support multiple precincts)
- 1 x emergency hub (ambulance, fire and state emergency services)
- A network of active open space
- Sub-regional sport reserves and facilities (to be provided outside the precinct)

Much of this infrastructure is expected to be co-located within the activity centres in order to support their usage across multiple precincts, as well as them being the most suitable locations in terms of access.

Employment

The Framework Plan identifies the need to provide local jobs in new neighbourhoods, with the aim to provide greater self-sufficiency within the growth areas. The WGGA is expected to generate approximately 21,500 local jobs, with a broader workforce of around 25,000 residents. The plan identifies that much of these local jobs will be provided in population-serving industries such as health and education, retail and related services, business and office-based sectors. It is expected that many of these population-serving jobs will be located within key activity centres. There is also scope for more intensive, industrial based jobs. These are expected to be in the south-western corner of the WGGA, away from residential neighbourhoods and close to key transport links. One trend to consider is the growing number of jobs that are likely to be occurring working from home. The result is that a mix of population-serving, as well as commercial/white-collar work could also be occurring across the WGGA.

Implementation

The Framework Plan proposes that nine PSPs be prepared for the growth areas in a sequential and time-specific way to ensure population and job growth demands are efficiently met. Creamery Road is classified as a short-term precinct, and therefore the first of the precincts to be strategically addressed in terms of activity centre configuration, job facilitation and determination of amenities.

TABLE 6: ESTIMATED PRECINCT SEQUENCING

	Short-Term	Medium-Term	Long-Term
WGGA	Creamery Road	Batesford North, McCann's Lane, Merrawarp Road	Batesford South
NGGA	Elcho Road East	Elcho Road West, Heales Road West	Heales Road East

Source: City of Greater Geelong 2020, *Northern and Western Geelong Growth Areas Framework Plan*, pp. 223-239.

4.7 NWGGA Employment Land Report (2017)

SGS Economics and Planning was engaged by the City of Greater Geelong to undertake an analysis of the demand for employment land for the NWGGA. An employment land assessment is required to inform the preparation of the above-mentioned Framework Plan. Demand was based on the anticipated dwelling and population yields for each growth area, with specific reference to the principle of one job per household for each growth area. It also required the identification of the potential format and size of future employment precincts.

The SGS analysis explained that employment floorspace tends to 'cluster' in hierarchies. That is, there are (i) strategic floorspace, which serves a city-wide function (major manufacturing, warehousing, CBD offices, major hospitals), (ii) district floorspace, which serves a regional purpose (small scale manufacturing, concrete batching, ancillary office, sub-regional centres, TAFE colleges) and (iii) local floorspace, which is aimed to serve the local population (light industrial, auto repair, local retailing, primary schools, etc). The report found that there was approximately 5.33 million sqm of employment

floorspace. Around 1.60 million is strategic, 2.34 million is district and 1.38 million is local. No existing employment floorspace was identified in the growth areas[18].

All of Greater Geelong's strategic employment precincts were analysed for their appeal to future employment growth. Both the NGGA and WGGA rated poorly in comparison to many of the other areas in Geelong. Both rated 'low' in terms of public transport access, existing population access and existing jobs access. The NGGA and WGGA were rated 'medium' and 'high' for arterial road access respectively[19]. When assessed against the type of industry that might be attracted, the report determined that neither growth area was suited for major industrial. The NGGA was moderately suited for health and education and commercial/office, whereas the WGGA was moderately suited to commercial/office only.

When converted to broad land use, it was determined that the NGGA and WGGA would experience demand of around 352 ha and 434 ha respectively. The vast majority of demand would come from Strategic and District employment across Freight and Logistics (warehousing and distribution), Urban Services (concrete batching, bus depots, defence, mechanics, defence activities) and Special Activities (health services, hospitals, medical centres, schools and TAFEs). Employment of around 11-14,000 jobs was estimated for the NGGA, with around 14-18,000 jobs estimated for the WGGA. This is below the one job per household target and is instead a realistic outcome given the economic geography of Greater Geelong, where access to most parts of the area is accessible within relatively short distances.

SGS concludes with the suggestion that most demand for strategic employment will be met within existing clusters and that it might be more important to ensure the strength of the regional economy rather than high quality local jobs. Attempting to reach the one job per household target could see the COGG artificially restrict growth in existing clusters to drive local jobs in the growth area. The focus should instead be on local amenity (local population-serving jobs), then moving on to the higher order district and strategic jobs.

4.8 Retail and Activity Centre Technical Report – WGGA – Urban Enterprise, June 2017

Urban Enterprise was engaged on behalf of a landowner consortium to provide an assessment of the future activity centre needs for the WGGA. The aim was to assess the distribution, form and size of retail centres required to service the needs of future communities. In order to make these assessments, a catchment analysis was undertaken for the WGGA. This was undertaken by first estimating the average retail spend for the local area and dividing it by the local population to estimate the expenditure per capita. This was then utilised to estimate a total expenditure figure for the WGGA at its final population, with this then distributed across the various centres.

One interesting benchmark observed was the concept that an average population catchment of 10,000 supports a NAC, anchored by a full-line supermarket[20]. Under this assumption, Urban Enterprise suggests that at least six NACs would be required, which would accommodate approximately 42,000

[18] SGS Economics and Planning 2017, '*NWGGA Employment land – Version 2: Final Report',* p.4
[19] Ibid, p.15
[20] Essential Economics 2011, cited in Urban Enterprise 2017. *Western Geelong Growth Area – Retail and Activity Centre Technical Report*, pg. 21.

sqm at 7,000 sqm each. Approximately 3-3,500 sqm of non-retail floorspace was estimated, resulting in a total centre floorspace of around 10-11,000 sqm.

Two NACs were identified across Creamery Road and Batesford North. NAC1, located in Batesford North has an estimated population catchment of 11,105 residents and a retail floorspace estimate of 7,774 sqm. NAC2, located on the southern boundary of Creamery Road is estimated to have a population of 10,700 residents, with retail floorspace of 7,490 sqm.

4.9 NWGGA Consolidated Activity Centre Assessment – Tim Nott, Sept 2017

Tim Nott consulting, in association with Harvest Digital Planning was engaged by the City of Greater Geelong to summarise a number of reports created to plan for the provision of activity centres across the NWGGA. The Essential Economics Report (2017) was focussed on the NGGA and identifies a three or four centre network to service around 43,000 people within the growth area. The report on the WGGA, prepared by Urban Enterprise (2017) (and discussed above) identifies a six-centre network to service a growth area of 64,000 people. One centre is expected to be a sub-regional centre serving the growth area and communities beyond. Total retail floorspace is estimated at 110,000 to 112,000 sqm and non-retail floorspace at 62,000 to 64,000. A sub-regional centre of 45,000 to 50,000 sqm of retail floorspace is proposed. The Urban Enterprise report identified two options for activity centre networks across the WGGA. Option 1 involved total floorspace of around 175-180,000 sqm made up of a single sub-regional centre (125,000 sqm) and five neighbourhood centres (10-11,000 sqm). Option 2 involved total floorspace of 172-177,000 sqm, made up of a sub-regional centre (108,000 sqm), one large neighbourhood centre (24,000 sqm) and four neighbourhood centres (10-11,000 sqm). Another key focus of the report was to determine whether the proposed growth areas interact well together and within the existing network, with particular reference to existing centres such as the Corio sub-regional centre and some smaller centres at Bell Post Hill, Lara Town Centre and Shannon Avenue North. Corio and Bell Post Hill were deemed to be less affected due to distance from the centres only affecting the margins. Lara Town Centre and Shannon Avenue North were deemed to be more vulnerable by the new neighbourhood centres[21].

4.10 ESD Action Plan – Hip v Hype, May 2019

Hip v. Hype Sustainability was engaged by the City of Greater Geelong to set out a framework level ESD Action Plan for delivering on the vision for the NWGGA. The aim is to act as an over-arching guide to the stages of the project, to ensure that it retains a focus on the underpinning sustainability drivers of climate change, natural systems, the electricity grid, education and employment shifts, flexible working and autonomous vehicles. Opportunities include the need for “20-minute neighbourhoods at the core” of the Framework Plan, in addition to net zero carbon energy sources, public transport from ‘day one’, precinct waste management plans for activity centres, blue and green infrastructure and collaborative governance[22].

[21] Nott, Tim 2017. *Northern & Western Geelong Growth Areas Consolidated Activity Centre Assessment, pg. ii*
[22] Hip v Hype Consulting 2019. *Framework Sustainability Action Plan – City of Greater Geelong: Northern and Western Geelong Growth Areas, pg.5*

4.11 Summary of Policy Review

This policy review has summarised the key themes that are relevant in analysing the retail and employment policies for Creamery Road - starting at the metropolitan level with Plan Melbourne and the Greater Geelong Retail Strategy, to the specifics of the Creamery Road Framework Plan and associated reports that influenced its design. Throughout, there is evidence of a consistent line of policy of the need to achieve walkable, 20-minute neighbourhoods, with high levels of connectivity to local activity centres. The activity centres are a core component of achieving many of these long-term ambitions. Neighbourhood centres of around 7-10,000 sqm seem to be an integral part of achieving this in precincts such as Creamery Road.

Another key observation is the consistency that surrounds the importance of maintaining the retail hierarchy. As the focal points for communities, such policies ensure that centres complement each other's needs, rather than competing to the point of becoming a detriment to the overall vibrancy of the neighbourhood. Creamery Road, which originally was expected to have two NAC's, has seen its southern NAC split into two LAC's and shifted further into the precinct, with the northern NAC being retained, but shifted westward into Batesford North.

5. Catchment Analysis

The importance of 20-minute neighbourhood design is referenced consistently throughout the policy documentation in Chapter 2. Specifically, the Framework Plan[23] makes reference to a desirable 20-minute neighbourhood design, via walking, cycling or local public transport trips.

> *ACTION W2.1.1 Geelong's new neighbourhoods will allow residents to live locally and meet most of their everyday needs within a 20-minute walk, cycle or local public transport trip of their home.*
>
> *ACTION W2.1.2 Walkability and cycling for local trips will be prioritised in the design of neighbourhoods.*
>
> *ACTION W3.1.1 An activity centre will be located at the heart of each 20-minute neighbourhood… A local convenience centre provides an alternative for residents beyond a comfortable walk to the subregional or neighbourhood activity centre*

SGS undertook three walking catchment/ped-shed analyses of up to a 1,600 metre single trip (2,400 metre round trip), with the data mapped at 400 metre, 800 metre and 1,600 metre single trip distances.

- Scenario 1: two NAC locations, as per the original Framework Plan (Scenario 1), split between Creamery Road (CR) and Batesford North (BN) precincts
- Scenario 2 and 4: Scenario 2 has two LACs as per the draft FUS, Scenario 4 has one NAC and one LAC in the same locations as the draft FUS. The modelling is the same, due to the centres being in the same position and therefore resulting in the same catchment results
- Scenario 3: a single NAC, located at the location of the Southern LAC as per the draft FUS

Method

Catchment analysis was undertaken using open-source QGIS software known as QNEAT3. This extension utilises available road networks to estimate the time taken from various points of origin. The QNEAT3 extension typically works best under an existing road network. In this instance, catchment analysis was being undertaken in a greenfield location, which required the road networks to be manually configured. The networks used resemble the draft FUS for Creamery Road (and Batesford North where required), with modification required in order to create a smoother result. Therefore, the results, whilst reasonable, may need to be confirmed with an improved road layer.

When overlayed against the likely locations of low, medium and high-density housing locations, it was possible to estimate the proportion of housing density in 400-metre segments (note that the 1,200 metre segment is not mapped to ensure the map is readable). Due to the lack of available data, it was not possible to estimate a total number of dwellings.

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[23] City of Greater Geelong 2020, *Northern & Western Geelong Growth Areas Framework Plan*, p.144, p.177. https://www.geelongaustralia.com.au/common/Public/Documents/8d85e3f534f7876-nwggaframeworkplan-august2020finaladopted.pdf

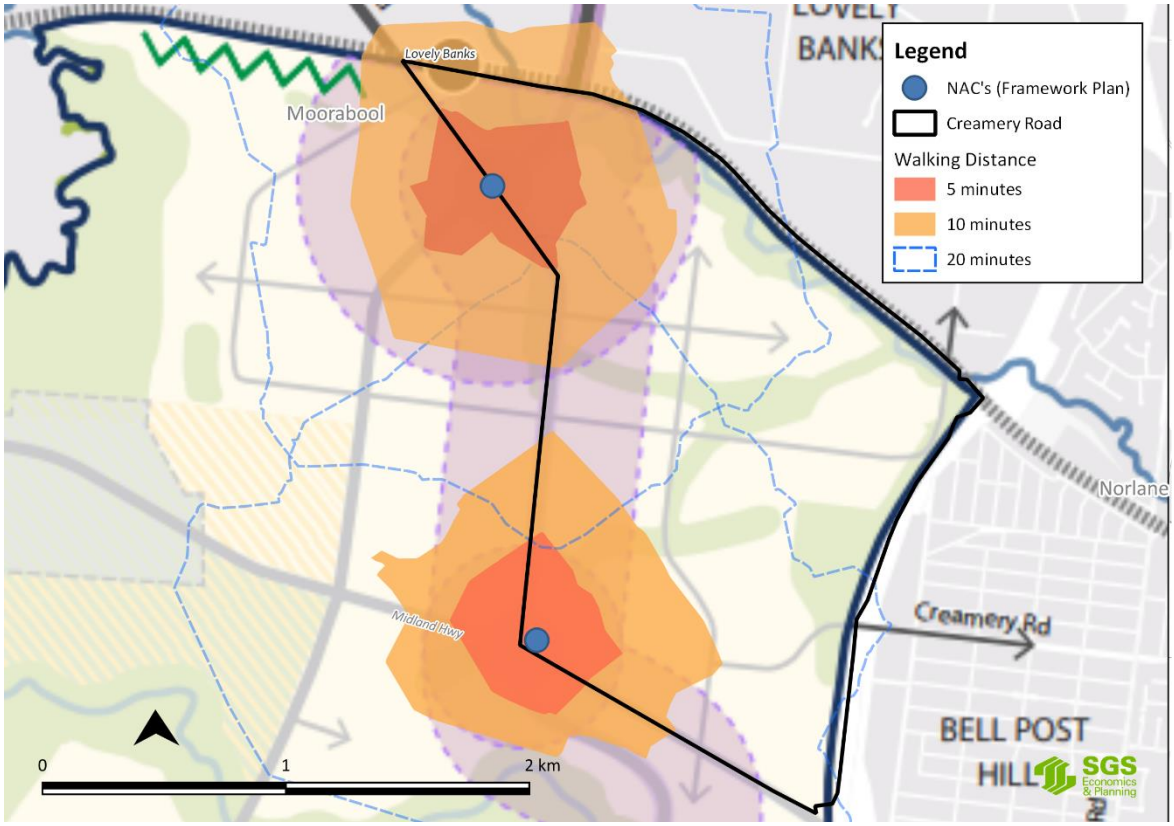
Note: All results are described in single trip measurements.

Scenario 1: Walking catchment based on the Framework Plan

The majority of high-density housing is located largely within an 800 metre (10-minute) single trip. A small amount of accessibility from outside the WGGA is observed to the north. For the purposes of this analysis, it is not considered part of any of the modelling.

According to Table 7, around 42 per cent of high-density residential is found within a 400 metre (5-minute) single trip, with 93 per cent of high-density residential within an 800 metre single trip. 37 per cent of medium density is found within an 800 metre single trip, with the majority found within a 1,200 metre (15-minute) single trip. This is largely due to the Clever and Creative Corridor and associated housing that is expected to run between the two NACs. There is a lack of low-density dwelling connectivity in the north-eastern corner. The analysis confirms this, with an estimate that around 27 per cent of low-density residential is not within a 1,600 metre (20-minute) single trip of an activity centre.

FIGURE 8: WALKING CATCHMENT, SCENARIO 1



Source: SGS Economics and Planning, 2021

TABLE 7: PROPORTION OF RESIDENTIAL DENSITIES WITHIN WALKING DISTANCE TO CENTRE (SCENARIO 1)

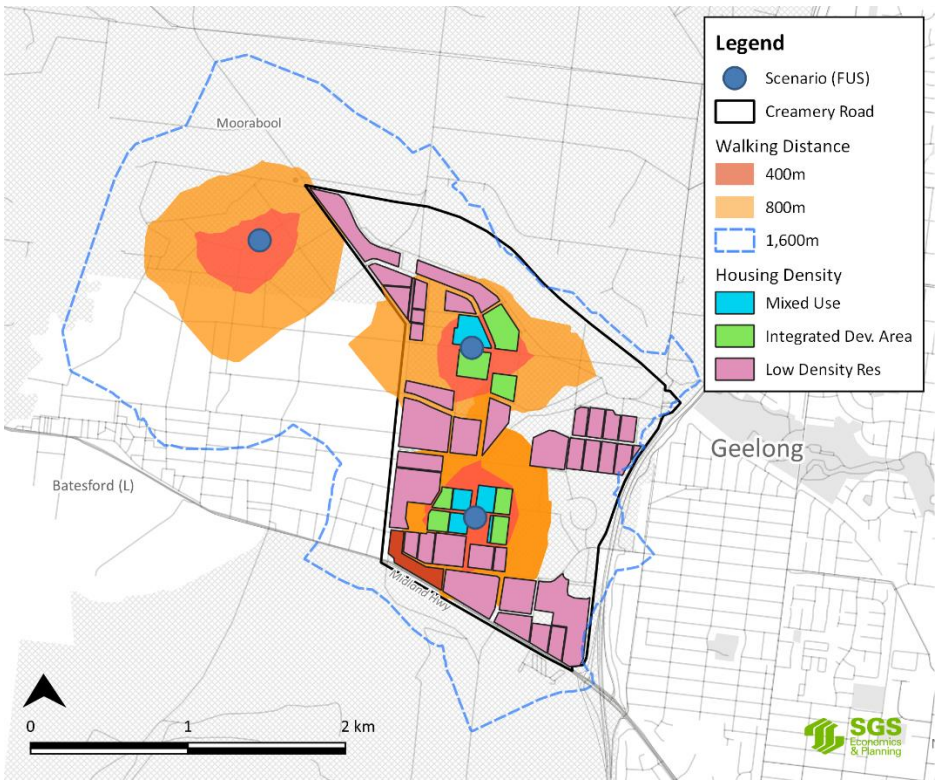
	Walking Distance from Centre (single trip)			
Dwelling Density	400m	800m	1,200m	1,600m
Low	0.0%	4.8%	33.9%	73.5%
Medium	0.0%	37.2%	97.8%	100.0%
High	42.3%	93.0%	100.0%	100.0%

Source: SGS Economics and Planning, 2021

Scenario 2 and 4: Walking catchment based on two centres, different centre sizes

An updated ped-shed analysis was undertaken based on the draft FUS. Under this configuration, the CCC runs through the middle of the precinct (as opposed to the edge), with the southern NAC split into two LACs and the NAC for Batesford North moved further into the centre of the Baterford North precinct (Scenario 2). An additional configuration considers whether it should be one NAC and one LAC instead (Scenario 4). Under both scenarios, the results are the same. As seen in Figure 9, There is greater walkability than Scenario 1, with the 800 metre single trip catchment covering a larger proportion of Creamery Road. Under a 1,600 metre single trip, the entire precinct is covered.

FIGURE 9: WALKING CATCHMENT, SCENARIO 2 AND 4



Source: SGS Economics and Planning, 2021

Whilst the higher density IDA/Mixed-Use precincts are all within an 800 metre single trip of the LACs, only around 46.8 per cent of low density residential is within 800 metres. This is still a significant improvement upon the Framework Plan, which only has 4.8 per cent of low density residential within an 800 metre single trip. Nevertheless, it highlights the difficulty in being able to provide high levels of walkability for all residents.

TABLE 8: PROPORTION OF RESIDENTIAL DENSITIES WITHIN WALKING DISTANCE TO CENTRE (SCENARIO 2/4)

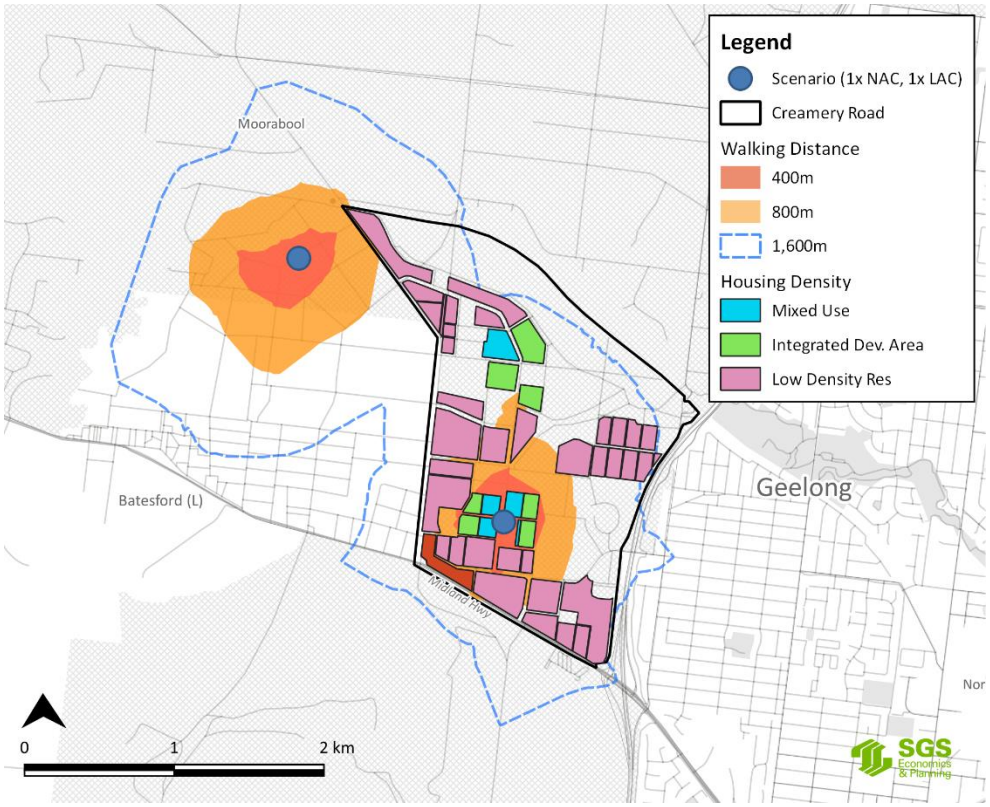
	Walking Distance from Centre (single trip)			
Dwelling Density	400m	800m	1,200m	1,600m
Low	3.5%	46.8%	81.8%	100.0%
IDA & Mixed-Use	77.8%	100.0%	100.0%	100.0%

Source: SGS Economics and Planning, 2021

Scenario 3: Walking catchment based on a single NAC within Creamery Road

A third configuration involved analysis based on a single NAC, located at the southern LAC as per the draft FUS. With one less centre, there is far less connectivity within an 800 metre single trip, which is lower than all other scenarios. One interesting observation is that all residential areas are covered under a 1,600 metre single trip, if one considers the catchment of the proposed Batesford North NAC. Any precinct areas outside of this align with Creamery Road's conservation buffer zones.

FIGURE 10: WALKING CATCHMENT, SCENARIO 3



Source: SGS Economics and Planning, 2021

TABLE 9: PROPORTION OF RESIDENTIAL DENSITIES WITHIN WALKING DISTANCE TO CENTRE (SCENARIO 3)

	Walking Distance from Centre (one way)			
Dwelling Density	400m	800m	1,200m	1,600m
Low	3.4%	31.8%	69.6%	100.0%
IDA & Mixed-Use	48.2%	50.1%	81.5%	100.0%

Source: SGS Economics and Planning, 2021

Under Scenario 3, only 50.1 per cent of the IDA and Mixed-Use precincts are within an 800 metre single trip. This compares with 100 per cent under Scenario 2 and Scenario 4. This is predominantly due to the removal of the northern LAC under this configuration, resulting in a medium and high-density area not being within walking distance.

6. Retail demand

Method

A high-level catchment analysis was undertaken to estimate retail demand across Creamery Road. Catchment analysis is a simplified method to broadly estimate the amount of retail demand that is expected to occur within a manually defined trade area. The benefit of this method is that it is easy to follow. The trade-off is that several assumptions are used throughout the process. This means that subjectivity is inherent, as it is dependent on the analyst undertaking the modelling. Therefore, it is important to remember that this method acts as a high-level estimate of retail demand. The method used in this retail demand assessment is as follows:

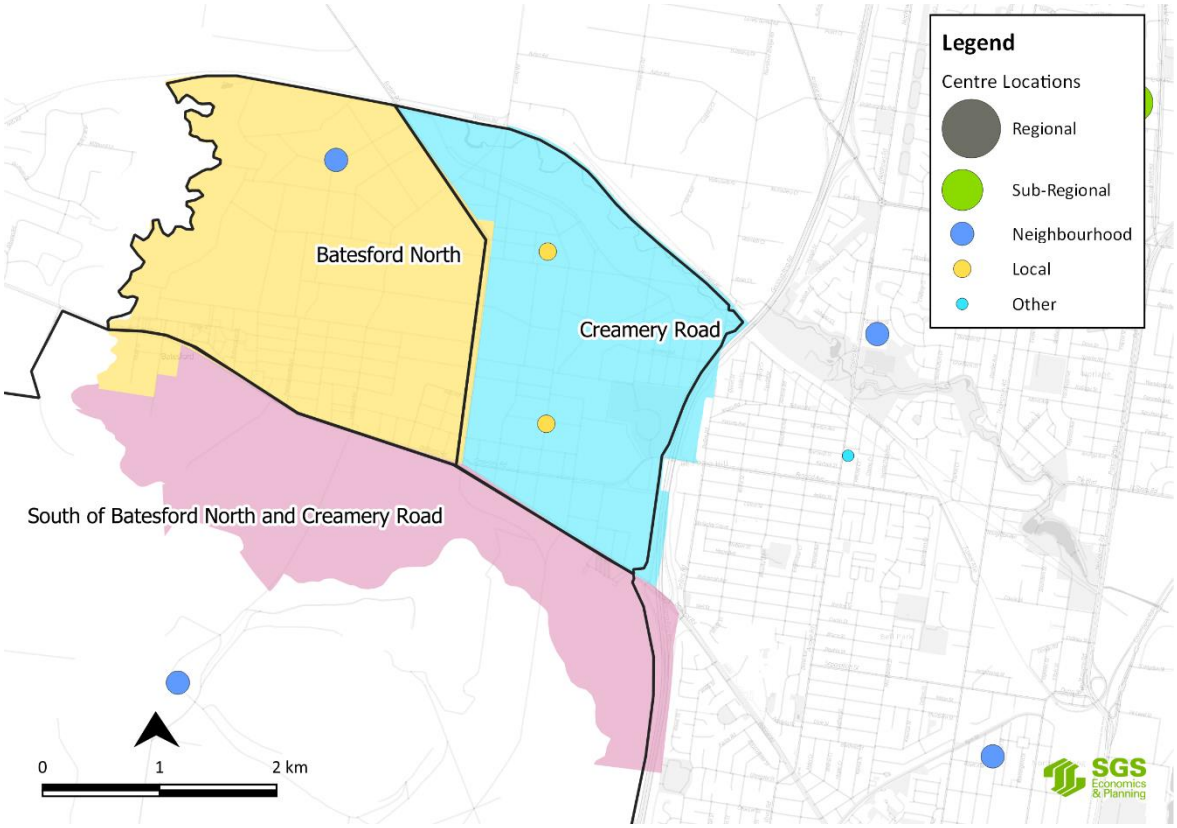
1. The user defines the retail trade area
2. Estimate the current and future population of the trade area
3. Estimate a retail expenditure total per capita
4. Multiply the future population by the retail expenditure per capita to calculate total expenditure
5. Calculate an 'escape expenditure' that will be lost within the catchment
6. Estimate the expected 'turnover' of a neighbourhood centre (defined by 'RTDs')
7. Divide the RTD rates by total expenditure to calculate demand

6.1 Estimating the retail trade area

Two trade areas needed to be defined. The first trade area was based on the centre locations under the Framework Plan (Scenario 1). The second was based upon the updated centre locations in the draft FUS and associated configurations (Scenario 2,3,4).

Under the Framework Plan, the WGGA comprises five neighbourhood activity centres, each with an estimated retail floor space of approximately 7,000-8,000 sqm. Two NACs were proposed along the border of Creamery Road and Batesford North, totalling around 15,000 sqm of retail floorspace. In determining the trade area for Scenario 1, both Creamery Road and Batesford North are considered the exclusive primary trade areas (See Figure 11). This is because there are a number of barriers that are likely to prevent attracting a broader catchment of demand. The Princes Highway acts as a barrier on the eastern boundary, with the Moorabool River acting as a barrier on the Western and Southern boundary. There is no residential growth planned to the North, which is also blocked to an extent by an existing rail line.

FIGURE 11: TRADE AREA BOUNDARY, FRAMEWORK PLAN

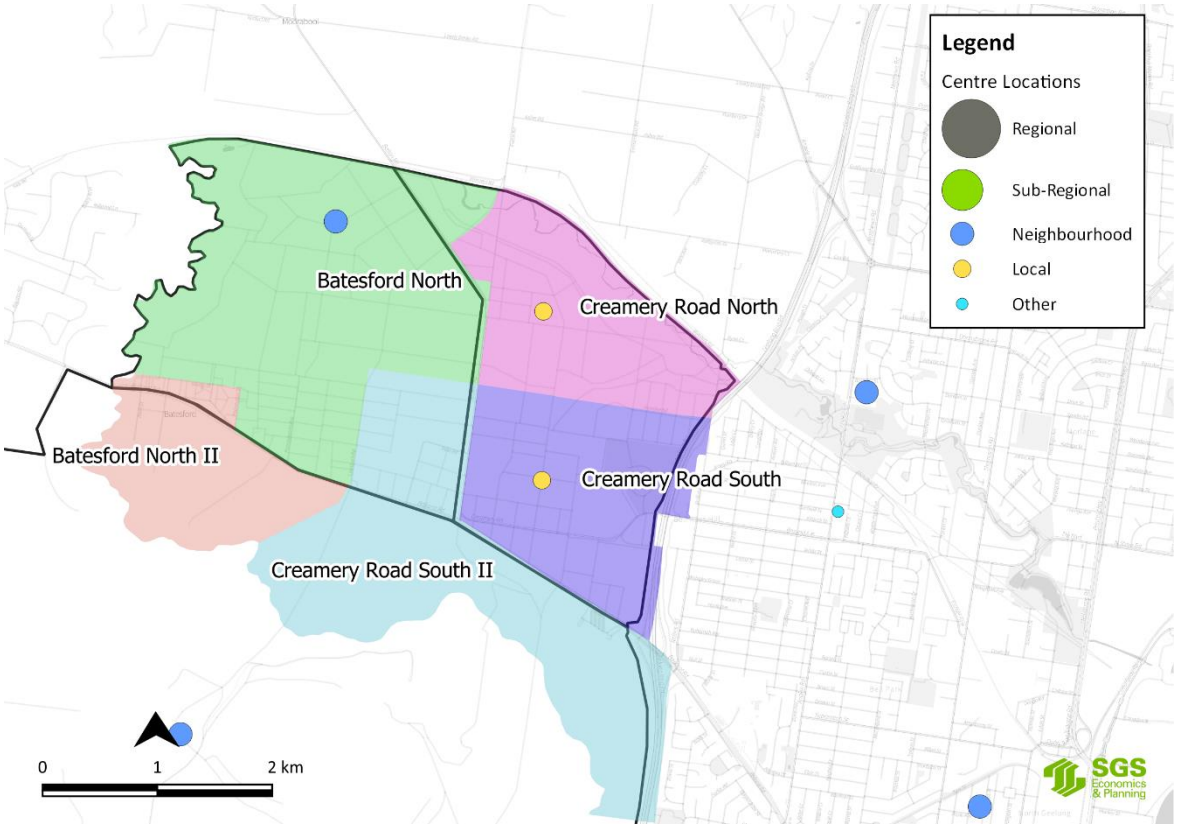


Source: SGS Economics and Planning, 2021
N.B: The future bulky goods precinct is not displayed, as it is modelled later in the analysis

Under the draft FUS, the southern NAC has been split into two LACs (Scenario 2) and shifted into the centre of Creamery Road. The northern NAC has been shifted westward into Batesford North. Under this configuration, the total floorspace of the LACs is expected to be around 3-4,000 sqm each, resulting in total retail supply of around 7-8,000 sqm. Two additional configurations are also modelled. Scenario 3 considers Creamery Road with just one NAC. Scenario 4 considers Creamery Road with one NAC and one LAC.

Centre sizes and hierarchies all change under the draft FUS. These changes are likely to result in demand becoming much more localised to their relevant precinct. The Batesford North NAC is likely to retain any spillover demand from Batesford North. Therefore, unlike the Framework Plan, where the two centres were largely in the middle, these scenarios are likely to see separation into more localised and self-contained precincts (see Figure 12). Due to the smaller sizing of the Creamery Road centres, their primary trade areas are weakened, and are therefore likely to result in a higher level of escape expenditure further away from the centres (known as Secondary Trade Areas and which can be observed to the south).

FIGURE 12: TRADE AREA BOUNDARY



Source: SGS Economics and Planning, 2021

6.2 Estimating the current and future population of the trade area

Small Area Land Use Projections (SALUP) were utilised to estimate the existing and future populations. SALUP data integrates the latest population and employment data with expected demographic, economic and planning policy to provide an estimate of the make-up of population and jobs at a small area level.

Whilst these projections are likely to have made some consideration of the WGGA, this data was released in 2019 and as such, is likely not as accurately reflected due to changes made to the Framework Plan in August 2020 and the draft FUS. As of 2021, the population of the trade area is around 437 residents. This is expected to grow to around 10,266 residents by 2046 (See Table 10). The largest amount of projected growth is expected to occur in Creamery Road South (3,191 new residents) and Batesford North (3,214).

TABLE 10: POPULATION PROJECTIONS, PRE-FRAMEWORK PLAN

	2021	2026	2031	2036	2041	2046	Change
Creamery Road North	36	286	445	618	851	1,126	1,090
Creamery Road South	69	742	1,245	1,722	2,392	3,260	3,191
Batesford North	66	69	484	1,139	2,150	3,280	3,214
Creamery Road South II	162	162	239	392	1,036	2,280	2,118
Batesford North II	104	104	108	116	175	320	216
Total	**437**	**1,363**	**2,521**	**3,987**	**6,605**	**10,266**	**9,829**

Source: SGS Economics and Planning, 2021]

A review of the Framework Plan identifies that Creamery Road will be the first precinct to be developed. According to the Geelong Settlement Strategy, there is a need for development to begin around 2025. Therefore, it is expected that residential growth will slowly begin in Creamery Road at the very earliest around 2026 (once construction is completed). Batesford North is considered a medium-horizon precinct and therefore is estimated to slowly start receiving residents around 2030.

The Creamery Road South II and Batesford North II trade areas (as per Figure 12) are part of the Batesford South precinct, which has a longer term development horizon. For the purposes of this modelling, they are assumed to start receiving residents around 2035. These areas are only likely to receive a small fraction of the total Batesford South residential population. Therefore, for the purposes of this study, these areas will be receiving around 15 per cent of the Batesford South total.

When considering the Framework Plan, the result is an updated figure of 22,645 residents, under the trade area defined by the FUS.

TABLE 11: POPULATION PROJECTIONS, WITH FRAMEWORK PLAN ADJUSTMENTS

Trade Segments	2021	2026	2031	2036	2041	2046	Change
Creamery Road North	36	245	1,288	2,330	3,373	3,416	3,379
Creamery Road South	69	382	1,941	3,500	5,060	5,123	5,054
Batesford North	66	66	736	4,083	7,429	10,131	10,066
Creamery Road South II	162	164	166	491	2,109	3,727	3,565
Batesford North II	104	106	107	121	185	248	144
Total	**437**	**963**	**4,238**	**10,525**	**18,155**	**22,645**	**22,208**

Source: SGS Economics and Planning, 2021

6.3 Estimate the retail expenditure per capita

Estimating expenditure with catchment analysis is typically undertaken with the use of MarketInfo retail estimates. These are industry-standard estimates, which estimates expenditure patterns at an SA1 level through the use of the Household Expenditure Survey. It is based on total residential expenditure and does not factor in the leakage to online retail (this is accounted for as 'escape expenditure' in later steps).

If undertaking analysis in established areas, one simply needs to extract the relevant SA1 expenditure data for a subject site. For growth areas however, there is no established residential population. As such, an estimated retail expenditure estimate needs to be built, based on a similar area or location.

The decision was made to utilise expenditure data from neighbouring Corio. This is because the future WGGA, is located directly adjacent to it (slightly further from the city centre) and therefore likely to attract similar socio-economic groups that are also drawn to Corio. MarketInfo calculates an estimated retail expenditure catchment for Corio at around $217.4 million dollars. When divided by the catchment's population, this equates to around $11,800 dollars in retail spending annually as of 2016. To account for inflation, each commodity group was multiplied by an annual rate of inflation of around 1.75 per cent. The result is an estimated retail spending per capita of around $19,856 by 2046.

TABLE 12: RETAIL EXPENDITURE PER CAPITA, CORIO (2016 DOLLARS)

Retail Expenditure Categories	Expenditure ($millions)	Per capita 2016	Per capita 2046
Food & Groceries	79.1	4,294	7,225
Bottleshop/Tobacco	29.1	1,579	2,658
Restaurants & Cafes & Take-away	26.0	1,411	2,375
Clothing & Shoes	15.0	816	1,373
Furniture, Whitegoods, Homeware, Manchester, Electronics	29.7	1,614	2,715
Hardware & Garden	8.3	451	759
Other Retail	23.5	1,277	2,149
Retail Services	6.6	358	603
Total	**$217.4**	**$11,800**	**$19,857**

Source: MarketInfo, 2016

6.4 Calculating total trade area expenditure

The per capita expenditure rates for Corio were multiplied by the expected residential populations for each trade area scenario (i.e. Figure 11 and Figure 12). A high level 'escape expenditure' calculation of 50 per cent was applied to the primary trade areas. An escape expenditure helps to account for the fact that not all spending will be drawn to these particular centres (i.e. going to other centres, online spending). For the draft FUS trade area, secondary trade areas were created (i.e. Creamery Road South II and Batesford North II) with a 65 per cent escape expenditure, to better account for the reduced pulling power of the LACs and the shift into the centre of the precincts and subsequent 'localisation'.

Under the Framework Plan, the residential expenditure for the trade area is expected to grow from $2.8 million to $224.8 million in 2046. This expenditure is roughly expected to be split evenly across the two NACs. Under the draft FUS, residential expenditure is lower by around 5.3 per cent or $213.0 million, primarily due to the application of secondary trade areas.

TABLE 13: EXPENDITURE (BATESFORD NORTH AND CREAMERY ROAD) ($ MILLIONS, 2016 DOLLARS)

	Framework Plan		Draft FUS		Difference	
Retail Expenditure Categories	**2021**	**2046**	**2021**	**2046**	**2021**	**2046**
Food & Groceries	1.02	81.81	1.02	77.50	-	-4.31
Bottleshop/Tobacco	0.38	30.09	0.38	28.51	-	-1.58
Restaurants & Cafes & Take-away	0.34	26.89	0.34	25.47	-	-1.42
Clothing & Shoes	0.19	15.55	0.19	14.73	-	-0.82
Furniture, Whitegoods, Homeware, Manchester, Electronics	0.38	30.75	0.38	29.13	-	-1.62
Hardware & Garden	0.11	8.59	0.11	8.14	-	-0.45
Other Retail	0.30	24.33	0.30	23.05	-	-1.28
Retail Services	0.09	6.82	0.09	6.46	-	-0.36
Total	**2.81**	**224.83**	**2.81**	**212.99**	**-**	**-11.84 (-5.3%)**

Source: MarketInfo, 2016

Under the Framework Plan, the location of the NACs meant that they were both likely to be drawing equally across Batesford North and Creamery Road precincts. Therefore, total expenditure for the NACs could be calculated at a high level. In 2046, the Framework Plan configurations would result in residential expenditure of $224.8 million.

Under the draft FUS, the total trade area extent does not change significantly (apart from the additional secondary trade areas). The result is a slightly smaller amount of trade area spending of approximately $213.0 million. However, this total amount must be split to account for the shifting of the centres into more localised trade areas. The result is that the new localised trade areas estimate expenditure of around $110.7 million for Creamery Road, with Batesford North drawing around $102.3 million.

TABLE 14: SPLITTING UP TRADE AREA EXPENDITURE BY PRECINCT OUT TO 2046 ($ MILLIONS, 2016 DOLLARS)

	Framework Plan 2046	Draft FUS, 2046		
Retail Expenditure Categories		Creamery Road	Batesford North	Total
Food & Groceries	81.81	40.27	37.23	77.50
Bottleshop/Tobacco	30.09	14.81	13.69	28.51
Restaurants & Cafes & Take-away	26.89	13.24	12.24	25.47
Clothing & Shoes	15.55	7.65	7.07	14.73
Furniture, Whitegoods, Homeware, Manchester, Electronics	30.75	15.14	13.99	29.13
Hardware & Garden	8.59	4.23	3.91	8.14
Other Retail	24.33	11.98	11.07	23.05
Retail Services	6.82	3.36	3.10	6.46
Total	**224.83**	**110.68**	**102.31**	**212.99**

Source: MarketInfo, 2016

6.5 Estimating the expected 'turnover' of a typical neighbourhood centre

Retail Turnover Densities, or RTDs, provide a high-level estimate of what a typical retail centre might earn per square metre. They are derived from industry standard RTD benchmarks from Urbis, which relies on surveying a large sample of centres to calculate an average turnover rate.

The following RTD figures are 2018 estimates based on median turnover rates for a single supermarket-based shopping centre. This was considered the most appropriate centre-type as it will most likely resemble the shopping centres found within Creamery Road. The RTDs are utilised to calculate demand in the forthcoming step. One observation is that Furniture and Hardware are of the same RTD. This is because there are no applicable RTD estimates for Hardware within single supermarket-based shopping centres. As such, a broad estimate of household goods was applied, due to the two categories holding similar characteristics as Household Goods.

TABLE 15: NEIGHBOURHOOD CENTRE TURNOVER PER SQM

Retail Expenditure Categories	RTD Estimate (2018 dollars)
Food & Groceries	$10,633
Bottleshop/Tobacco	$9,114
Restaurants & Cafes & Take-away	$7,908
Clothing & Shoes	$4,808
Furniture, Whitegoods, Homeware, Manchester, Electronics	$7,772
Hardware & Garden	$7,772
Other Retail	$11,577
Retail Services	$6,457

Source: Urbis Retail Benchmarks, 2018

6.6 Estimating demand

Floorspace demand is calculated by dividing trade area expenditure by the RTD rates for each commodity by year. Demand growth is the difference between this calculation at 2021 and 2046.

Table 16 provides a summary of demand growth between the Framework Plan and the draft FUS for the total trade area. Under the Framework Plan, demand growth is calculated at 20,654 sqm, with around 6,147 sqm of supermarket floorspace. Under the draft FUS, floorspace demand growth for the total trade area is 19,607 sqm, with around 5,836 sqm of supermarket floorspace. This is around 5.1 per cent less than the Framework Plan.

TABLE 16: RETAIL DEMAND COMPARISON (SQM)

	Framework Plan			Draft FUS		
Retail Expenditure Categories	2021	2046	Demand (2021 - 2046	2021	2046	Demand (2021 – 2046)
Food & Groceries	94	6,241	6,147	77	5,913	5,836
Bottleshop/Tobacco	40	2,678	2,638	33	2,537	2,504
Restaurants & Cafes & Take-away	42	2,758	2,717	34	2,613	2,579
Clothing & Shoes	40	2,623	2,584	32	2,485	2,453
Furniture, Whitegoods, Homeware, Manchester, Electronics	48	3,209	3,161	40	3,040	3,001
Hardware & Garden	14	897	883	11	850	838
Other Retail	26	1,705	1,679	21	1,615	1,594
Retail Services	13	857	844	11	812	801
Total	**316**	**20,970**	**20,654**	**258**	**19,865**	**19,607**

Source: SGS Economics and Planning, 2021

Floorspace demand growth between 2021 and 2046 needs to be disaggregated to the localised demand expected for the Creamery Road trade area under the draft FUS. When splitting out the demand, retail demand for Creamery Road falls to 10,165 sqm, with around 9,442 sqm allocated for Batesford North.

TABLE 17: RETAIL DEMAND COMPARISON – BATESFORD NORTH AND CREAMERY ROAD SPLIT

Retail Expenditure Categories	Creamery Road	Batesford North	Total
Food & Groceries	3,025	2,810	5,836
Bottleshop/Tobacco	1,298	1,206	2,504
Restaurants & Cafes & Take-away	1,337	1,242	2,579
Clothing & Shoes	1,272	1,181	2,453
Furniture, Whitegoods, Homeware, Manchester, Electronics	1,556	1,445	3,001
Hardware & Garden	435	404	838
Other Retail	827	768	1,594
Retail Services	415	386	801
Total	**10,165**	**9,442**	**19,607**

Source: SGS Economics and Planning, 2021

6.7 Estimate of bulky goods demand

The draft FUS indicates the potential development of bulky goods floorspace. To estimate whether there is any demand for bulky goods floorspace, high-level allocations were made with specific commodities. This is based loosely on the types of permissible retail commodities that are allowed in bulky goods precincts (i.e. generally supermarkets are not allowed), as well as the likelihood of these commodities being entirely located within bulky goods centres (furniture/whitegoods), or split across the activity centres (clothing can be found in both bulky goods and activity centres). The estimated allocation to bulky goods can be seen in Table 18 below.

If applying this allocation to both Creamery Road and Batesford North, the result is potential bulky goods demand of around 5,274 sqm. Creamery Road's retail centre floorspace falls from 10,165 sqm to 7,430 sqm.

TABLE 18: ALLOCATIONS OF TRADE AREA DEMAND TO BULKY GOODS

	Floorspace Demand		Manual Allocation		Retail Centres		Bulky Goods
Retail Expenditure Categories	Creamery Road	Batesford North	Retail	Bulky Goods	Creamery Road	Batesford North	Total
Food & Groceries	3,025	2,810	100%	0%	3,025	2,810	-
Bottleshop/Tobacco	1,298	1,206	100%	0%	1,298	1,206	-
Restaurants & Cafes & Take-away	1,337	1,242	95%	5%	1,270	1,180	129
Clothing & Shoes	1,272	1,181	50%	50%	636	591	1,226
Furniture, Whitegoods, etc	1,556	1,445	0%	100%	-	-	3,001
Hardware & Garden	435	404	0%	100%	-	-	838
Other Retail	827	768	95%	5%	785	729	80
Retail Services	415	386	100%	0%	415	386	-
Total	**10,165**	**9,442**			**7,430**	**6,902**	**5,274**

Source: MarketInfo, 2018

Final bulky goods calculation

Bulky goods demand is based off the draft FUS trade areas. Realistically, this precinct is designed for the entire WGGA. A 'bulky goods per capita' rate of 0.23 sqm was estimated (5,274 sqm / 22,645 residents in 2046). This 0.23 sqm was then multiplied by the expected WGGA population of 64,269, resulting in an estimated bulky goods demand of 14,969 sqm. This aligns with Nott (2017), which estimated bulky goods demand at 0.24 per capita[24]. This is smaller than the definition (~50,000 sqm) as identified in the Greater Geelong Retail Strategy, due to these precincts typically being found in more established areas.

TABLE 19: ESTIMATING BULKY GOODS DEMAND ACROSS THE WGGA

Scenario	Bulky Goods Demand	Population	Demand per Capita
Trade Area	5,274	22,645	0.23
WGGA	14,969	64,269	0.23

Source: SGS Economics and Planning, 2021

[24] Nott, Tim 2017. *Northern and Western Geelong Growth Areas Consolidated Activity Centre Assessment, pg. 19*

Retail Gap Estimate

The retail gap helps to calculate whether there is sufficient supply to meet demand. If there is more demand than supply, there is a 'retail gap'. If there is less demand than supply, there is a 'retail surplus'. In strategic planning, the consensus is typically to ensure that supply and demand are in 'balance'. As subsequent sections will discuss, greenfield areas may benefit from retaining a retail gap to artificially boost vibrancy in its nascent stages.

The supply estimates for each of the four scenarios are introduced and subtracted against the calculated levels of demand (see Table 20). Since centres are made up of both retail and non-retail floorspace, only the retail supply has been considered.

Under Scenario 1, there is approximately 20,654 sqm of retail demand across the Batesford North and Creamery Road trade area (both NACs are assumed to be in Creamery Road and therefore attract this demand). When subtracting the 7,000 sqm of retail supply from the two NACs (2 x 3,500 sqm), the result is a retail gap of around 13,654 sqm.

Under Scenario 2, there is approximately 7,430 sqm of retail demand (remembering the localisation of the Creamery Road trade areas and new bulky goods precinct). When subtracted against the estimated 5,250 sqm of retail supply, the result is a retail gap of 2,180 sqm, or around 1,090 sqm per LAC. Under Scenario 3, the retail gap is 3,930 sqm. This is because it is a single NAC, with a smaller amount of floorspace supply. Under Scenario 4, the retail gap is 1,305 sqm, due to there being a higher amount of floorspace due to there being a NAC and a LAC.

These retail results do not consider non-retail floorspace demand (such as business services). The combination of the two will enable a more complete gap analysis. This is calculated in subsequent chapters.

TABLE 20: RETAIL DEMAND SCENARIOS

Scenario	Retail floorspace (excl. non-retail floorspace)	Demand	Gap
Scenario 1, CR + BN (as per Framework PLan	Total Retail: 7,000 sqm (2 x NAC, 3,500 sqm)	20,654	-13,654
Scenario 2 (as per Draft FUS)	Total Retail: 5,250 sqm (2 x LAC of 2,625 sqm)	7,430	-2,180
Scenario 3 (as per Draft FUS)	Total Retail: 3,500 sqm (1x NAC of 3,500 sqm)	7,430	-3,930
Scenario 4 (as per Draft FUS)	Total Retail: 6,125 (1 x NAC 3,500; 1 x LAC of 2,625)	7,430	-1,305

Source: SGS Economics and Planning, 2021 (numbers may not sum due to rounding)
Minimum retail thresholds for LACs are not defined under the Framework Plan. As such, the estimated totals for the LAC are half the size of a LAC (7,500 / 2 = 3,750). Retail was considered to make up around 70% of the total centre size, with non-retail around 30%.

7. Employment demand

7.1 Method

An employment needs assessment was undertaken to estimate the number of jobs that might be found within Creamery Road. From this, it is possible to estimate the number of jobs that might be found within the retail centres and then to determine 'non-retail' employment demand in the activity centres. This can then be added to retail demand to estimate 'total centre demand'.

The method was to break down the major sources of jobs, which are likely to be derived from the retail/employment centres, home-based businesses, any relevant employment precincts and social infrastructure. The methods are explained in the forthcoming sections.

7.2 Estimating centre-based employment

2016 ABS Place of Work was utilised to find retail centres of similar size and scale to the proposed centres at Creamery Road and Batesford North (8,000 – 15,000 sqm). Centres were chosen primarily on whether there was an applicable Destination Zone or 'DZN' polygon that solely contained a shopping centre. DZN polygons are ABS defined and provide the most localised detail possible on job numbers. Using DZNs that only contained shopping centres (and not other structures like schools/hospitals) provides a higher degree of confidence that the jobs within these DZN's could be attributed to the centre, as opposed to other non-centre-based employment. This method is also useful in estimating the number of non-retail jobs (such as banks, insurance, physiotherapists, etc). A list of the centres studied and their corresponding floorspace are provided in Table 21.

Not all of these centres are located in Geelong. For the purposes of this study, it was deemed more important to investigate centres that were the dominant feature within the DZN. This was challenging given most neighbourhood centres are located in close proximity to either a school, community centre, or medical centre, and that DZNs in regional or semi-regional areas are typically larger than metropolitan DZNs and capture a number of other uses which generate employment apart from the centre itself. Nevertheless, SGS believes the range of case studies reviewed will serve as a useful guide in providing a high-level employment average.

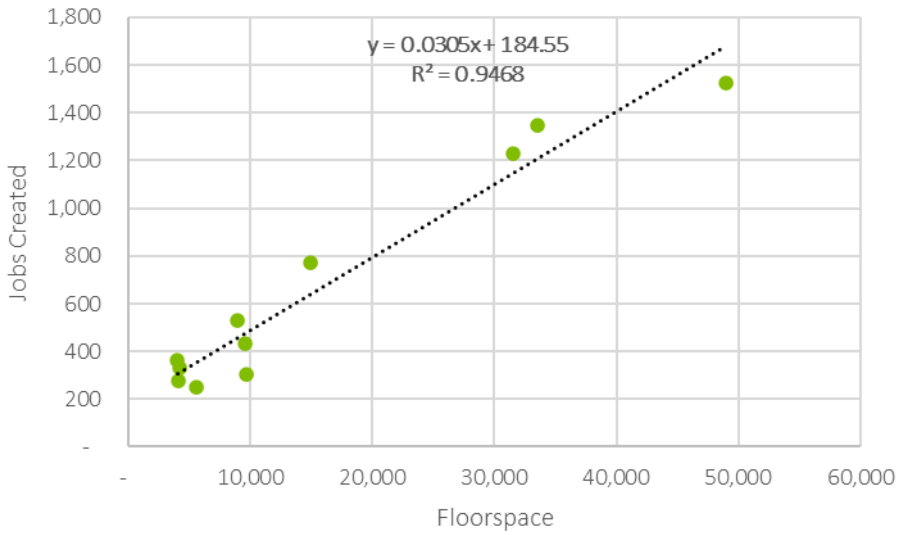
The results find that on average, 1 job equates to 21.1 square metres of centre floorspace. One could use this floorspace average to estimate retail and non-retail employment. However, a more robust metric would be to use a simple linear regression that measures the relationship between jobs and floorspace for the sample centres. A high-level inspection of such an analysis reveals a sound correlation between jobs and retail floorspace. This is shown in Figure 13.

TABLE 21: CHARACTERISTICS OF SELECTED VICTORIAN NEIGHBOURHOOD CENTRES

Centre	Hierarchy	Floorspace (sqm)	Estimated Jobs	Floorspace per job
Williams Landing	Neighbourhood	8,960	528	17.0
Armstrong Creek (Warralily)	Neighbourhood	9,625	302	31.9
Bell Park	Neighbourhood	4,147	333	12.5
Pakenham West	Neighbourhood	9,500	432	22.0
Berwick	Neighbourhood	4,000	365	11.0
Hogan's Corner, Hoppers Crossing	Neighbourhood	5,568	250	22.3
Mill Park, South Morang	Neighbourhood	4,081	278	14.7
Lara Shopping Centre	Neighbourhood	14,952	772	19.4
Corio	Sub-Regional	31,503	1,229	25.6
Leopold Shopping Centre	Sub-Regional	33,510	1,346	24.9
Waurn Ponds Shopping Centre	Sub-Regional	48,938	1,525	32.1

Source: SGS Economics and Planning, 2021

FIGURE 13: RELATIONSHIP BETWEEN JOBS AND FLOORSPACE ACROSS GREATER GEELONG AND MELBOURNE



Source: SGS Economics and Planning, 2021

Using this function, it is possible to estimate the number of jobs across centres of various sizes, across the WGGA. The result is a job estimate more aligned to the size of individual centres. Under the Framework Plan, a total of 4,050 centre-based jobs is projected. Under the FUS, a total of 4,287 jobs are projected. Utilising the scenarios for Creamery Road finds a total of 4,050 and 4,388 centre-based jobs respectively.

TABLE 22: TOTAL CENTRE EMPLOYMENT BY POLICY SCENARIO

Scenario	Centre Hierarchy	Retail Jobs	Non-Retail Jobs	Total Jobs
Scenario 1 (As per Framework Plan) (CR + BN)	Specialised Centre (2,000 sqm) x 1	262	29	291
	Neighbourhood Centre (7,500 sqm) x 5	909	1,279	2,187
	Sub-Regional (50,000 sqm) x1	731	842	1,572
Scenario 2 (As per Draft FUS)	Specialised Centre (2,000 sqm) x 1	262	29	291
	Local Centre (3,750 sqm) x 2	145	529	675
	Neighbourhood Centre (7,500 sqm) x 4	727	1,023	1,750
	Sub-Regional (50,000 sqm) x 1	731	842	1,572
Scenario 3 (Single NAC in Creamery Road Precinct)	Specialised Centre (2,000 sqm) x 1	262	29	291
	Neighbourhood Centre (7,500 sqm) x 5	909	1,279	2,187
	Sub-Regional (50,000 sqm) x1	731	842	1,572
Scenario 4 (One NAC and one LAC in Creamery road, location as per draft FUS)	Specialised Centre (2,000 sqm) x 1	262	29	291
	Local Centre (3,500 sqm) x 1	73	265	337
	Neighbourhood Centre (7,500 sqm) x 5	909	1,279	2,187
	Sub-Regional (50,000 sqm) x 1	731	842	1,572
Scenario 1 (CR + BN)	**Total**	**1,901**	**2,150**	**4,050**
Scenario 2	**Total**	**1,864**	**2,423**	**4,287**
Scenario 3	**Total**	**1,901**	**2,150**	**4,050**
Scenario 4	**Total**	**1,973**	**2,414**	**4,388**

Source: SGS Economics and Planning, 2021 (numbers may not sum due to rounding)

'Bottom-up' non-retail employment estimate

Once the total WGGA centre-based jobs are calculated across the WGGA, they can be narrowed down to a centre-based estimate for Creamery Road under each scenario. Scenario 1 estimates around 875 jobs, of which 512 are non-retail. Scenario 2 estimates 675 jobs, of which 529 are non-retail. Scenario 3, which involves a single NAC estimates around 437 jobs, of which 256 are non-retail. Scenario 4, which involves a NAC and LAC estimates around 775 jobs, of which around 520 are non-retail.

TABLE 23: TOTAL CENTRE EMPLOYMENT BY POLICY SCENARIO AT CREAMERY ROAD

Scenario		Retail Jobs	Non-Retail Jobs	Total Jobs
Scenario 1 (2 x NACs)	CR	182	256	438
	BN	182	256	438
	Total	363	512	875
Scenario 2 (2 x LACs)		145	529	675
Scenario 3 (1 x NAC)		182	256	437
Scenario 4 (1 x NAC, 1 x LAC)		254	520	775

Source: SGS Economics and Planning, 2021 (numbers may not sum due to rounding)
N.B: Scenario 2-4 do not consider non-retail jobs in the bulky goods centre (i.e. the bulky goods precinct is retail only).

'Top-down' non-retail employment estimate

However, relying purely on the bottom-up/centre-size estimate is not sufficient, as it is not based on any broader economic demand. Rather it is based purely off the centre envisioned by the planner. For instance, if planners decided to build 5 sub-regional centres in Creamery Road, then the linear regression would estimate the number of 'expected' jobs that would be found in sub-regional centres. However, it would not reflect the economic reality of whether demand is actually there to meet those jobs. Therefore, an additional 'top-down' demand estimate has been created, to ensure that the jobs better reflect market conditions. This was achieved through

1. Extracting the trend of jobs in the trade area from the 2019 Small Area Land Use Projections (SALUP) dataset. This data excludes blue collar workers that are unlikely to be found in centres. The result is a total non-blue collar worker population for the trade area (9,828 new workers)
2. Extracting the original SALUP population for the trade area, to then determine a worker: population ratio (0.07)
3. This ratio is then applied to the future population growth of the WGGA. This provides an updated estimate of non blue-collar workers across the trade area (1,497 new workers)
4. Workers can then be sorted into whether they will be in Batesford North (48 per cent) or Creamery Road (52 per cent), by using the retail demand allocations as a proxy.

5. Workers are further disaggregated by removing those which might be working from home (as calculated in an upcoming chapter). The result is 'centre-based' workers
6. 'Centre-based' workers can then be split between retail and non-retail workers based on the proportions expected for typical neighbourhood centres (42 per retail, 58 per cent non-retail

The result of this was non-retail, centre-based worker demand of 339 jobs within the trade area. The next step simply involved averaging the bottom-up and top-down methods, which results in a range of 298 non-retail jobs (Scenario 3) to 434 (Scenario 2).

TABLE 24: NON-RETAIL CENTRE-BASED JOB ESTIMATE

Scenario	Bottom-Up Centre Estimate	Top-Down Economic Estimate	Average
Scenario 1 (CR + BN)	512	339	425
Scenario 2	529	339	434
Scenario 3	256	339	298
Scenario 4	520	339	430

Source: SGS Economics and Planning, 2021

7.3 Jobs from home

A high-level analysis of the Australian Business Register Sole Trader data provided by Remplan was undertaken. Sole Traders were considered a reasonable proxy for work from home jobs. It estimates that there are approximately 6,230 registered sole traders across the City of Greater Geelong.

Estimating the total number of sole traders for the WGGA and Creamery Road was achieved by creating rate per 1,000 residents by industry (i.e. 5.93 construction jobs per 1,000; 2.64 professional services jobs per 1,000). These rate per 1,000 statistics were then applied to the estimated WGGA and Creamery Road populations of 64,269 and 8,433 respectively. The result is an estimate of around 1,493 work from home jobs across the WGGA and around 196 within Creamery Road.

TABLE 25: GROWTH AREA SOLE TRADER ESTIMATES, BASED OFF REMPLAN DATA

Step	Geography	Population	Sole Traders
1	Greater Geelong	268,180	6,230
2	Framework Plan (WGGA)	64,269	1,493
3	Framework Plan/draft FUS (Creamery Road)	8,433	196

Source: Remplan, 2021; SGS Economics and Planning, 2021
Note: Scenario #3 and Scenario #4 for Creamery Road not undertaken, as it is based off the precinct's population as per the FUS

7.4 Jobs in the Employment Precinct

On the south-western edge of the WGGA is a 105 ha employment precinct, which according to the Framework Plan is intended for mostly light industrial, manufacturing, transport and logistics and other business and innovation uses. After removing a high-level benchmark of 15 per cent as non-employment land, the result is around 89.57 ha of employment land. The remaining land was then divided by floorspace ratios estimated from similar-sized industrial lands. Using these ratios, it is estimated that this employment precinct could generate around 11,882 jobs.

TABLE 26: ESTIMATED EMPLOYMENT NUMBERS FOR THE EMPLOYMENT PRECINCT

Estimated Industry	Allocation	Floorspace (sqm)	Jobs to Floorspace Ratio	Jobs
Manufacturing	50%	447,873	71	6,308
Transport and Logistics	35%	313,511	113	2,774
Professional and Business Services	15%	134,362	48	2,799
Total	**100%**	**895,746**	-	**11,882**

Source: SGS Economics and Planning, 2021
Note: This was not required to be individually analysed for the FUS, Scenario #3 or Scenario #4, as it sites outside of Creamery Road

7.5 Jobs from Social Infrastructure

Apart from the proposed centres and employment precincts, there is need to consider how social and educational infrastructure may increase the number of jobs in the WGGA, particularly in terms of schools, kindergartens, long day care centres, and other health, leisure and recreational infrastructure.

Schools

According to the Victorian Government's Schools and Enrolments dataset (July 2020)[25] there are 43,517 enrolments across 87 schools in Greater Geelong- meaning each school is catering for, on average, 500 in the area. The Framework Plan proposes 14 additional schools (11 Primary; 3 Secondary), meaning the total number of additional students the WGGA could be catering for is approximately 7,000 (500 x 14). The national student-teacher ratio is 13.5 students for every teacher.[26] With this in mind, it can be estimated that 519 (7,003/13.5) teaching employees will be needed to cater for expected demand by 2046.

[25] Department of Education and Training 2021. *Statistics on Victorian schools and teaching.* Victorian Government. https://www.education.vic.gov.au/about/department/Pages/factsandfigures.aspx
[26] Geelong Advertiser 2019. https://www.geelongadvertiser.com.au/education/schools-hub/how-every-geelong-school-compares-for-teacher-student-ratios/news-story/344f7b43583ca89bcf95941434f7eaf5

Given that teaching staff only make up approx. 70% of employment at schools in Victoria[27], and 30% are non-teaching, the total number of employees across the 14 additional schools can be increased by 222 workers to a total of 741 (combining teaching and non-teaching staff).

Kindergartens

There are also plans to construct 5 kindergartens and 6 child care centres in the WGGA. On average in Geelong, each kindergarten caters for 41 students, while long day care centres cater for 118 students each on average.[28]

This means that in total, it's expected that WGGA would have to accommodate for 913 Early Learning Centre (ELC) enrolments on average. SGS reviewed the ratio of ELC workers to enrolments at existing kindergarten and long day care centres in Greater Geelong and found that, on average, there are 6 enrolments for every ELC worker. This means that the WGGA can expect an additional 152 ELC jobs to come online into the future, with approximately 27 to be found within Creamery Road.

Police and emergency services

Currently, there are 1,115 of these police and emergency service workers stationed in Greater Geelong, servicing a population catchment of 242,682 people. This is a ratio of one emergency services job for every 217 residents. If we consider that the WGGA is expected to accommodate for 64,269 people, this means that an additional 295 police and emergency service workers could be expected across the WGGA, with approximately 39 expected to be based in the station at Creamery Road.

Other smaller uses

The other five smaller employment-generating uses are 3 maternal and child health centres; 2 integrated children's centres; 1 health and wellbeing centre; 1 indoor recreation centre (or multi-purposes community centre), and 1 'cultural hub'. Using the maternal and child health centre at Newtown, Sydney as an example, this sort of facility can be expected to be approximately 293sqm. Using the assumption of 34 sqm-per-employee for this type of activity[29], and considering that there are three of these centres proposed, this may equate to an additional 26 jobs.

Applying a similar logic to the two integrated children's centres and one health and wellbeing centres equates to an additional 4 (72sqm/34 sqm per worker benchmark x 2) and 43 (1,454sqm/34sqm per worker benchmark x 1) jobs respectively. In terms of the proposed indoor recreation centre, the existing 'Geelong Indoor Sports' centre provides a good benchmark- containing approx. 1,372sqm of floorspace. Using a benchmark of 105 sqm-per-employee for 'Tourist, Cultural and Leisure' uses[30], this

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[27] Australian Curriculum, Assessment and Reporting Authority 2021. *Full time equivalent (FTE) of total staff by school sector, school level and sex, Australia 2020.* https://acara.edu.au/reporting/national-report-on-schooling-in-australia/national-report-on-schooling-in-australia-data-portal/staff-numbers#view1

[28] Australian Children's Education & Care Quality Authority 2021. *Research and reports.* https://www.acecqa.gov.au/resources/research#NEF

[29] Sizztech 2015. *Employment density projections.* https://sizztech.com/2015/07/30/employment-density-projections/

[30] Ibid.

equates to 13 additional jobs at the facility. Furthermore, in terms of the proposed 'cultural hub', if the Geelong Heritage Centre model is to be followed, then this use can be expected to accommodate for an additional 11 employees[31].

A summary of social infrastructure jobs is provided in Table 27 below. It estimates a total of 1,285 social infrastructure jobs across the WGGA, with around 195 estimated to be found within Creamery Road.

TABLE 27: SUMMARY OF SOCIAL INFRASTRUCTURE ACROSS THE WGGA

Estimated Industry	WGGA	Creamery Road
Schools (11 x primary; 3 x secondary) – Teaching Staff	519	74
Schools (11 x primary; 3 x secondary) – Non-Teaching Staff	222	32
Early Learning Centres (5 x kindergarten, 6 x child care centres)	152	27
Police and emergency services (x1)	295	39
Maternal and Child Health Centres (x3)	26	9
Integrated children's centre (x2)	4	2
Health and well-being centre (x2)	43	Not in CR
Indoor recreation centre (x1)	13	13
Cultural hub (x1)	11	Not in CR
Total	**1,285**	**195**

Source: SGS Economics and Planning, 2021

[31] Dun & Bradstreet 2021. *'Geelong Heritage Centre Company Profile'*. https://www.dnb.com/business-directory/company-profiles.geelong_heritage_centre.ace72fd2b49d58efdd5f76e2693c3055.html

7.6 Bulky Goods Jobs

The retail analysis determined that there was demand for around 5,274 sqm of bulky goods for the Creamery Road precinct. A jobs to floorspace ratio of 84.6 was applied, which was based on a selection of bulky goods precincts across metropolitan Melbourne. The result is that the bulky goods precinct is expected to have demand for around 62.3 jobs (5,274 / 84.6).

However, as discussed in the retail analysis, it is likely that the described bulky goods precinct is designed to draw in demand from across the WGGA. Therefore, rather than utilising 5,274 sqm as the base level of demand, it is likely to be considered more appropriate to utilise the implied WGGA bulky goods demand of 14,969 sqm. When divided by the jobs to floorspace of 84.6, the result is an estimate of around 177 jobs. The recommendations in this report will outlines whether the bulky goods land supply at Creamery Road is sufficient, the timing of the development and the benefits from keeping it separated from the activity centre.

TABLE 28: ESTIMATED EMPLOYMENT IN THE BULKY GOODS PRECINCT

Estimated Industry	Allocation	Jobs to Floorspace ratio	Estimated Jobs
Creamery Road Bulky Goods Demand	5,274	84.6	62.3
Creamery Road Trade Area Pop	22,645		
Bulky Goods Demand Per Capita	0.23		
WGGA Population	64,269		
WGGA Bulky Goods Demand (64,269 x 0.23)	**14,969**	**84.6**	**176.9**

Source: SGS Economics and Planning, 2021

7.7 Summary of employment assessment

The employment analysis investigated total jobs expected to be found across the WGGA and within Creamery Road, under the four scenarios. The total range is between 18,624 - 19,134 jobs. This represents around 88.0 per cent of jobs envisaged under the Framework Plan projection of 21,500 jobs and around 82.5 per cent of the DELWP 1 job per household target, which equates to 22,953 for the WGGA (though this this may be achievable with jobs outside of the precinct).

The largest contribution to jobs comes from the strategic employment precinct, with around 11,882 jobs. Job targets not met from this precinct most risk the WGGA not hitting its 1 job per household target. This is not a concern for the Creamery Road precinct, though is worth considering for wider growth area context.

For Creamery Road, it is estimated that there will be between 1,047 and 1,180 jobs created by 2046. The vast majority of jobs are expected to be created from the neighbourhood or local centres envisaged, given that the social infrastructure does not change significantly between the Framework Plan and the draft FUS (difference of only 15 jobs).

Under Scenario 1, 789 jobs are projected from the two NACs (split equally across the two centres). Under Scenario 2, there are 580 jobs (split equally across the two centres). Scenario 3 results in 479 centre-based jobs, whilst Scenario 4 results in 684 centre-based jobs (more jobs in the NAC).

TABLE 29: TOTAL EMPLOYMENT, BY CONFIGURATION

Scenario	Geography	Jobs in Centres	Work from Home	Emp. Precinct	Social Infra.	Bulky Goods	Total#
Scenario 1	WGGA	3,964	1,493	11,882	1,285	-	**18,624**
	Creamery Road	789	196	-	195	-	**1,180**
Scenario 2	WGGA	4,192	1,493	11,882	1,285	177	**19,030**
	Creamery Road	580	196	-	195	177	**1,147**
Scenario 3	WGGA	4,092	1,493	11,882	1,285	177	**18,929**
	Creamery Road	479	196	-	195	177	**1,047**
Scenario 4	WGGA	4,297	1,493	11,882	1,285	177	**19,134**
	Creamery Road	684	196	-	195	177	**1,252**

Source: SGS Economics and Planning, 2021
Does not distinguish between FTE and PTE

8. Total centre demand

Non-retail demand (e.g. banks, insurers, Medicare, hair/massage salon or other business services) can be projected by utilising the non-retail jobs estimated within each centre (from Table 24) and then multiplying it by a jobs to floorspace ratio (the average of the ratios based on the centre configurations). When added to retail floorspace demand, the result is an estimate of total floorspace demand (See Table 30).

TABLE 30: NON-RETAIL JOBS TO FLOORSPACE ESTIMATE

Scenario		Non-Retail Jobs#	Jobs to Floorspace Ratio	Demand (sqm)
Scenario 1	CR	213	21.39	4,551
	BN	213		4,551
	Total	425		9,101
Scenario 2		434	14.60	6,340
Scenario 3		298	21.39	6,365
Scenario 4		430	18.82	8,091

Source: SGS Economics and Planning, 2021 (Numbers may not sum due to rounding)
Does not distinguish between FTE and PTE

Non-retail supply was added to non-retail demand, to determine whether there is any non-retail gap (demand greater than supply). The narrowest non-retail gap is Scenario 1 with a gap of 1,101 sqm, spread across CR and BN precincts. The widest non-retail gap is Scenario 2, with a non-retail gap of 4,090 sqm, spread across the two LACs.

TABLE 31: NON-RETAIL GAP ESTIMATE

Scenario	Non-Retail Supply	Demand (sqm)	Gap (sqm)
Scenario 1 (CR + BN)	Total Non-Retail: 8,000 sqm (2 x NAC of 4,000 sqm)	9,101	-1,101
Scenario 2	Total Non-Retail: 2,250 sqm (2 x LAC of 1,125 sqm)	6,340	-4,090
Scenario 3	Total Non-Retail: 4,000 sqm (1x NAC of 4,000 sqm)	6,365	-2,365
Scenario 4	Total Non-Retail: 5,125 (1 x NAC 4,000; 1 x LAC of 1,125)	8,091	-2,966

Source: SGS Economics and Planning, 2021
Minimum retail thresholds for LACs are not defined under the Framework Plan. As such, the estimated totals for the LAC are half the size of a LAC (7,500 / 2 = 3,750). Retail was considered to make up around 70% of the total centre size, with non-retail around 30%.

Non-retail demand was integrated with retail demand to calculate total centre demand. Combining the two helps to provide a more comprehensive understanding as to whether the individual centre sizes anticipated for Creamery Road are sufficient.

TABLE 32: TOTAL CENTRE DEMAND AND GAP, SQM

Scenario		Demand			Supply	Gap
		Retail	Non-Retail	Total	Total	Total
Scenario 1	CR	10,327	4,551	14,877	7,500	-7,377
	BN	10,327	4,551	14,877	7,500	-7,377
	Total	20,654	9,101	29,754	15,000	**-14,754**
Scenario 2		7,430	6,340	13,771	7,500	**-6,271**
Scenario 3		7,430	6,365	13,796	7,500	**-6,296**
Scenario 4		7,430	8,091	15,521	11,250	**-4,271**

Source: SGS Economics and Planning, 2021 (numbers may not sum due to rounding)

The results find that all scenarios have slightly higher demand than supply, resulting in a retail gap. Subsequent chapters will recommend whether this retail gap should remain (keep demand higher than supply deliberately) to better activate the future centre/s. Under Scenario 1, total demand equates to around 29,754 sqm, which could potentially support centres of approximately 15,000 sqm each. Under Scenario 2, there is total demand of around 13,771 sqm, which could potentially support two centres of approximately 6,885 sqm each. In other words, the strategic planning under both Scenario 1 and Scenario 2 do not result in an overprovision of floorspace. It indicates that there may be sufficient demand to consider two LACs as per the draft FUS.

The following chapters will discuss the practicalities as to whether proceeding with the two LACs as per the draft FUS is the most appropriate, given the changing nature of retail and the practicalities of two LACs in a smaller trade area. As the following chapters suggest, alternative configurations might be considered a lower risk option, therefore creating a better trading environment and ensuring development takes place.

9. Elements of well-designed centres

What are the benefits to pedestrian or design-oriented centres? This chapter aims to understand some of the key ingredients that can determine their development takes place by investigating successful centres at Laurimar Town Centre, Point Cook Town Centre and Mernda Village Town Centre. The aim is to determine whether there are any common elements that can be introduced to encourage more pedestrian-designed centres in growth areas, which are too often car-dominated. Goodman and Kroen (2019) [32] investigate this problem. Their survey-based analysis of developers uncovers key motivators, whilst also providing case studies of Laurimar Town Centre, Point Cook and Mernda Village as examples of successful centres.

Why are greenfield centres so car dominant?

Goodman and Kroen explain that centres are designed in a way that they are accessible by car, with ample parking space around the perimeter. Centres generally prefer locations on major arterial roads to attract passing trade. Because of this, they are often poorly integrated with their surrounding area and are at odds with the planning aims to be at the heart of the residential community.

They also tend to be 'enclosed' box centres, as opposed to street malls, which are often seen as being the most pedestrian friendly. This is due to perceptions that enclosed box centres are 'tried and tested'. Strip malls are seen as not as economically viable, with the authors pointing to a number of prominent shopping strips (such as Chapel Street, or Lygon Street) as increasingly 'struggling'. Other examples include the inability for smaller outlets to compete with larger 'economies of scale' outlets, shorter operating hours, proportionately higher operating costs, lower investment capital availability and less management expertise (Bennison et al 2010, cited in Goodman and Kroen 2019). If higher costs are often involved in strip centres, then the fact that greenfield residential communities are staged over a longer timeline makes it much more difficult to sustain, until very late in the life cycle.

What's the rationale behind car parking being so dominant in a centre?

Goodman and Kroen discuss studies that suggest front-facing car parks act as an 'attractor' for shoppers, with any perception of difficulty in finding parking acting as a 'repellent'. However, this argument is not widely shared. In fact, a number of studies note neutral, or even positive benefits by pushing parking to the back. It suggests that there is inconclusive evidence that underpins the necessity of front-facing car parks. Successful examples of rear-facing car parking can occur, though other factors are generally at play. That means that the viability of a rear facing car park is less of a factor in the broader implementation. A key feature behind the success of Laurimar Town Centre (See Figure 18) seems to be the large contiguous land holding of approximately 405 hectares[33]. Furthermore, a large level of incentive came from the developer themselves. The developers recognise that their approach

[32] Goodman, R and Kroen, A 2019. *'Assessment of retail model in greenfield development settings: The social and health impacts of the form of shopping centres in new suburbs.'* https://www.planning.vic.gov.au/__data/assets/pdf_file/0017/450134/Assessment-of-retail-model-in-greenfield-development-settings.pdf

[33] Ibid

was unique, with existing incentives not sufficient to embark on such a project without adjustments to government policy[34]. As centres becoming increasingly about 'experience', rather than physical 'goods' – this may add to the private incentives to push for more pedestrian oriented centres.

The developer advocates for the need for a value capture policy in greenfield locations (further expansion on this is discussed by Spiller et al 2017[35]).

FIGURE 14: LAURIMER STREET VIEW WITH CAR PARKING AT THE REAR

One example of a more successful well-designed centre is Point Cook Town Centre - a $100 million-dollar joint venture between Walker Corporation and VicUrban[36]. It is designed around having a main street theme, with low rise architecture and access to the local nature reserve. A key attribute to the success of this centre was the joint private-public partnership, where the designs and masterplan guidelines were created by VicUrban, with Walkercorp bidding to win the construction[37]. Another example is the upcoming Mernda Village development, which has prioritised car parking at the back, as part of its masterplan design guidelines[38]. In summary, elements such as (i) large land holdings, (ii) value capture policy, (iii) private-public partnerships, (iv) design guidelines (in masterplans) and (v) developer incentives are examples of components that can lead to a more pedestrian-friendly centres.

Implications for Creamery Road

In Creamery Road's case, these elements are less visibly evident. Land holdings are split across multiple owners, there is no intent for the site to be developed under a masterplan/private-public partnership arrangement and there is no broader value-capture policy in place. It does not seem to display the design-oriented preconditions discussed in the case studies. Therefore, there may need to be additional incentives that can encourage such an outcome.

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[34] Danvers R and Drapac M 2008. *'Laurimar: a town like no other'.* City Structure 08. https://apo.org.au/sites/default/files/resource-files/2005-12/apo-nid60356.pdf

[35] Spiller M et al 2017. *'Value capture through development licence fees'.* SGS Economics and Planning. https://www.sgsep.com.au/assets/main/SGS-Economics-and-Planning-Value_capture_through_development_licence_fees.pdf

[36] ANCR 2005. *Point Cook Town Centre*. http://ancr.com.au/Point_Cook_Town_Centre.pdf

[37] Ibid.

[38] City of Whittlesea 2008. *Mernda Strategy Plan Incorporated Document.* *https://www.planning.vic.gov.au/resource-library/incorporated-documents/whittlesea/wsea-C095-Mernda-Villages-Neighbourhood-Centre-Comprehensive-Development-Plan.PDF*

10. Recommendations

10.1 Summary of report

This report has analysed the relevant growth area policies relating to Creamery Road and has undertaken three separate studies: a walking catchment analysis, a retail demand analysis and an employment needs analysis. Each analysis was undertaken for four individual scenarios.

Catchment analysis of Scenario 1 finds around 93 per cent of high density within an 800 metre single trip, compared with around 37.2 per cent of medium-density and 4.8 per cent of low density. Beyond the 800 metre catchment, around 26.5 per cent of low-density residential is not within a 1,600 metre single trip. An analysis of Scenario 2/4 finds that all IDA/Mixed-Use precincts are within an 800 metre single trip of a centre, at a higher percentage than Scenario 1. All residential across the precinct is considered walkable within a 1,600 metre single trip. Scenario 3, which investigates a single NAC has the least amount of both low and IDA/mixed-use accessibility within an 800 metre single trip compared to Scenario 2/4. Despite being a single centre, all residential is within a 1,600 metre single trip if considering the influence of the Batesford North NAC.

The retail analysis was based on a trade area that encompassed Creamery Road, Batesford North, as well as a portion of Batesford South. When adding in the projected populations for these precincts, it is estimated to be home to around 22,645 residents. Under the Framework Plan, the estimated expenditure within this trade area is around $224.8 million. Under the draft FUS, provided in November 2021, it is expected to be around $213.0 million. This is primarily due to the localisation of the centres under the FUS and the reduced pulling power of the Creamery Road centres being downgraded to LACs. If focussing purely on the Creamery Road component of the trade area, the actual trade area expenditure for Creamery Road is reduced further to approximately $110.7, with 102.3 million set to be directed to the Batesford North NAC. Demand is calculated by dividing expenditure by average turnover estimates for neighbourhood centres. The result is trade area retail demand of 20,654 sqm under the Framework Plan or 7,430 sqm under the FUS.

The employment analysis undertook a bottom-up assessment of WGGA jobs expected to be created by each retail centre, home-based businesses, the employment precinct and social infrastructure. Across each of the four scenarios, there is estimated to be between 18,624 – 19,134 jobs across the WGGA. This figure compares well with the employment estimate in the Framework Plan of around 21,500 jobs and the broader DELWP objective to have 1 job per household. Creamery Road is estimated to hold between 1,047 – 1,180 jobs, depending on the final centre format, with between 479 and 789 estimated for the centres under the various configurations. Non-retail centre demand was estimated to be between 6,365 sqm and 9,101 sqm.

Total centre demand was calculated by combining the retail analysis findings with the non-retail centre-based jobs estimated in the employment analysis. Under the Framework Plan, there was approximately 29,754 sqm of centre demand, with 13,771 – 15,521 sqm under the various FUS configurations. All four display a centre gap, indicating that the projected centre sizes are not overprovisioning for the expected future population, with the potential for this undersupply to be used strategically to achieve better planning outcomes.

A high-level case study analysis was undertaken to determine some of the key themes that can encourage well-designed centres in greenfield areas. It determined that large land holdings, value capture, private-public partnerships and design guidelines for master planned communities played a key role in these centres.

Recommendation #1: The draft FUS has sufficient demand, but may conflict with policy and practicality

The retail analysis determines that there is sufficient demand to meet the supply under the FUS centre structure of approximately 6,271 sqm. This suggests that there is viability to support two LACs within Creamery Road. The benefits of two LACs are the retention of walkability to achieve the objectives of a 20-minute neighbourhood and particularly for medium and high-density areas.

Two LACs however does not seem to align well to the Greater Geelong Retail Strategy. Firstly, local centres imply small groups of shops, serving a limited catchment and daily convenience needs. Therefore, LACs are typically found dispersed and in between other NACs in the hierarchy. The fact that there are no NACs, but instead two LACs suggests a conflict. Secondly, the modelling implies demand of 13,771 sqm, but LACs can typically grow to a maximum of 5,000 sqm each (10,000 sqm total). If they were allowed to increase, it would require a changing of their definition to a NAC. Requiring this change might limit confidence in planning policy and inhibit confidence and investment. Finally, two LACs might not have sufficient size to attract interest from the private sector. The policy restrictions associated with a LAC is one element, however the risk is exacerbated by (i) the eventual development of a NAC into Batesford North (cutting demand in half) (ii) the additional bulky goods centre (reducing demand further) (iii) the shift of the centres from arterial roads (iv) forcing of the two LACs to compete for a smaller trade area.

Table 33 provides a summary of these key aspects, with a basic scoring system to highlight these key investment detractions. Scenario 1, whilst not the optimal configuration for walkability, offers a higher degree of investment incentive, as it offers higher levels of demand, access to main roads, less competition and greater status in the hierarchy. Scenario 2, shifts these incentives further towards achieving better planning outcomes, though may not achieve the requisite level of private sector investment.

TABLE 33: EXAMPLES OF PRIVATE SECTOR CONSIDERATIONS BY CONFIGURATION

Dwelling Density	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Centre Demand (Table 31)	High	Moderate	Moderate	Moderate
Access to Main Roads	High	Low	Low	Low
Low Competition	High	Low	Moderate	Low
Pulling Power (Hierarchy)	Moderate	Low	Moderate	Low
Score (H=3; M=2; L=1)	11	5	7	5

Source: SGS Economics and Planning, 2021

This comparison suggests that there are less reasons for the private sector to show interest for Scenario 2-4 than under the Scenario 1. Conditions have shallowed (less demand, more centre competition), whilst the demands from the City (shifting from arterial roads) have increased. Even if investment did occur, the *level* of investment could be reduced, given the reduced likelihood of generating a return. The result is that the centre may resemble a generic greenfield centre, as opposed to one where greater returns would justify a higher level of investment.

Therefore, in attempting to improve walkability through Scenario 2, the result might be reduced quality and amenity. If the centres are not desirable places to visit, this could impact the overall vision for Creamery Road and the WGGA. For instance, residents would have little reason to live in medium and high-density housing, if they are only in proximity of a car dominated, dull centre. Even if the two LACs did work, there is a higher risk attached, than when directing one centre with a larger amount of trading potential. Given the imperative to achieve a 20-minute neighbourhood, the risk seems too high, given it could undermine the future vision.

Recommendation #2: A single NAC in Creamery Road may be most appropriate

A better approach may be to consolidate retail demand into one NAC within Creamery Road, such as Scenario 3. There is sufficient demand, of around 13,796 sqm (and a retail gap of around 6,296 sqm). This demand amount fits within the definition of a NAC, which expects such centres to be up to 15,000 sqm.

A single centre means there is no cannibalisation of the trade area between two centres (such as the Scenario 2/4). It also means that activity is concentrated around one point (which leads to activity spillovers in the long term), rather than divided into two smaller locations. This concentration offers ideal trading conditions, which is likely to be favourable to the private sector for the NAC, but also for smaller businesses that are likely to want to trade near adjacent to such a hub of activity.

Given the favourable trading and demographic conditions, it is likely to garner more interest from the private sector. It also increases the chances that the City could achieve a more pedestrian-oriented centre, since the private sector is more likely to receive a return. This in turn increases the chances that the centre acts as a catalyst to turn the streetscape into a liveable centre, and in turn improve the probability of residents within to live in medium and high density.

Recommendation #3: The single NAC in Creamery Road is well located, with the option to shift it northward a few hundred metres

The southern NAC under the draft FUS is currently well positioned, in terms of walkability. Walkability to this NAC within an 800 metre single trip remains within the Creamery Road boundary. At a 1,600 metre single trip distance, it is able to connect with the 1,600 metre catchment of Batesford North, meaning that the entirety of Creamery Road is covered within a 1,600 metre walk to an activity centre (note: this does not solve the concern around walkability for medium and high-density dwellings, which remain out of the 800 metre single trip under this configuration). The southern NAC also puts more distance between the Creamery Road NAC and the Batesford North NAC, therefore slightly improving the trading environment.

There does seem to be scope to shift the Creamery Road NAC northward around 200-300 metres. That is because there may be some underutilised walkability to the south, which spills out beyond the Creamery Road boundary. Therefore, if one wanted to maximise the connectivity of this NAC to be within Creamery Road, it could potentially shift a few hundred metres to the north. This would also increase general walkability across the precinct, as it is slightly more centred.

Recommendation #4: Medium and high-density walkability with one NAC can be achieved by shifting the northern mixed-use and IDA precincts toward the NAC

The issue of the single NAC, as per Scenario 3 is that it is the least walkable. That is because it is only one centre, compared to the Scenario 2 and 4 which have two centres and twice the coverage. One consideration is whether some of the IDAs and mixed-Use precincts can be shifted south towards the NAC, or even radiate out gradually from the location of the NAC and along the CCC. This would enable the configuration to better align with planning objectives, though, just like other configurations, challenges remain in getting low density housing within an 800 metre single trip.

It must be noted however that the location of a single NAC still means full 1,600 metre single trip accessibility, when including the location of the Batesford North NAC (however this is yet to be confirmed and not to be completely relied upon). Therefore, whilst the low-density areas are not within an 800 metre single trip (which is difficult to achieve under any configuration), there is still full coverage, which is an improvement from Scenario 1. Figure 15 highlights a lack of coverage to the north of Creamery Road, however this falls within the Cowies Creek conservation area which is not intended for residential development.

TABLE 34: PROPORTION OF RESIDENTIAL DENSITIES WITHIN WALKING DISTANCE TO CENTRE (SCENARIO 1)

	Walking Distance from Centre (single trip)			
Dwelling Density	400m	800m	1,200m	1,600m
Low	3.4%	31.8%	69.6%	100.0%
IDA & Mixed-Use	48.2%	50.1%	81.5%	100.0%
Shifted IDA & Mixed-Use	98.9%	100.0%	100.0%	100.0%

Source: SGS Economics and Planning, 2021

FIGURE 15: SHIFTING THE IDAS TO THE SOUTHERN NAC, UNDER SCENARIO 3

Source: SGS Economics and Planning, 2021

The additional benefit of consolidation is that it also increases the residential densities that are within the direct catchment of the NAC. This would add another incentive for the private sector to invest in the NAC and increase the ability for the City to leverage better design outcomes.

Other alternatives, as will be discussed in Recommendation #7 are to disperse these precincts in a manner that can enhance walkability across the precinct. For instance, rather than concentrating the precincts towards the NAC, an alternative might be to disperse small mixed-use centres with small amounts of corner shop retail (i.e. 500 sqm). These could host a small array of retail services that might enable Creamery Road to better meet its 20-minute neighbourhood objectives.

Recommendation #5: Restrain initial supply close to 7,500 sqm (with minor increases if better design outcomes are achieved)

The total demand analysis has determined retail demand is greater than retail supply, across all scenarios. However, the question is whether this supply is appropriate, or instead should be increased to better meet this higher level of demand. Answering this must first begin with a caveat that the method to calculate demand is broad and designed for a strategic estimate. Therefore, applying specific supply controls to meet this broad demand calculation may not be optimal. However, a broad sense-check to determine appropriateness is from Essential Economics, cited in Urban Enterprise (2017), which states that a 10,000 residential population supports a neighbourhood centre of around 7,000

sqm. The Creamery Road trade area of 12,266, for a centre of 7,500 sqm is in the ballpark of this estimate[39].

Is there any justification to increase supply to meet this higher level of demand? There is an argument to keep supply lower (or even substantially lower) than demand, in order to achieve better planning outcomes. For instance, if supply is kept low, it means that there is competition for that scarcity of space, with a lower chance of vacancies. If supply is relatively concentrated within a single localised area (i.e. a single NAC), then the combination of the two is likely to lead to a higher degree of vibrancy. Applying the same principle across two centres (such as two LACs) is possible, though it would split the level of potential vibrancy, whilst introducing greater private sector risk and reduce the incentive to invest, as outlined in Recommendation 1.

Secondly, restraining initial supply provides for flexibility in the future. Oversupply in the beginning can lead to poorer planning outcomes, as one is unsure as to how the precinct will develop. Starting with a small concentration of floorspace and an undersupply means that one can more flexibly pace retail that aligns with market conditions.

Third, restraining initial supply prevents single ownership over a large amount of floorspace[40]. Unlocking future supply increases the chances and opportunities for smaller investors and developers to follow as the centre grows. Allocating all floorspace in the beginning potentially locks floorspace supply to a single developer, reducing the chances of alternative patterns of development. Therefore, it is recommended that supply is retained close to its current strategic estimates. For Scenario 3, it would mean restraining supply to the NAC estimate of around 7,500 sqm.

However, a degree of flexibility should be considered, to ensure compromise with the private sector. There may be scope to increase supply up to a certain threshold. For example, one aim could be to allow initial supply thresholds up to a point where demand remains 25 per cent higher than supply.

[39] Essential Economics 2011, cited in Urban Enterprise 2017. *Western Geelong Growth Area – Retail and Activity Centre Technical Report*, pg. 21.

[40] Preventing single ownership over a large amount of floorspace runs counter to the argument made by Goodman and Kroen (2019) in Chapter 9 who discuss the benefits of large land holdings. Therefore, it might come down to the specific developer. In the case study, the development was a masterplan, with a mix of uses and therefore beneficial to have a large land holding. If the developer is focussing on a single business/business type (i.e. supermarket chain/local centre), then preventing a single ownership may be important in ensuring future variety of use.

TABLE 35: SUPPLY THRESHOLDS (DEMAND REMAINS 25 PER CENT HIGHER THAN SUPPLY), SQM

Scenario	Supply	Demand	Ratio	Adjusted Supply	New Ratio	Per centre supply
Scenario 1	15,000	29,754	1.98	23,804	1.25	11,902 sqm
Scenario 2	7,500	13,771	1.84	11,017	1.25	5,508 sqm
Scenario 3	7,500	13,796	1.84	11,037	1.25	11,037 sqm
Scenario 4	11,250	15,521	1.38	12,417	1.25	4,139/8,278 sqm

Source: SGS Economics and Planning, 2021

For the draft FUS (Scenario 2), supply could therefore be increased from 7,500 sqm to 11,017 sqm, which equates to supply between the LACs growing from 3,750 sqm to 5,508 sqm. This represents growth of around 46 per cent. Under Scenario 3, there is scope to increase the centre from 7,500 sqm to 11,037 sqm. Under Scenario 4, there is scope to increase the centre to 12,417 sqm. Under current ratios between the NAC/LAC, this equates to the LAC growing from 3,750 sqm to 4,139 sqm and the NAC growing from 7,500 sqm to 8,278 sqm (growth of 10.4 per cent).

Estimating the amount of land required was undertaken by estimating cadastral boundaries for the centres in Table 21 and dividing it by the estimated floorspace in use. "Land take" is the development site coverage including car parking, loading areas, landscaping and other infrastructure. The result was a around 3.66:1 (for every one sqm of floorspace requires 3.66 sqm of land). Land takes were then estimated across three levels, for each configuration (i) current supply (ii) the supply threshold where demand is 25 per cent higher than supply and (iii) at total demand. The result show that Scenario 1 requires around 5.49 and 10.88 hectares of land. Scenario 2 and 3, require between 2.74 ha and 5.05 ha. Scenario 4 requires between 4.11 ha and 5.68 ha.

TABLE 36: EXPECTED LAND TAKE, AT A RATIO OF 3.66:1

		Current Supply		Supply Threshold		At Total Demand	
Scenario		Supply	Land Take (ha)	Supply	Land Take (ha)	Supply	Land Take (ha)
Scenario 1	CR	7,500	2.75	11,902	4.36	14,877	5.44
	BN	7,500	2.75	11,902	4.36	14,877	5.44
	Total	15,000	5.49	23,804	8.71	29,754	10.88
Scenario 2		7,500	2.74	11,017	4.03	13,771	5.04
Scenario 3		7,500	2.74	11,037	4.04	13,796	5.05
Scenario 4		11,250	4.11	12,417	4.54	15,521	5.68

Source: SGS Economics and Planning, 2021 (numbers may not sum due to rounding)
N.B: This excludes bulky goods floorspace, which is discussed in Recommendation #11

Recommendation #6: Leverage excess demand by negotiating a larger centre for better design outcomes (short-term)

There is around 6,296 sqm of residual demand in Creamery Road (13,796 sqm demand – 7,500 sqm supply), which is enough demand for an entirely new centre. This is demand for retail or non-retail (business services) and not demand that can be met by bulky goods. This residual demand could be leveraged for better design outcomes. For instance, increasing the initial supply (i.e. up to the threshold amount where demand is 25 per cent higher) could be given to developers meeting design outcomes.

Recommendation #7: Utilise the leftover demand to build mixed-use/high street supply in IDAs or along the CCC (medium/long-term)

Even if supply was increased to its threshold (due to better design outcomes), there is still remaining floorspace demand. This could be utilised in a way to catalyse adjacent areas through mixed-use floorspace. This would typically occur after the activity centre starts to gain traction.

Having pent-up demand means an increased likelihood that any new supply will meet its planning objectives. It also means being much more deliberate in the allocation of floorspace, rather than allocating large swathes of floorspace and hoping it gets filled. Such a strategy might prove fruitful for high street/mixed-use precincts in IDAs along the CCC. Oversupplied, ad-hoc or poorly positioned mixed-use developments scattered throughout the precinct may in fact work against the planning objective and even against the retail hierarchy. It can draw expenditure away from centres, whilst at the same time not having sufficient trade to prevent vacancies and a blighted ground floor experience.

This residual demand might be useful to hold 'in the back pocket', to give the existing centre a highly lucrative trading environment. Time is then spent to gradually introduced the mixed-use supply to then build up the high street along the CCC. The mixed-use/IDAs might be concentrated closer to the NAC to enhance the centre, or it could also be used to fill in gaps in the walking catchment, as suddenly these can also become smaller destinations as part of the 20-minute neighbourhood.

Recommendation #8: Introduce a 25 per cent non-retail threshold

One challenge of greenfield retail developments is that they can fail to transform into centres providing a broad mix of activity and amenity. A developer purchasing a site is often utilising the site to meet its immediate primary need (i.e. a supermarket), resulting in excess space, likely to be taken up by car parking. This can have the effect of 'locking out' any consideration of non-retail use (such as commercial, or community infrastructure). Over time, this limits the centre's potential by limiting non-retail floorspace. This is relevant to Creamery Road, which has non-retail demand of approximately 6,340 – 8,091 sqm under the FUS. One solution is to introduce non-retail commercial and community floorspace thresholds. This has been recently introduced in the City of Casey through Amendment C258[41]. Different thresholds are required depending on the centre hierarchy. For neighbourhood centres, the City of Casey identified a non-retail threshold of 25 per cent. A 7,500 sqm centre with this condition results in around 5,625 sqm of retail and around 1,875 sqm of non-retail. This equates to around 75.7 per cent of retail demand and 29.5 per cent of non-retail demand. Policies around car

[41] City of Casey 2021. *'C258 Amendment documents comparing changes (Casey Planning Scheme clauses)'.* City of Casey. https://www.casey.vic.gov.au/sites/default/files-public/user-files/C258%20Combined.pdf

parking caps may also be considered in the future, to prevent excess car parking space locking out other development opportunities. Non-retail uses could include commercial office or community infrastructure, such as a library or civic centre.

TABLE 37: EXAMPLE OF A 25 PER-CENT NON-RETAIL THRESHOLD FOR A 7,500 SQM NAC

Dwelling Density	Demand	25% non-retail threshold
Retail	7,430	5,625 sqm (75.7% of demand)
Non-Retail	6,365	1,875 (29.5% of demand)
Total	13,796	7,500 sqm
Proportion non-retail		25.0%
Residual non-retail	3,474 sqm	

Source: SGS Economics and Planning, 2021

Recommendation #9: Utilise social infrastructure to create activity along the Clever and Creative Corridor

Losing two centres to focus on a single NAC is likely to reduce walkability in the catchment. However, this can be offset, by leveraging the social infrastructure being invested, as well as the IDAs. Activity generated out of social infrastructure (particularly schools and parks) could enable levels of foot traffic that could partially offset the loss from another centre, or potentially outperform it in a more organic way. By focussing on one focal point of activity creates favourable trading conditions, which can then spill over into induced activity over the long-term.

One example of this being used effectively is in Oxford Street, Bulimba in Brisbane. This is a high street, far from a main arterial road (and is actually a local road culminating in a dead end). It has a single supermarket, with associated shops, with a significant amount of activity running along the high street. Directly opposite the local centre is a park, which experiences a high degree of activity from local sporting clubs, as well as children/adults participating in afternoon or weekend sport.

FIGURE 16: BULIMBA, BRISBANE – ADJACENT PARK TO LOCAL CENTRE AND CORRESPONDING HIGH STREET

Source: SGS Economics and Planning, 2021

It is anchored on one side by a primary school and public library. The school in particular generates activity before and after school for daily shopping. On the other side is medium-density housing, which adds additional density and foot traffic.

FIGURE 17: OXFORD STREET, BULIMBA USING SOCIAL INFRASTRUCTURE TO GENERATE SPILLOVER ACTIVITY

Source: SGS Economics and Planning, 2021

Note: The classification of medium density is based off building height estimates, rather than official land use boundaries

Centralising much of the social infrastructure could be an effective offset against the loss of the additional centre, whilst at the same time providing better trading conditions for the centre owners and surrounding local businesses.

Recommendation #10: Stage the NAC to be coming online around 2031, with ancillary retail/non-retail gradually from 2036 onwards

The amount of retail should ideally be aligned with the growth of Creamery Road's localised population found in the customised trade area precincts (Creamery Road North, Creamery Road South, Creamery Road South II). To estimate a potential staging timeline, the 7,500 floorspace was multiplied by the final population of Creamery Road (See Table 38). In deciding when the centre should be sequenced, it seems that the largest uptick in population for Creamery Road is expected to occur around 2031 (27.7 per cent of the total population). Therefore, one option is to have the local centre starting to come online around that time (supermarket and basic supporting retail).

TABLE 38: ESTIMATED TIMELINE FOR THE NAC

	2021	2026	2031	2036	2041	2046
Cumulative Population (CR Nth, CR Sth, CR Sth II)	267	791	3,395	6,322	10,542	12,266

Population Growth		523	2,604	2,927	4,220	1,724
Proportion of Residential Pop	2.2%	6.4%	27.7%	51.5%	85.9%	100.0%
Proportion x Total Floorspace	**163**	**483**	**2,076**	**3,866**	**6,446**	**7,500**

Source: SGS Economics and Planning, 2021

Any residual retail and non-retail demand can be used to gradually introduce mixed-use/high street retail once the main NAC is established. The aim would be to either begin in the areas adjacent to the NAC and then aim to work its way up the CCC or concentrate in targeted IDA/Mixed-Use precincts as required.

Recommendation #11: The bulky goods land provision is appropriate

The bulky goods precinct is estimated to have a land area of approximately 42,246 sqm according to the draft FUS. Given the typical typology of a bulky goods centre requires a significant amount of car parking space, a high-level estimate was to remove 50 per cent as non-utilised floorspace (further analysis might deem a more refined non-floorspace provision). The result is an estimated bulky goods floorspace demand of around 21,123 sqm. The retail and employment analysis determined that there is demand of approximately 14,969 sqm of bulky goods floorspace across the whole of WGGA. That equates to demand of approximately 70.9 per cent site capacity, with around 6,154 sqm, or 29.1 per cent remaining. This remaining land capacity may serve as a reasonable amount of 'reserve', to remain agile for any future changes to bulky goods demand.

TABLE 39: BULKY GOODS LAND PROVISION

Scenario	Remaining land calculation
Area of Bulky Goods (draft FUS)	42,246 sqm
Removing 50% (car parking, other use)	21,123 sqm
WGGA Demand	14,969 sqm
Remaining land (could be reserved for future)	**6,154 sqm**
Utilisation	**70.9%**

Source: SGS Economics and Planning, 2021

Further modelling is likely required for a more detailed demand estimate, given that the retail demand for the initial estimate of bulky goods floorspace was for Creamery Road and then extrapolated on a per capita basis for the population of the WGGA. As a high-level estimate, it suggests that there is sufficient provision to meet future demand, at its current size, with remaining floorspace available for any potential expansion.

Recommendation #12: The bulky goods location is appropriate, but may conflict with the Greater Geelong retail strategy

The location of the bulky goods, as a separated precinct, seems appropriate given its positioning adjacent to main roads, which enables visibility from passing traffic, as well as easy entry and exit access from multiple locations. Having it separated from the Southern NAC is also a reasonable method of reducing bulky goods traffic interfering with the intention of the high street.

However, as stated in the Greater Geelong Retail Strategy (p.47), restricted retail/bulky goods should be encouraged to locate in Central Geelong and sub-regional centres, in preference to specialised restricted retail precincts. The strategy also mentions that restricted retail should be discouraged elsewhere, unless it can be proven that a net community benefit will be created by the proposed development. This suggests that the bulky goods precinct might be best placed being located closer to the proposed sub-regional centre in McCanns Lane. However, its proposed location at Creamery Road may be most optimal due to it being at the crossroads of major arterials. Therefore, further analysis and a possible net community benefit test might be required to further consider the bulky goods centre in this location.

Recommendation #13: Stage the bulky goods based on the WGGA growth, not Creamery Road

Unlike the staging of the retail centres, it is potentially more appropriate to stage the bulky goods precinct to occur in line with population growth of the WGGA. The benefit is two-fold: firstly, bulky goods demand requires a large population catchment and therefore it will require a more established population across the broader area before it becomes feasible. Secondly, it means that the retail centres are able to gain a foothold, prior to any potential impacts stemming from the bulky goods precinct. The largest periods of population growth for the WGGA are set to occur around 2036, which is five years after the activity centres in Creamery Road are expected to begin construction. An initial bulky goods precinct of around 6,957 sqm could be established (i.e. a small Bunnings), which could then be expanded to a centre size of around 15,000 sqm.

The placement of these bulky goods centres will be important, as they will largely pull from a regional customer base. Because of this, proximity to strategic roads or at key intersections will be important. This 15,000 sqm of floorspace could be split and placed across the growth area as long as they remain close to major roads. A total provision of this floorspace would then be in line with the demand of around 14,969 sqm.

TABLE 40: ESTIMATED TIMELINE FOR THE BULKY GOODS CENTRE

	2021	2026	2031	2036	2041	2046
Population WGGA	437	963	4,238	10,525	18,155	22,645
Population Growth		526	3,275	6,287	7,630	4,490
Proportion of Growth to 2041	1.9%	4.3%	18.7%	46.5%	80.2%	100.0%
Proportion x Total Floorspace	**289**	**636**	**2,801**	**6,957**	**12,001**	**14,969**

Source: SGS Economics and Planning, 2021

Recommendation #14: Create a 'centre masterplan' for the NAC

As discussed in Chapter 9, one key factor that has determined the outcome of the Laurimar Town Centre was its designation as a 'Comprehensive Development Zone' or 'CDZ' (Schedule 3 to the CDZ in the Whittlesea Planning Scheme). This format allows the City to define the layout, purpose, permissible uses and design guidelines for a specific tract of land. The result is that development outcomes can be tailored to meet strategic objectives. Figure 18 provides an illustration to how a CDZ was applied to Laurimar. For instance, high street retail, commercial, education and community uses are all clustered together, with car parking to the rear of the supermarket and a large amount of surrounding social infrastructure.

FIGURE 18: LAURIMAR LAND USE AND ZONING MAP

Source: SGS Economics and Planning; VicPlan, 2021

The benefits of the CDZ approach are that it enables the City to have greater control. This holds relevance for the WGGA, which requires a strong commitment to the 20-minute neighbourhood. A successful activity centre is therefore a key component to driving this vision. A clearly outlined precinct plan could benefit private developers who would recognise that they are operating within a narrower development band.

Applying a CDZ however may be a more labour-intensive process for the City, who would have responsibility for creating the masterplan and corresponding amendments to the planning scheme. It places greater design responsibilities upon the City, rather than to the developer. Therefore, it seems that such an approach might only apply in key precincts, rather than to every activity centre. For instance, applying it to Creamery Road's two LAC's may be too resource-intensive and too constraining to private developers, who may be already hesitant by the limits incurred by a local centre. Focussing

on one centre (such as a single NAC) means lower local government resources, whilst developers still benefit from the broader conditions arising from a single centre. Another trade-off is that too much control on the City's side could further separate the policy from the economic realities of what can be achieved. To minimise this risk, it might be beneficial to liaise with the private sector around the formation of the CDZ to ensure greater levels of alignment. Were the City not wishing to undertake the process of a CDZ, the designation of centres under an 'Activity Centre Zone' (ACZ). An ACZ provides explicit planning controls specific to activity centres, though without the need to take creative control. This could allow local government strategic direction, whilst handing over a higher level of development responsibility to the private sector.

Recommendation #15: The Batesford North precinct location and train station is in a better location than under the original Framework Plan

The original Framework Plan had a proposed future train station to the north of Creamery Road. The draft FUS has since placed this potential station to the north of Batesford North and moved the northern NAC further into the centre of Batesford North, rather than along Geelong-Ballan Road. An initial observation of this new location suggests that it is in a better position than under the original Framework Plan.

The proposed station and nearby NAC are somewhat unusual. This is a result of the configuration of the WGGA. A typical transit-oriented development would see the NAC entirely integrated in and around the station. From a transport side, higher densities mean less reliance on private vehicles and greater walkability. From a retail side, higher densities mean a greater turnover per sqm.

However, in the case of the WGGA, this is not possible, given the train line is on the boundary (with residential activity only occurring to the south). In other words, retail spending can only be coming from the south, with no spending coming from the north, due to it being agricultural land. This complicates the positioning of the NAC and therefore means that it cannot be located too closely to the train station, without cutting off its trade area. With the NAC shifted south, it is better able to capture the surrounding population and increase the chances of it being viable, whilst still being within walking catchment of the potential train station.

When this centre and train station was originally designed for Creamery Road, this NAC/train station relationship was complicated further, due to being within range of competition from the southern NAC. This southern NAC is likely to have received the bulk of trade due to its position in the centre of the WGGA and being next to two arterial roads. The northern NAC was therefore in a more precarious position and unlikely to have been as successful. Therefore, the shifting of the station and subsequent NAC to Batesford North is likely to do better, as it is not in as much conflict with a nearby centre.

TABLE 41: TOTAL CENTRE DEMAND, BATESFORD NORTH

	Demand			Supply	Gap
Scenario	Retail	Non-Retail	Total	Total	Total
Batesford North (1 x NAC)	6,902	5,712	12,614	7,500	-5,114

Source: SGS Economics and Planning, 2021

The modelling highlights that the centre in Batesford North is viable. It is estimated that Batesford North will have around 12,614 sqm of demand, of which 6,902 sqm will be retail and around 5,712 sqm of non-retail. With an estimated supply of 7,500 sqm, this results in a retail gap of around 5,114 sqm, indicating there is sufficient demand for the proposed supply. If supply were increased, according to the same demand: supply ratio of 1.25 (i.e. demand should be 25 per cent higher than supply), then the centre could potentially rise to around 10,091 sqm. Alternatively, this demand could be met gradually over time through mixed-use IDAs, similar to Creamery Road.

Recommendation #16: Minimise barriers to growth

Any long-term strategic plan is likely to encounter barriers to future viability. The best chance is to identify and attempt to minimise as much as possible. Identified barriers to growth include:

- Mismatch in objectives between public and private sector: State government objectives are to achieve a 20-minute (round trip) neighbourhood that creates a walkable environment with less reliance of a car. The reality from the private sector is that this might not be achievable given a range of factors relating to the proposed population, size and location of a new greenfield centre. The result could be that activity centres do not get realised or underperform. The consequences of this have far-reaching implications for the entire precinct. The best chance of finding alignment is to maximise the opportunities for the private sector that can still enable the City to meet local and state government objectives. A single NAC may strike the balance.
- Centres are not activated: If the proposed NAC remains car-dominated and inactive, then it could impact the vision of Creamery Road. Residents will be less inclined to live in medium or high-density if there is nothing of interest nearby. The result is that the precinct might revert to a traditional greenfield, low-density suburb. Therefore, ensuring centre viability is a key priority. This can be maximised by ensuring the centre appeals to the private sector as much as possible, with as much incentive as possible to ensure that it aligns with the City's goals.
- There is an undersupply of floorspace: The analysis in this report has tended to underestimate floorspace. This underprovision could be a barrier to growth, as there may not be sufficient supply. Strategically though, an undersupply may be preferable. An undersupply means greater concentration and vibrancy, confidence amongst traders, competition for floorspace and growing investor appetite to build more floorspace. The City also has greater leverage, whilst wielding the ability to be more agile to any future conditions. An oversupply of floorspace may provide higher growth and diversity in the short-term, but it risks locking in a centre's future design, which may not appropriately meet objectives in the long-term. The solution is for the City to consistently monitor the levels of supply (checking vacancy rates, rental prices/yields, speaking with businesses/private sector), to ensure that they are agile enough to introduce new supply as required and/or encourage surplus demand to be met by IDAs along the CCC
- Macroeconomic shifts/downturn in the economy: Reduced economic activity could reduce spending in activity centres. The growing shift to online might also accelerate, resulting in reduced floorspace demand. Since the future is increasingly uncertain, it is reasonable to have an undersupply to enable future flexibility. Similarly, centres that focus more on experiences rather than goods are more diversified and less vulnerable to economic conditions.
- Traffic: One potential downside to a single centre, where supply is less than demand is traffic. This needs to be considered, as a large number of cars would likely be descending into one location. It is an important consideration, so as to not detract from the amenity that is required for the precinct to succeed.

11. Appendix

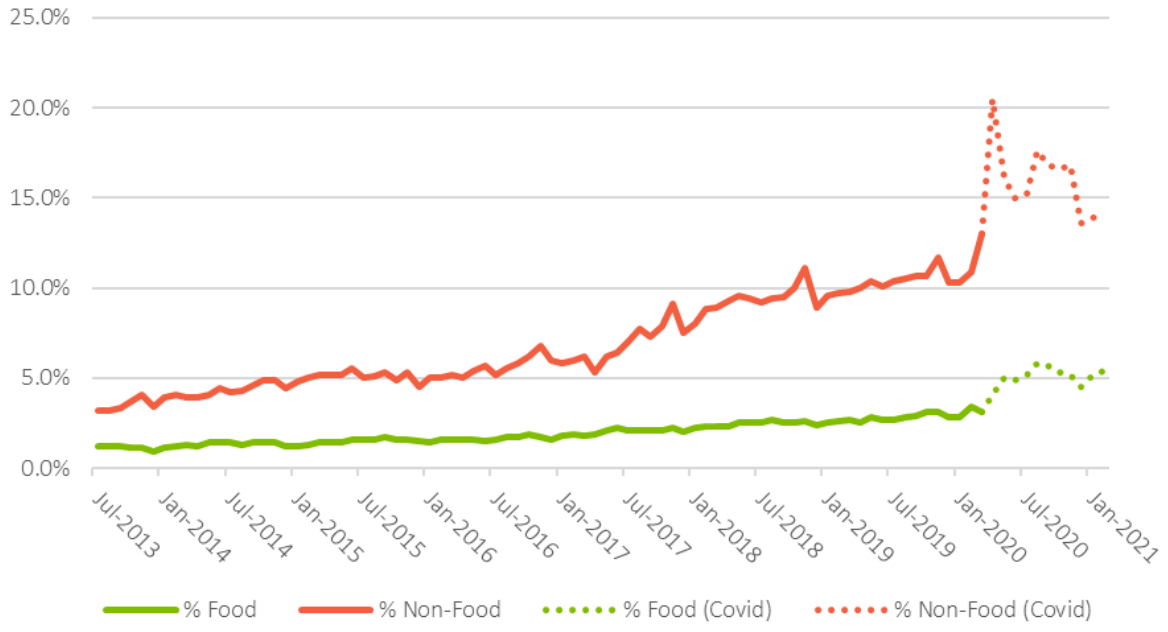
There are broader macroeconomic shifts that could favour a natural shift towards pedestrian-oriented centres. The rise of online retail means that centres are needing to focus on amenity. The work from home shift and regional population movements are also placing greater demand for neighbourhood centres. It seems reasonable to expect that developers may in fact prioritise a more pedestrian-oriented centre, so long as there are no significant inhibitors to their investment decision making.

Online retail

Online retailing is increasingly impacting on Australia's retail sector, with market share growing by around 0.75% per year (See Figure 19). The impact of Covid-19 has resulted in a significant rise in the market share that is now heading online (see dotted lines). The latest data from February 2021, suggests that non-retail market share has returned to its pre-covid trend. However there seems to have been an ongoing shift in market share for food that has since gone online. Essentially, the steady march of online retail consumption continues. Whilst non-food commodities are experiencing much higher competition, it has returned to its pre-covid trend. Whilst food-based commodities are less vulnerable, there does seem to have been a small structural shift that has occurred since Covid-19.

These structural changes offer challenges, but also opportunities for planners looking to utilise retail to activate their centres and shape their community.

FIGURE 19: GROWTH OF ONLINE RETAIL, AUSTRALIA



Source: ABS 8501.0 Retail Trade - Table 23 | Percentage change of total Australian retail

To ensure centres are given their best chance to be commercially viable, they need to ensure they have a full trade area. This automatically positions the northern trade centre at a disadvantage. The result of

this is that this northern centre will likely need to be more 'convenience-based', with less of a focus on amenity and design in order to be viable. It may also need to be smaller to ensure that there is less chance of vacancies, which can lead to 'blighting' and a cascading effect of a degraded centre.

Opportunities lie in the realisation that centres must be able to offer an experience that can't be provided through online retailing. In other words, there is an opportunity to use these structural shifts to achieve better design outcomes, such as rear facing car parks. Increasingly centres are recognising the need to prioritise amenity. Therefore, a centre that offers amenity and discourages poor design outcomes has the potential to create a more defensible retail asset amidst this growing competition from online.

Working from home and suburban renewal

The employment analysis identified approximately 685 home-based businesses within Creamery Road by 2046. Yet there are likely to be additional workers at home, as a result of Covid-19. The result means a structural shift in working and the building blocks of suburban renewal. Recent ABS data indicates that the proportion of Australian workers preferring to work from home has doubled over the past 12 months from 24 to 41 per cent[42], with almost 47 per cent wanting the current work from home arrangements to remain the same, 11 per cent wanting less working from home and 8 per cent wanting more working from home[43]. This, along with generous federal government construction support packages has supported suburban renewal.

The result is that growth areas have tended to fare better than other areas on average (See Figure 20). Areas such as Armstrong Creek have experienced internal migration, compared to the City of Greater Geelong and Victoria.

[42] Australian Bureau of Statistics 2021. 'A year of COVID-19 and Australians work from home more. https://www.abs.gov.au/media-centre/media-releases/year-covid-19-and-australians-work-home-more
[43] Ibid

FIGURE 20: COMPONENTS OF POPULATION CHANGE

Component	Geography	2017	2018	2019	2020	19-20	19-20 (%)
Natural Increase	Armstrong Creek	198	239	328	331	3	0.9%
	COGG	977	932	996	899	-97	-9.7%
	Victoria	38,998	39,129	37,187	36,212	-975	-2.6%
Net Internal	Armstrong Creek	2,427	2,686	2,572	2,961	389	15.1%
	COGG	3,420	3,718	3,735	3,672	-63	-1.7%
	Victoria	18,193	14,316	12,198	2,243	-9,955	-81.6%
Net Overseas	Armstrong Creek	365	327	325	235	-90	-27.7%
	COGG	1,899	1,909	1,923	1,418	-505	-26.3%
	Victoria	91,243	86,968	85,476	61,335	-24,141	-28.2%
ERP Growth	Armstrong Creek	2,990	3,252	3,225	3,527	302	9.4%
	COGG	6,296	6,559	6,654	5,989	-665	-10.0%
	Victoria	148,434	140,413	134,861	99,790	-35,071	-26.0%

Source: ABS - Regional Population, 2018-19 financial year, 2021

This trend suggests that suburban growth areas could be a major beneficiary, as the distance to work is now muted due to the ability to work from home. It means the potential for higher levels of self-containment, as the travel catchments for many residents are reduced to the reduced need to transit to and from work each day. It also means a greater potential for centre diversification (i.e. co-working spaces), which leads to further centre diversification (alongside additional social infrastructure), increasing the incentive to make a more pedestrian-oriented centre. The City can leverage this structural shift as a way to advocate for better design outcomes, most notably for the southern NAC.

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