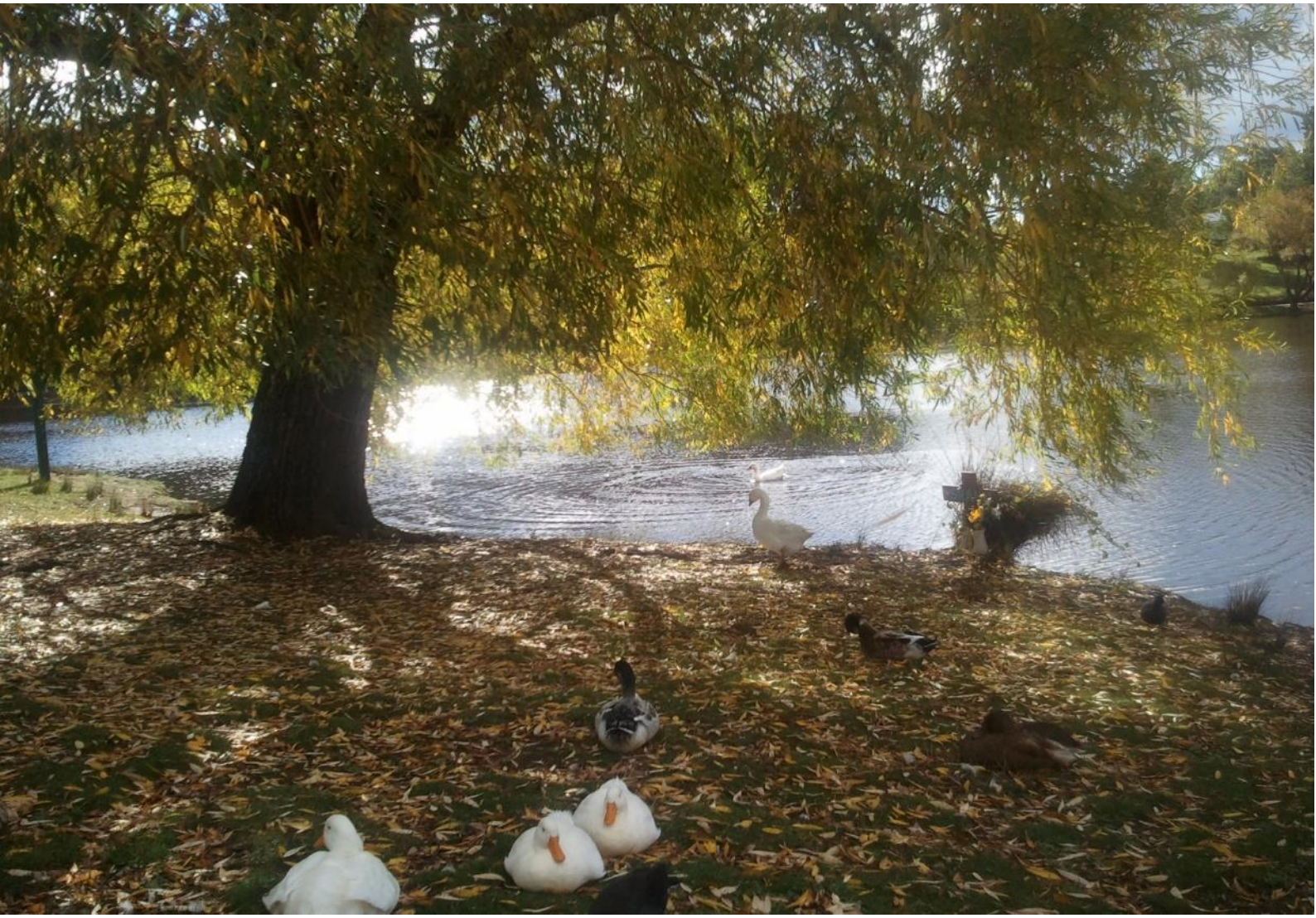

Land Capacity and Demand Assessment – 2023 Update

Hepburn Shire Council

11 | 11 | 2023

SGS Economics & Planning

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Contents

Executive summary

Hepburn Shire Council (the Council) is preparing the Hepburn Settlement Strategy (HSS) which will include structure plans for five towns in Hepburn Shire (the Shire): Clunes, Creswick, Daylesford-Hepburn, Glenlyon, and Trentham.

SGS Economics and Planning was commissioned to conduct a Land Capacity and Demand Assessment (LCDA) to understand:

- the current capacity for Residential, Commercial, and Industrial zoned land in each of the structure plan towns; and
- the current demand and recommended locations for Residential, Commercial, and Industrial zoned land in each of the structure plan towns.

Although it broadly considers the role of housing in the rest of Hepburn Shire, this study is primarily focused on housing delivery in the five towns.

Profiling for the five towns was initially completed in 2021 using 2016 Census data and has been kept in a separate document. This document shows the results of the land capacity analysis and demand modelling based on 2021 Census data.

Demand and capacity, for the purposes of this report, was assessed using different boundaries to what exists in the Hepburn Planning Scheme. They are deemed fit for purpose as part of this assessment.

Policy considerations

The Department of Transport and Planning (DTP) Planning Practice Note 90 (PPN90)[1], published most recently in July 2023, directs municipalities in Victoria to plan for housing. The document identifies that planning for urban growth should consider:

- Opportunities for consolidation, redevelopment, and intensification of existing urban areas.
- Neighbourhood character and landscape considerations.
- The limits of land capability and natural hazards, and environmental quality.
- Service limitations and the costs of providing infrastructure.

In addition, it stipulates that municipalities should:

> Plan to accommodate projected population growth over at least a 15-year period and provide clear direction on locations where growth should occur. Residential land capacity will be considered on a municipal basis, rather than a town-by-town basis.

[1] https://www.planning.vic.gov.au/__data/assets/pdf_file/0032/445388/PPN90-Planning-for-housing.pdf

As state government requires a consideration at a municipal level, this report addresses growth across the Shire and how this might be met across the five towns. The recommendations will balance these two considerations.

An earlier analysis of key policy documents, demographic profiling and review of market trends suggests a set of considerations to inform the capacity and demand recommendations for the five towns as detailed in Table A below.

TABLE A: IMPLICATIONS FOR THIS STUDY – FINDINGS FROM LAND CAPACITY AND DEMAND ASSESSMENT – PROFILING (2021)

Consideration	Conclusion	Implication for this study
Housing	Opportunities for more housing are required to meet future needs. Different types of housing, including a mix of types, tenures and locations should be provided.	Demand projections for the Shire should be compared to both the capacity to deliver more housing implied by planning controls and the likely realisable development. A variety of housing should be provided in both greenfield and infill areas to meet the diverse needs of future households.
COVID-19	The pandemic led to a surge of growth in attractive regional areas. Hepburn Shire's commutability and appeal to tourists and second homeowners has led to increased demand for properties.	Recent permissions data for dwellings will be considered in the capacity analysis to capture recent growth and count second homes.
Role of Towns	Two distinct housing markets need to be considered. In the east, Daylesford-Hepburn Springs, Trentham, and Glenlyon offer amenity and lifestyle change, as well as proximity to Melbourne, along with a strong draw for tourism. In the west Creswick and Clunes are less linked to Melbourne and more to Ballarat and its labour market. These distinctions are discernible from strategic documents, demographic mix, commuting patterns, and housing market dynamics.	While it is important to maintain sufficient capacity at a municipal level, housing in Clunes and Creswick will not necessarily meet the sub-market demand for the lifestyle and amenities in evidence in the eastern portion of the Shire. An east-west distinction in the demand and capacity analysis is therefore considered.

Source: SGS Economics and Planning (2022-23)

For this study, a 20-year perspective to the dwelling demand and capacity analysis has been utilised.

The Method

TABLE B: METHOD OVERVIEW

Consideration	Demand method	Capacity method	Gap assessment method
Housing (number of dwellings)	Past dwelling change using the Census (the average rate over the past ten years) is projected forward for the next 20 years. In the "policy-on" scenario, future housing growth is 'directed' to the different towns using adjusted shares that incorporate planning aspirations.	SGS's Housing Capacity Model (HCM) was used as a starting point to understand the potential additional dwellings from vacant zoned lots. Given current zoning controls, there is potential for some lots to be subdivided. Subdivision was capped based on an analysis of past development trends to reflect potential realisation rates.	Demand over a 20-year period was compared to net capacity, or the number of additional dwellings that could be provided in the towns. "Years supply" is the number of years, or average demand, remaining to consume the available capacity.
Commercial and Industrial Floorspace (sqm)	Total employment change by industry over the past ten years is projected forward; then disaggregated by township according to SGS small area land use projections (SALUP) and then converted to floorspace using floor area to job ratios.	SGS used Geoscape and publicly available spatial data to understand existing floorspace on and vacant commercial and industrially zoned lots across the towns. The floorspace potential on the vacant lots plus an allowance for intensification of commercial floorspace was calculated.	Demand over a 20-year period was compared to capacity. "Years supply" is the number of years, or average demand, remaining to consume the available capacity.

Source: SGS Economics and Planning (2022-23)

Dwelling demand and capacity summary

Table C summarises the demand, adjusted or assumed capacity and gap for housing in the Hepburn Shire, and also disaggregates this between the towns. Overall, in the townships, there is a surplus in capacity in 2041, though Creswick and Trentham (and Glenlyon) fall short of the projected 2041 demand. The total shortfall across the entire shire has been shown for reference.

TABLE C: DEMAND, CAPACITY AND GAP ANALYSIS – DWELLINGS IN HEPBURN SHIRE

Location	Realisable Capacity	Demand 2021-41	Gap	Years Capacity past 2041
Clunes	420	410 (15%)	10	0.7
Creswick	330	550 (20%)	-220	-13.4
Daylesford-Hepburn	1,370	680 (25%)	690	10.0
Glenlyon	40	50 (2%)	-10	-3.2
Trentham	120	270 (10%)	-150	-25.4
Townships	2,280	1,960 (72%)	320	2.8
Non-townships	-	760 (36%)	-760	-

Location	Realisable Capacity	Demand 2021-41	Gap	Years Capacity past 2041
Eastern Shire	1,530	1,010 (39%)	520	10.4
Western Shire	750	950 (35%)	-200	-4.3
Non-townships	-	760 (36%)	-760	-
Hepburn Shire	**2,280**	**2,720 (100%)**	**-440**	-3.2

Source: SGS Economics and Planning (2022-23)

Commercial and industrial demand and capacity summary

Tables D and E below summarise the outcome of the commercial and industrial floorspace demand and capacity analysis, and the 'gap' for each for the townships across the Shire, as well as the eastern and western portions. There is an overall shortfall of both commercial and industrial floorspace capacity compared to projected future demand across Hepburn Shire. A share of the projected future demand will be accommodated in some non-commercial zoned areas or precincts (for example, some of the floorspace will be in existing school or hospital precincts) or can be met by more efficient utilisation when sites are redeveloped, leaving a lesser overall shortfall in capacity to 2041.

There are local capacity shortfalls and surpluses, most notably, an apparent shortfall in Daylesford-Hepburn Springs, projected to attract more than half of the Shire's total commercial floorspace demand, with only about 10 years' capacity available, even through intensification. In the western portion of the Shire, there appears to be sufficient capacity, though Creswick itself has a shortfall and Clunes a surplus. Additional opportunities for modest commercial and retail floorspace in Creswick should be considered in future structure planning.

There is an overall shortfall of industrial land in Hepburn Shire, with most townships not containing any capacity at all. Capacity in the east is largely concentrated in Trentham, with only a few years of supply left in Daylesford-Hepburn Springs, whereas there is no capacity at all in the LGA's west. While Trentham has the majority of vacant industrial land, it is expected to have reduced demand over the next 20 years (and constraints to developing the existing industrial zoned land may exist), while towns with no capacity are expected to have rising demand.

TABLE D: COMMERCIAL DEMAND AND CAPACITY BY SUB-AREA (SQM), 2021-2041

Township	Commercial demand	Commercial capacity	Gap	Years capacity past 2041	Implied land requirement (sqm)
Clunes	700	5,200	4,500	128.6	NA
Creswick	16,800	14,300	-2,500	-3.0	2,500
Trentham	3,900	5,300	1,400	7.2	NA
Glenlyon	2,400	0	-2,400	-20.0	2,400
Daylesford-Hepburn Springs	33,300	18,100	-15,200	-9.1	15,200
Eastern Shire	39,600	23,400	-16,200	-8.2	16,200
Western Shire	17,500	19,500	2,000	2.3	NA
Hepburn Shire	**57,100**	**42,900**	**-14,200**	**-5.0**	**14,200**

Source: SGS Economics & Planning

TABLE E: INDUSTRIAL DEMAND AND CAPACITY BY SUB-AREA (SQM), 2021-2041

Sub-area	Industrial demand	Industrial capacity	Gap	Years capacity past 2041	Implied land requirement (sqm)
Clunes	6,400	0	-6,400	-20.0	21,333
Creswick	0	0	0	-	-
Trentham	0	7,200	7,200	-	NA
Glenlyon*	6,400	0	-6,400	-20.0	21,333
Daylesford-Hepburn Springs	12,000	1,400	-10,600	-17.7	35,333
Eastern Shire	18,400	8,600	-9,800	-10.7	32,667
Western Shire	6,400	0	-6,400	-20.0	21,333
Hepburn Shire	**24,800**	**8,600**	**-16,200**	**-13.1**	**54,000**

Source: SGS Economics & Planning

The results of the housing and commercial and industrial employment demand, capacity and gap analysis are presented in Table F below. They have been presented using a 'traffic light' assessment to draw conclusions (where green suggests sufficient capacity, amber suggesting a potential shortfall by 2041 and red suggesting insufficient capacity in 2041 with earlier attention required). Given the unique positioning of each town, the colour assessment does not exactly correspond to years capacity. Rather, it is meant to signal future policy interventions required.

TABLE F: CAPACITY AND DEMAND CONCLUSIONS – FIVE TOWNSHIPS

Township	Use	Conclusion
Clunes	Residential	Sufficient capacity beyond 2041 to meet growth objectives, however only with a small surplus. Further opportunities should be investigated, given there are shortfalls elsewhere in the Shire and constraints with infrastructure.
	Commercial	Sufficient capacity beyond 2041, modest demand forecast.
	Industrial	No capacity, modest growth – a small industrial area of approx. 2-3ha required.
Creswick	Residential	Capacity shortfall by 2041, investigate future opportunities.
	Commercial	Capacity shortfall by 2041; demand could be met by intensification and redevelopment but additional opportunities for modest commercial / retail floorspace in town centre should be considered in future structure planning.
	Industrial	No capacity, but no demand forecast over the next 20 years. Nevertheless, provision could be made for a small industrial area (of say 1-2 ha) to facilitate local activity not anticipated by the forecasts.
Daylesford-Hepburn	Residential	There will continue to be strong demand for dwellings to 2041, including some overflow development from constrained towns in eastern settlements and towns under a "policy-on" scenario.

Township	Use	Conclusion
		Investigate opportunities for infill and medium-long term development in Daylesford (noting limits to further growth in Hepburn Springs).
	Commercial	Capacity shortfall in next 10 years. Demand could be met through redevelopment; additional opportunities for modest commercial / retail floorspace expansion in town centre should be considered in future planning.
	Industrial	Shortfall in short term (within say 5 years) due to limited vacant capacity – investigate opportunities for expansion of 5-6 ha including absorbing Glenlyon demand – subject to understanding developability of existing Trentham area.
Glenlyon	Residential	No additional capacity beyond 2041, limit future growth.
	Commercial	No capacity, while commercial demand is expected to marginally increase to 2041, so slight shortfall. Likely to be accommodated without rezoning.
	Industrial	No capacity, increase in demand for industrial land expected to 2041; but could be met in Trentham and/or Daylesford.
Trentham	Residential	Capacity shortfall by 2041, investigate future opportunities that consider existing services and infrastructure. For example, consider orderly development and intensification in the south west fringe area.
	Commercial	Sufficient capacity to 2041 and beyond.
	Industrial	Large surplus of vacant industrial land, with most of the shire's industrial capacity located here. Reduced demand is expected. Surplus may accommodate eastern area demand not met elsewhere (depending on developability of existing zoned area which should be).

Source: SGS Economics and Planning (2022-23)

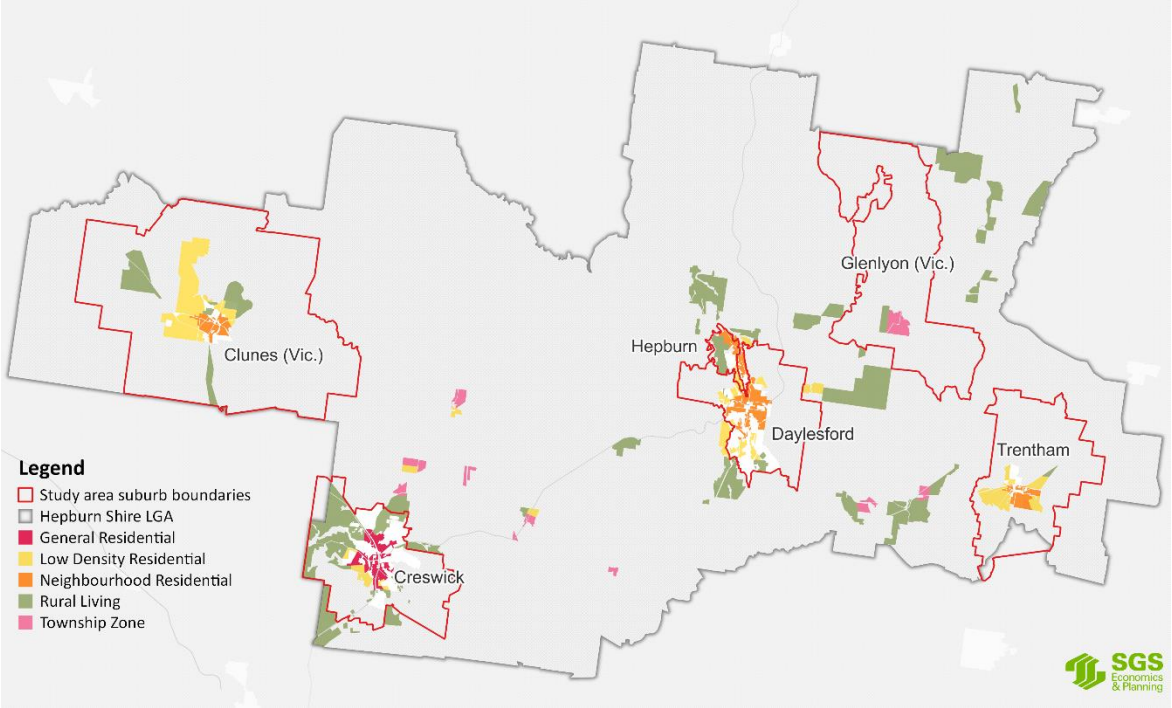
1. Introduction

1.1 The study

Hepburn Shire Council (the Council) is preparing the Hepburn Settlement Strategy (HSS) which will include structure plans for five towns in Hepburn Shire (the Shire).

SGS Economics & Planning was commissioned to conduct a Land Capacity and Demand Assessment (LDCA) to understand the current capacity of residential, commercial, and industrial zoned land in each of the structure plan towns, namely Clunes, Creswick, Daylesford-Hepburn, Glenlyon and Trentham, and any shortfalls or surpluses given future demand. Figure 1 shows the relevant zoned areas in and around each township, overlaid with the ABS 'suburb and locality' statistical boundaries that align with each township.

FIGURE 1: HEPBURN SHIRE TOWNSHIPS AND RESIDENTIAL ZONING (AND ABS 2016/21 TOWNSHIP STATISTICAL BOUNDARIES)



Source: SGS Economics & Planning

This primary focus is on a sustainable future pipeline of capacity for housing and employment development in the five towns, and appropriately zoned land in and adjacent to them.

In the recent past, significant development has occurred outside the townships of Hepburn Shire, in Farming Zone land. In fact, non-township areas experienced more dwelling growth in the last ten years than any of the individual townships. Anecdotally, many tree-changing professionals and retirees from the city have moved to the Shire or have bought or developed houses as holiday homes. Where Farming Zone land is subdivided for holiday homes or 'hobby farms' it may reduce the productive yield of Hepburn Shire's agricultural sector, by fragmenting arable land.

Incoming, sometimes wealthier new occupants and residents, and associated development has disrupted the Shire's housing market and significantly reduced affordable housing opportunities for a wider spread of residents and households.

Ensuring there is sufficient land to accommodate new housing, and industrial and commercial development, is a key strategic planning function of the Council. This report provides the underlying evidence base for a town by town assessment of future land requirements across the different uses.

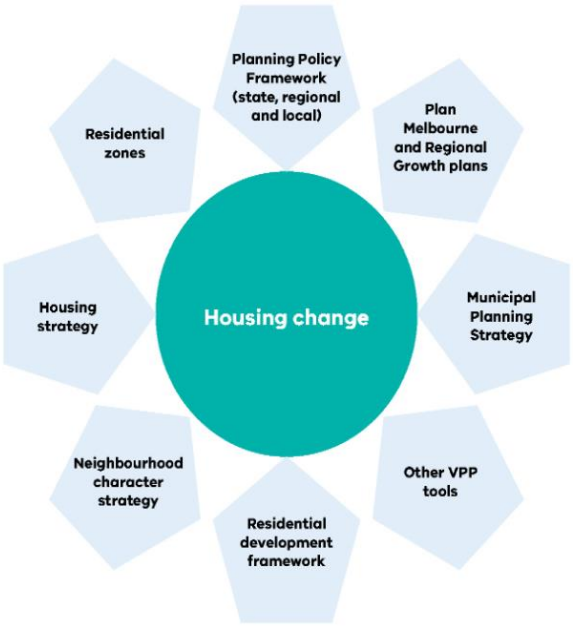
1.2 Planning Practice Note 90

The Department of Transport and Planning (DTP) Planning Practice Note 90 (PPN90)[2], published most recently in July 2023, directs municipalities in Victoria to plan for housing. The document identifies that planning for urban growth should consider:

- Opportunities for consolidation, redevelopment, and intensification of existing urban areas.
- Neighbourhood character and landscape considerations.
- The limits of land capability and natural hazards, and environmental quality.
- Service limitations and the costs of providing infrastructure.

PPN90 sets out the following, which should be considered for housing change:

FIGURE 2: PLANNING FOR HOUSING CHANGE



Source: DTP, Planning Practice Note 90: Planning for Housing (2023)

In addition, it stipulates that municipalities should:

> Plan to accommodate projected population growth over at least a 15-year period and provide clear direction on locations where growth should occur. Residential land capacity will be considered on a municipal basis, rather than a town-by-town basis.

[2] https://www.planning.vic.gov.au/__data/assets/pdf_file/0032/445388/PPN90-Planning-for-housing.pdf

This study assesses whether the capacity for housing is sufficient to accommodate for demand that arises from population growth over a 20-year period across the entire Shire. It also disaggregates this capacity calculation to a township level, to capture the nuance of the unique housing markets that exist within the Shire. A similar horizon and approach has been used for the employment floorspace analysis.

1.3 Study structure

Profiling for the five towns was initially completed in 2021 using 2016 Census data and has been kept in a separate document. This document shows the results of the land capacity analysis and demand modelling based on 2021 Census data.

Demand and capacity, for the purposes of this report, was assessed using different boundaries to what exists in the Hepburn Planning Scheme. They are deemed fit for purpose as part of this assessment.

The structure of the report is as follows:

- Housing demand analysis
- Housing capacity analysis
- Employment floorspace demand and capacity
- Key findings.

Appendix A includes detailed town by town demand and capacity assessments. Appendix B describes SGS's capacity analysis and modelling in more detail.

2. Housing demand analysis

2.1 Introduction

The analysis in this section draws upon a range of datasets, including the Census, and observed trends in population age, family, and household types. Building upon these inputs and demographic factors, potential population futures are identified and SGS's Housing Demand Model provides a shire-wide estimate for the number of additional dwellings that will be required by 2041, which has been disaggregated to a township level in our analysis.

The key aims of this section are to understand the following questions:

- How have population and dwellings grown historically?
- Where has dwelling growth occurred in different parts of the Shire?
- In planning for the future, how much and where should future development occur?

2.2 How have population and dwellings grown historically?

The population of Hepburn Shire grew from 14,400 in 2011[3] to 16,600 in 2021[4]. The average annual growth rate (AAGR) over the period (2011-21) was 1.45% and over the five years 2016 to 2021 was 1.34%.

TABLE 1: HISTORIC POPULATION GROWTH, HEPBURN SHIRE, 2011 TO 2021

Town	2011	2016	2021	Change 2011-16	Change 2016-21	AAGR 2011-21	AAGR 2016-21
Hepburn Shire	14,370	15,530	16,600	1,160	1,070	1.45%	1.34%

Source: ABS Census (2011, 2016, 2021),figures have been rounded to the nearest 0

The number of private dwellings increased from 8,050 in 2011 to 9,490 in 2021. The AAGR from 2011-21 was 1.66% compared to 1.81% between 2016-21. The rate of growth of dwellings increased at a significantly higher rate than the population, and accelerated in the five years 2016 to 2021.

TABLE 2: HISTORIC DWELLING GROWTH, HEPBURN SHIRE, 2011 TO 2021

Town	2011	2016	2021	Change 2011-16	Change 2016-21	AAGR 2011-21	AAGR 2016-21
Hepburn Shire	8,050	8,670	9,480	620	810	1.66%	1.81%

Source: ABS Census (2011, 2016, 2021),figures have been rounded to the nearest 10

This points to both declining household sizes (ageing and downsizing) contributing to household formation rates greater than population growth rates, as well as the development of second, or holiday homes, which are sometimes vacant.

[3] https://www.abs.gov.au/census/find-census-data/quickstats/2011/LGA22910
[4] https://abs.gov.au/census/find-census-data/quickstats/2021/LGA22910

Only 77% of dwellings in Hepburn Shire were occupied on Census night 2021, compared to 89% across Victoria. Given that the Shire has high rates of second home ownership and a prevalence in short-term rental accommodation, it is important to consider overall dwelling growth over population.

2.3 Where has dwelling growth occurred in different parts of the Shire?

To understand where growth has occurred at a smaller geography than an LGA, the ABS statistical category of Suburbs and Localities[5] was used and these are assumed to be a best-fit approximation of township boundaries for modelling purposes. The ABS statistical boundaries of most of the townships in the Shire were altered between 2011 and 2016. The boundaries remained the same between 2016 and 2021 (see Figure 1) so the observed dwelling change in this five year period can be used to approximate recent trends and shares between locations, to inform future demand assumptions.

Table 3 shows the township and non-township dwelling growth from 2016 to 2021. Township dwelling growth accounted for 67% of total Shire growth over the period, with Daylesford-Hepburn Springs receiving the highest share (21.9%) – but non-township growth was higher (at 33.2%) than any single township in terms of the share of growth attributed to the different locations.

TABLE 3: HISTORIC DWELLING GROWTH BETWEEN ALL TOWNS, 2016 TO 2021

Town	2016	2021	Change 2016-21	AAGR 2016-21	Share of growth 2016-21
Clunes	900	1,030	120	2.6%	15.0%
Creswick	1,460	1,570	110	1.4%	13.2%
Daylesford-Hepburn Springs	2,450	2,630	180	1.4%	21.9%
Glenlyon	250	260	10	0.1%	0.1%
Trentham	630	760	130	4.0%	16.5%
Non-townships	2,970	3,240	270	1.8%	33.2%
Hepburn Shire	8,670	9,480	810	1.8%	100.0%

Source: ABS Census Place of Residence (, 2016, 2021),figures have been rounded to the nearest 10

2.4 In planning for the future, how much and where should future development occur?

In recent years, dwelling growth has outpaced what was predicted in top-down forecasts from the State government.

How much?

To determine how many dwellings should be planned for by 2041, two overall dwelling forecast scenarios were developed for this analysis:

- State-based projections, or Victoria in Future 2019[6] (VIF19) projections, adjusted to account for observed change 2016 to 2021; and

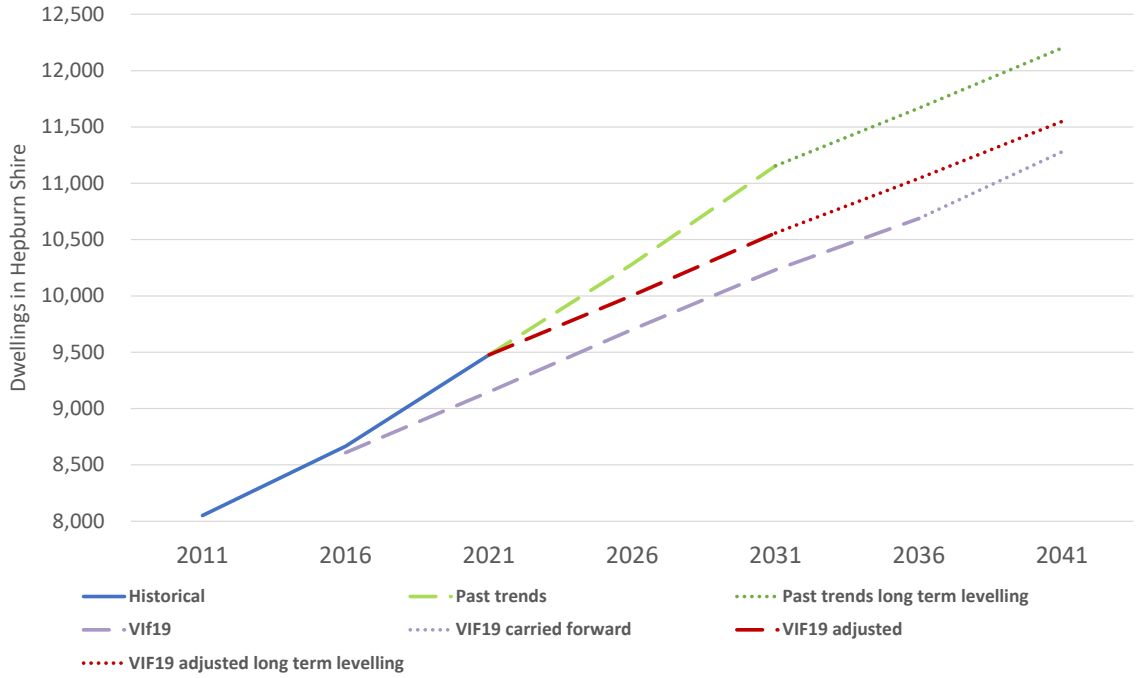
[5] https://www.abs.gov.au/statistics/standards/australian-statistical-geography-standard-asgs-edition-3/jul2021-jun2026/non-abs-structures/suburbs-and-localities
[6] https://www.planning.vic.gov.au/land-use-and-population-research/victoria-in-future

- A past development trends scenario, which applies the ten-year dwelling growth rate observed in the Census.

The original ViF19 projections are from 2016 to 2036. A 2041 total can be identified by carrying forward the growth rate observed from 2016 to 2036. This is included in Figure 3. The number of dwellings in this VIF19 forecast for 2021 was a projection, and it underestimated the actual census count in 2021. A VIF19 adjusted projection is included and it applies the original VIF19 growth rate to the dwelling numbers observed in 2021.

It is typical for projections to "level off", with a decreased rate of growth, beyond a ten-year time horizon. This is to account for uncertainty over the long term and to avoid the effects of compounding annual growth. This levelling off is demonstrated in Figure 3 below in the past trends and VIF19 adjusted scenario which includes historic dwelling change.

FIGURE 3: PLANNING FOR HOUSING CHANGE IN HEPBURN SHIRE, SCENARIO COMPARISON, 2021-41



Source: ABS Census (2016 and 2021); SGS Economics & Planning; Victoria in Future

The numerical results of the two plausible scenarios ('Past trends' and VIF19 adjusted) are presented in Table 4 below. The Past trends scenario results in a growth rate of 1.27% per annum between 2021 and 2041, which is higher than what is projected under ViF19. The Past trends scenario suggests approximately 12,200 dwellings in 2041 compared to 11,550 in the VIF 19 adjusted scenario.

TABLE 4: DWELLING DEMAND FROM 2021-41 IN HEPBURN SHIRE, SCENARIO COMPARISON

Scenario	2021	2041	Change 2021-41	AAGR 2021-41
Past trends	9,480	12,200	2,720	1.27%
VIF19 (adjusted)	9,480	11,550	2,070	0.99%

Source: ABS Census (2016 and 2021); SGS Economics & Planning; Victoria in Future

It is recommended that the 'higher' projection be adopted, to provide a planning buffer. On this basis, Hepburn Shire should plan for an additional 2,720 dwellings from 2021 to 2041 -or approximately 136 per year.

Where?

As indicated in Table 3, most additional dwellings in Hepburn Shire in recent years have been added outside of the townships and in Daylesford-Hepburn Springs.

Projecting this forward may not be a desired outcome nor reflect prospects from a planned suite of policy interventions across the Shire. As such, a "policy-on" position on future growth has been assumed to allocate future demand for planning purposes.

Table 5 shows the share of population in each township and the share of relative population growth that was experienced between the last two census periods. A 'policy-on" position on the percentage share of future growth is included as justified in the notes column.

TABLE 5: PROJECTED DWELLING GROWTH ACROSS HEPBURN SHIRE AND A "POLICY-ON" POSITION

Area	Proportion in 2021	Share of growth (16-21)	Policy-on	Notes on "policy-on" position
Clunes	11%	15%	15%	Future demand in line with recent growth share
Creswick	17%	13%	20%	Expected increase in future dwelling growth due to transport connections and access to Ballarat, combined with planning interventions (improved structure planning, place-making)
Daylesford-Hepburn Springs	28%	22%	25%	Slight uptick in growth from 2016-21 reflecting strong demand for eastern Shire townships and areas not able to be accommodated elsewhere due to constraints.
Glenlyon	3%	0%	2%	Negligible share of overall dwelling growth, given lack of services and infrastructure
Trentham	8%	17%	10%	Continued future growth above the current share of dwellings but declining compared to recent shares recognising constraints to expansion.

Area	Proportion in 2021	Share of growth (16-21)	Policy-on	Notes on "policy-on" position
Non-townships	34%	33%	28%	Reduced future share of development, redirected to residential zones with appropriate services and planning.

Source: ABS (2016, 2021), SGS Economics & Planning

The disaggregated results of this "policy-on" planning position, have been presented in Table 6 below.

TABLE 6: ADDITIONAL DWELLING DEMAND IN HEPBURN SHIRE IN POLICY-ON SCENARIO

Location	2021	2026	2031	2036	2041	Change 21-41
Clunes	1,030	1,130	1,240	1,340	1,440	410
Creswick	1,570	1,710	1,850	1,980	2,120	550
Daylesford-Hepburn	2,630	2,800	2,970	3,140	3,310	680
Glenlyon	250	260	280	290	300	50
Trentham	760	830	900	960	1,030	270
Non-townships	3,240	3,430	3,620	3,810	4,000	760
Hepburn Shire	**9,480**	**10,160**	**10,840**	**11,520**	**12,200**	**2,720**

Source: SGS Economics and Planning (2022-23)

Overall, this future demand scenario is a policy aspiration, whereby additional development is within township boundaries and in residential zones and generally discouraged in the farming zone. This outcome is reliant on further planning interventions that will be achieved through the Structure Planning process in each of the towns.

3. Housing capacity analysis

3.1 Introduction

SGS uses an in-house housing capacity model for assessing housing demand compared to capacity. The housing capacity model (HCM) begins with a spatial base layer of the LGA, which provides data on the size and location of all lots, existing dwellings, zoning and any environmental or planning constraints that may impact development.

Capacity analysis can be conducted at the township level. Inputs from council and relevant aspects from development controls, such as prescriptive densities for each zone, are captured in the modelling. The modelling estimates a maximum "net yield" possible for each parcel, which aggregates to the housing capacity for the selected townships and Shire as a whole. This model and more detailed assumptions are described in Appendix B.

Testing capacity for areas solely within a structure plan boundary would ignore the possibility of other townships with similar housing and settlement characteristics providing substitute opportunities, while also ignoring the housing that is currently being provided, for example, in the Farming Zone in Hepburn Shire. In line with PPN90, the methodology seeks to identify whether there is adequate capacity to cater for demand for the entire Shire, while also having regard to internal housing sub-markets, both at and beyond 15 years.

3.2 Housing capacity

Housing capacity assumptions

The HCM uses Geoscape, along with assumptions regarding the developability of lots, further informed by desktop research, to understand potential additional theoretical housing capacity across both vacant lots, and lots that could be further subdivided.

Future housing capacity is assumed to come from one of two places: vacant lots with no dwellings, or the creation of new lots by subdividing under current planning controls (including multi-unit housing).

Vacant lots

The results of the base spatial layers reveal that there are 755 vacant parcels capable of accommodating at least a single dwelling across the Shire in the residential zones in the defined township areas the majority of which are in Daylesford-Hepburn Springs. This is effectively 'infill' potential.

TABLE 7: ADDITIONAL DWELLING CAPACITY FROM VACANT RESIDENTIAL LOTS IN HEPBURN SHIRE TOWNSHIPS

Location	Capacity (vacant)
Clunes	150
Creswick	120
Daylesford-Hepburn Springs	380
Glenlyon	40
Trentham	70
All towns	760

Source: SGS Economics and Planning (2022-23) using Geoscape modelling and desktop research

Subdivision capacity

The theoretical development capacity or further subdivision potential on existing vacant lots needs to be subject to a sensitivity check by reference to a potential "realisation" rate. The particular focus here is on the likely rate of intensification that might be achieved. "Realisation" is development that is likely given observed and potential future trends. This realisation potential has been informed by planning permissions provided by Hepburn Shire Council.

Table 8 below shows net lots created by historical subdivision approvals in each of the townships and projects this forward, with some adjustments to identify potential future demand.

The potential for approximately 75 dwellings were approved through subdivision each year in the townships across Hepburn Shire. Over a 20-year period, this could mean an additional 1,500 dwellings. A desktop review of development prospects in the towns considered aspects such as emerging housing preferences, infrastructure and remaining subdividable capacity to determine a likely net lot realisation rate by town, which translates into new dwelling capacity.

TABLE 8: HEPBURN SHIRE NET LOTS FROM APPROVED SUBDIVISIONS (BY TOWN) (2013-21) AND FUTURE REALISABLE CAPACITY (2021-41)

Town	Total Net Lots created, 2013-21	Average Net Lots Created Per Year	Average net lots rolled forward (2021-41)	Assumed realisable lots from subdivision (2021-41)	Assumption
Clunes	67	8	156	270	Increase in subdivision capacity from previous years
Creswick	65	7	150	200	Increase in subdivision capacity from previous years
Daylesford-Hepburn Springs	397	45	907	990	Slight uplift in subdivision capacity
Glenlyon	57	7	135	10	Limited growth potential in existing residential lots
Trentham	73	8	168	50	Limited growth potential in existing residential lots
Towns	659	75	1,526	1,520	

Source: SGS Economics & Planning 2022-23 based on Hepburn Shire Council Planning Approvals Data (2013-21)

Net capacity

Considering the capacity on vacant lots and a likely realisation rate in subdividable areas, there is a net capacity of approximately 2,280 dwellings across the five towns.

TABLE 9: ADDITIONAL DWELLING CAPACITY IN HEPBURN SHIRE

Location	Capacity (vacant)	Capacity (subdivision realisation)	Total
Clunes	150	270	420
Creswick	120	200	320
Daylesford-Hepburn Springs	380	990	1,370
Glenlyon	40	10	50
Trentham	70	50	120
Towns	760	1,520	2,280

Source: SGS Economics and Planning (2022-23) using Geoscape modelling and desktop research

3.3 Housing demand, capacity, and gap analysis summary

For the calculation of housing demand, a "policy-on" position for future growth by township and non-township has been assumed. This is intended to reflect the desired outcomes for responsible, sustainable development across the Shire. It assumes policy interventions have the desired future effect of restraining development outside of established townships.

Table 10 compares realisable capacity to demand in each township to understand the relative surplus or shortfall to 2041. Across all townships there is sufficient capacity to meet 'township' related demand ('policy-on') projections, and outside the townships it is assumed the capacity to meet the identified 980 dwelling demand is available, such that the PPN90 requirement to provide zoned capacity for housing demand on a municipal basis can be met. The non-township demand and supply balance is the subject of a separate study (the Agricultural Land and Rural Living Study).

The table demonstrates, however, that the ability to meet demand beyond 2041 varies significantly between townships across the Shire. Clunes and Daylesford-Hepburn Springs appear to have the most future development potential given the housing requirement.

TABLE 10: ADDITIONAL DWELLING REALISABLE CAPACITY IN HEPBURN SHIRE, 2021-41

Location	Realisable Capacity	Demand ('Policy on')	Gap	Years Capacity past 2041
Clunes	420	410	10	0.7
Creswick	330	550	-220	-13.4
Daylesford-Hepburn Springs	1,370	680	690	10.0
Glenlyon	40	50	-10	-3.2
Trentham	120	270	-150	-25.4
Townships	**2,280**	**1,740**	**540**	6.2
Non-townships	*	980		
Towns	**2,280**	**2,720**	**-440**	-3.2

Source: SGS Economics and Planning (2022-23)

Table 11 aggregates demand, assumed capacity and the gap for housing between the eastern towns (Daylesford, Hepburn Springs, Trentham, and Glenlyon) and the western towns (Clunes and Creswick), assuming that there is some 'interchangeability' between the settlements in these different housing sub-markets. Overall, there is a surplus capacity to the 2041 horizon, but this is smallest in the Western towns of Creswick and Clunes. Table 11 excludes non-township demand which if required to be accommodated in the township areas would change the results of the gap analysis to show that there is insufficient realisable capacity to meet demand in the townships by 2041.

TABLE 11: DEMAND, CAPACITY AND GAP ANALYSIS BY EASTERN AND WESTERN HOUSING SUB-MARKETS, 2021-41

	Realisable capacity	Demand ('Policy on')	Gap	Years Capacity past 2041
Eastern townships	1,530	1,010	520	10.4
Western townships	750	950	-200	-4.3

Source: SGS Economics and Planning (2022-23)

The results of the housing demand, capacity and gap analysis are presented in Table 12 below. They have been presented using a traffic light assessment to discuss implications. Given the unique positioning of each town, the colour assessment does not exactly correspond to years capacity. Rather, it is meant to signal future policy interventions required. Future planning should have regard to the eastern and western housing market distinctions. For example, future observed gaps in capacity in Trentham and Glenlyon, where expansion is constrained by infrastructure and environment, may be met by capacity provided in Daylesford.

TABLE 12: HOUSING GAP – "POLICY ON" PLANNING IMPLICATIONS

Township	Assessment
Clunes	Sufficient capacity beyond 2041 to meet growth objectives, however only with a small surplus. Further opportunities should be investigated, given there are shortfalls elsewhere in the Shire.
Creswick	Capacity shortfall by 2041, investigate future opportunities.
Daylesford-Hepburn Springs	There will continue to be strong demand for dwellings to 2041, including some overflow development from constrained towns in eastern settlements and towns under a "policy-on" scenario. Investigate opportunities for infill and medium-long term development in Daylesford (noting limits to further growth in Hepburn Springs).
Glenlyon	No additional capacity beyond 2041, limit future growth.
Trentham	Capacity shortfall by 2041, investigate future opportunities that consider existing services and infrastructure. For example, consider orderly development and intensification in the south west fringe area.

Source: SGS Economics & Planning

4. Employment floorspace demand and capacity

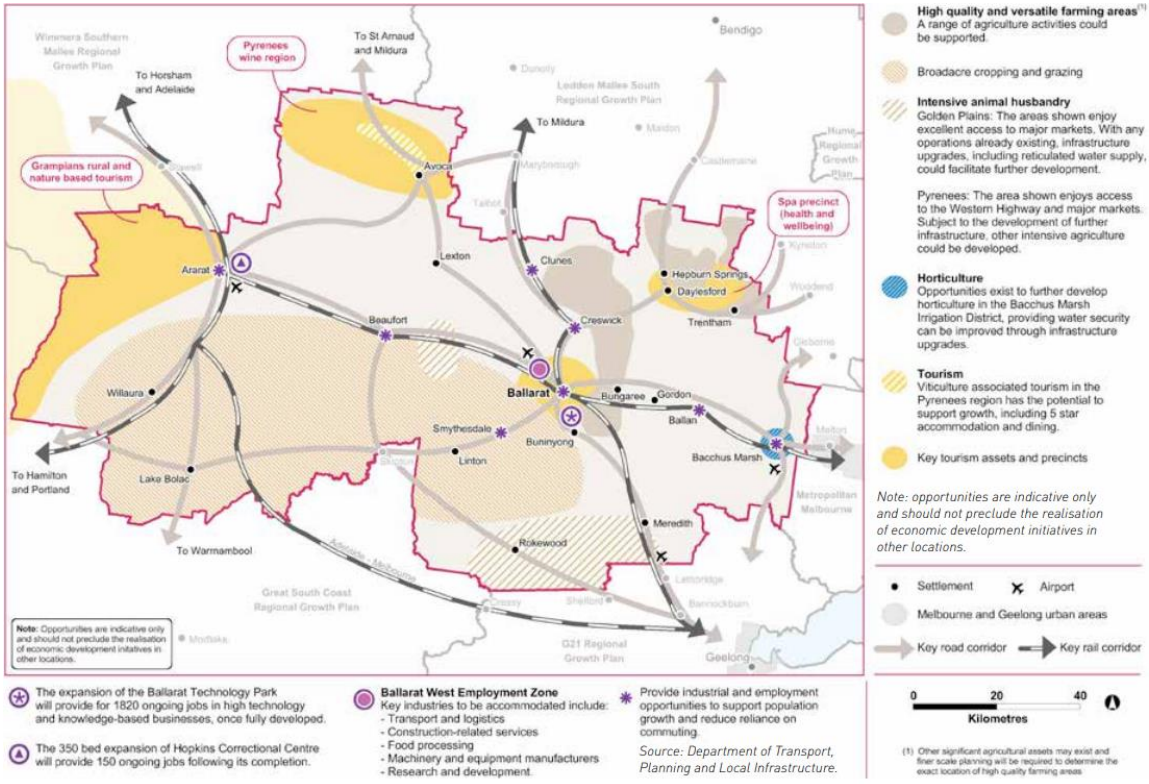
4.1 Introduction

It is important to ensure there is adequate floorspace and land to accommodate future employment growth by 2041. This includes both commercial land and industrial land spanning multiple sectors.

The Central Highlands Regional Growth Plan[7] notes the following, which has implications for Hepburn Shire:

- Creswick and Clunes are noted to provide industrial and employment opportunities to support population growth and reduce reliance on commuting.
- Daylesford, Hepburn Springs, and Trentham are noted as settlements within key tourism assets and precincts.

FIGURE 4: KEY ECONOMIC DEVELOPMENT OPPORTUNITIES AND ASSETS – CENTRAL HIGHLANDS



Source: Central Highlands Regional Growth Plan

[7] https://www.planning.vic.gov.au/__data/assets/pdf_file/0026/94445/Central-Highlands-Regional-Growth-Plan-May-2014.pdf

4.2 Past employment change in Hepburn Shire

Across the Shire, employment increased by 1,025 jobs between 2011 and 2021, most of which occurred between 2016-21. The tables below allocate the jobs by industry sectors to broad industry classifications used for this study i.e. industrial, commercial and 'primary' (principally agriculture and mining).

TABLE 13: PAST EMPLOYMENT CHANGE BY SECTOR – HEPBURN SHIRE, 2011 – 2021

Industry	2011	2016	2021	Change 2011-21	AAGR 2011-21
Agriculture, forestry and fishing	420	466	529	109	2.33%
Mining	5	11	7	2	3.42%
Manufacturing	239	234	238	-1	-0.04%
Electricity, gas, water and waste services	15	23	13	-2	-1.42%
Construction	231	277	367	136	4.74%
Wholesale trade	89	50	62	-27	-3.55%
Retail trade	478	490	532	54	1.08%
Accommodation and food services	700	724	805	105	1.41%
Transport, postal and warehousing	124	117	122	-2	-0.16%
Information media and telecommunications	29	26	43	14	4.02%
Financial and insurance services^	45	42	60	15	2.92%
Rental, hiring and real estate services^	69	49	54	-15	-2.42%
Professional, scientific and technical services	233	246	322	89	3.29%
Administrative and support services	81	127	156	75	6.77%
Public administration and safety	199	190	273	74	3.21%
Education and training	343	376	398	55	1.50%
Health care and social assistance	555	717	740	185	2.92%
Arts and recreation services^	76	120	139	63	6.22%
Other services	157	188	236	79	4.16%
Total employment	**4,088**	**4,473**	**5,096**	**1,025**	**2.23%**

Source: ABS Census, Counting Employed Persons, Place of Work, Industry of Employment (2011, 2016, 2021)

TABLE 14: PAST EMPLOYMENT CHANGE BY BROAD CATEGORY, HEPBURN SHIRE, 2011 - 2021

Industry	2011	2016	2021	Change 2011-21	AAGR 2011-21
Commercial	3,054	3,345	3,820	766	2.26%
Industrial	609	651	740	131	1.97%
Primary (Ag and Mining)	425	477	536	111	2.35%
Total employment	**4,088**	**4,473**	**5,096**	**1,008**	**2.23%**

Source: ABS Census, Counting Employed Persons, Place of Work, Industry of Employment (2011, 2016, 2021)

4.3 Future employment floorspace demand

For the purposes of the current study SGS has followed a multi-step process when calculating employment floorspace demand:

1. Estimate future employment (number of jobs) by ANZSIC Division[8] by applying recent trend rates;
2. Bundle the divisions into jobs by broad industry categories (BIC) of 'industrial' and 'commercial' and 'primary' (agriculture and mining industry categories);
3. Convert employment to floorspace using a defined floor area to job ratio (FAJR) by BIC; and
4. Distribute demand by township using small area land use projections (SALUP[9]).

1. Future employment by industry

The modelling used to calculate future employment was based on historic trends of employment in Hepburn Shire from 2011 to 2021, by each ANZSIC industry division. The average annual growth rate from ABS Census data (from 2011 to 2021) for each industry was applied out to 2041, with adjustments made to ensure sectors didn't decline unrealistically (e.g. the decline in manufacturing was moderated going forward, noting employment in this sector stabilised in the latter 2016-21 period).

The results of this analysis with these adjustments are shown in Table 15 below (note the figures in the 2021 column have been rounded to the nearest 10).

[8] https://www.abs.gov.au/ausstats/abs@.nsf/0/20C5B5A4F46DF95BCA25711F00146D75?opendocument
[9] Please see Appendix B for an explanation of SALUP

TABLE 15: EMPLOYMENT BY INDUSTRY CATEGORY IN HEPBURN SHIRE IN 2021 AND 2041

BIC	2021*	2041*	Change in employment*
Agriculture, forestry and fishing	530	710	180
Mining	10	20	10
Manufacturing	240	220	-20
Electricity, gas, water and waste services	10	10	0
Construction	370	710	340
Wholesale trade	60	30	-30
Retail trade	530	650	120
Accommodation and food services	810	930	120
Transport, postal and warehousing	120	110	-10
Information media and telecommunications	40	70	30
Financial and insurance services	60	90	30
Rental, hiring and real estate services	50	30	-20
Professional, scientific and technical services	320	500	180
Administrative and support services	160	410	250
Public administration and safety	270	420	150
Education and training	400	470	70
Health care and social assistance	740	1,090	350
Arts and recreation services	140	340	200
Other services	240	420	180
Total Employment	**5,100**	**7,230**	**2,130**

Source: SGS Economics & Planning, 2023

* Rounded to nearest 10.

2. Aggregate to broad industry categories (BIC)

Table 16 aggregates the jobs to the Broad Industry Categories of Commercial and Industrial, with the 'primary' sectors of mining and agricultural, forestry and fishing jobs excluded as occurring outside of commercial and industrial precincts, though recognising that some jobs in the other ANZSIC categories will also occur outside commercial or industrial precincts and in non-township areas. These excluded categories relate to about 7% of projected future employment. While the industrial category includes a small decline in manufacturing employment it also captures healthy growth in construction activity. Overall jobs in these 'industrial' categories are growing by around 12%, and by around 37% in the 'commercial' category from 2021 to 2041 compared to about 30% for all employment. These rates and differentials are plausible given observed industry and structural change.

3. Convert employment to floorspace using a defined floor area to job ratio

While jobs in different industry categories use or 'consume' floorspace (and land) at different rates, an average Floor Area to Job Ratio (FAJR) for the broad industry categories of commercial and industrial can be utilised in this case. The assumed FAJR is 35 sqm for commercial floorspace and 80 sqm for industrial floorspace. These are drawn from observations of floorspace use from previous experience in relevant contexts, as there is no Hepburn specific data available for this metric. The non-township primary sectors have been excluded from consideration.

TABLE 16: EMPLOYMENT TO FLOORSPACE CONVERSIONS BY BROAD INDUSTRY CATEGORY

BIC	2021	2041	Change in employment* (2021-41)	Floor area (sqm) to job (FAJR)	Total change in floorspace demand (sqm)
Commercial	3,820	5,450	1,630	35	57,100
Industrial	740	1,050	310	80	24,800
Total Employment	**5,100**	**7,230**	**2,130**		**97,100**

Source: SGS Economics & Planning

* Rounded to the nearest 10

4. Distribute demand to townships

To understand the potential distribution of future employment across the towns, SGS used small area land use projections (SALUP) to understand where employment is projected to occur in the future.[10] Most employment growth is expected to be in Daylesford-Hepburn Springs, followed by Creswick. This is shown in Table 17 below. These small areas were assigned to each township in a manner that covered the entire LGA, meaning that non-township areas have been included in the catchments of the implied commercial and industrial precincts of each township. Therefore, the figures presented in Table 17 below represent the 'commercial' and 'industrial' employment in the Shire, assigned to a township whether within the statistical boundaries of that township, or in the wider catchment of their industrial and commercial precincts (the 'primary' employment is not assigned and is excluded).

TABLE 17: PROJECTED SHARES OF EMPLOYMENT GROWTH – BY TOWN, 2021 – 2041

Area	Change 2021-41*	AAGR
Clunes	100	0.9%
Creswick	480	1.7%
Trentham	110	0.8%
Glenlyon	150	3.0%
Daylesford-Hepburn Springs	1,100	2.0%
Total	**1,940**	**1.8%**

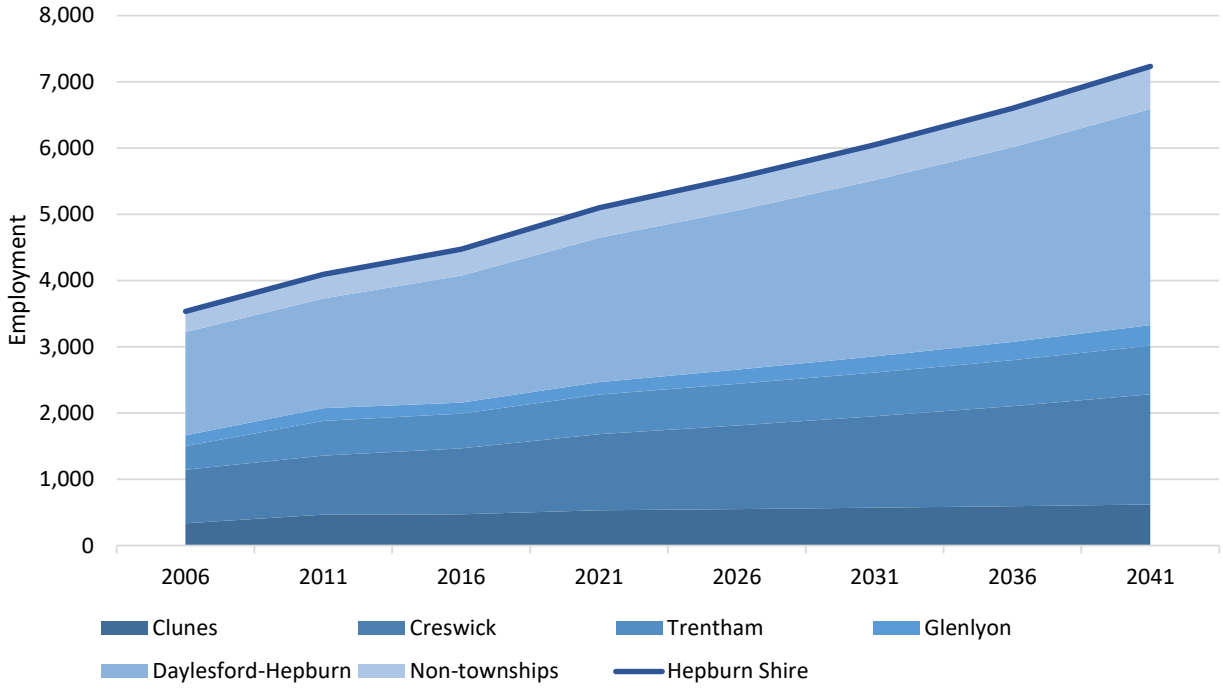
Source: SGS Economics and Planning (2023) using ABS Census

* Rounded to the nearest 10

[10] The SALUP projections are at a finer geography than past ABS statistics on employment (only available at an SA2 level).

The components of this growth are also shown in Figure 5 below, revealing a proportional increase in the total number of jobs in Daylesford-Hepburn Springs as compared to other towns in Hepburn Shire. While Glenlyon is projected to experience a high average annual growth rate of employment, this is from a low starting point, and the change is minor in the context of the whole Shire.

FIGURE 5: EMPLOYMENT GROWTH BROKEN DOWN BY TOWNSHIP– HEPBURN SHIRE



Source: SGS Economics and Planning (2022-23)

At a township level, the breakdown of job additions is demonstrated in Table 18 below. These translate to floorspace demand calculations at a township and Shire-wide level. The 'primary' employment represented by Agriculture, Forestry & Fishing and Mining have been excluded.

TABLE 18: EMPLOYMENT GROWTH BY BIC AND TOWN – 2021-41

Area	Commercial	Industrial	Township total
Clunes	20	80	100
Creswick	480	0	480
Trentham	110	0	110
Glenlyon	70	80	150
Daylesford-Hepburn Springs	950	150	1,100
Total	**1,630**	**310**	**1,940**

Source: SGS Economics and Planning (2022-23) using Census 2021

Table 19 below disaggregates the demand for floorspace in Hepburn Shire presented above to a township level.

TABLE 19: EMPLOYMENT FLOORSPACE (SQM) GROWTH BY BIC AND TOWN – 2021-41

Area	Commercial	Industrial	Total
Clunes	700	6,400	7,100
Creswick	16,800	0	16,800
Trentham	3,900	0	3,900
Glenlyon	2,400	6,400	8,800
Daylesford-Hepburn Springs	33,300	12,000	45,300
Total	**57,100**	**24,800**	**81,900**

Source: SGS Economics and Planning (2022-23) using Census 2021
Rounded to the nearest 100 sqm

The above approach suggests 2021-41 demand for approximately 82,000 sqm of floorspace across commercial and industrial categories.

Another, more conservative approach to calculating floorspace demand is to apply the current employment floor area to population ratio to the projected future population growth. Existing commercial floorspace is 121,600 square metres, and existing industrial floorspace is 44,600. This gives a total existing employment floorspace figure of 166,200sqm, while the population at the 2021 census was 16,604, implying a floor area to population ratio of 10.02 sqm per person. The population is projected to grow by 4,276 people over the next 20 years (past trends scenario). This would generate floor area demand of 42,800 sqm.

This provides a range of estimates of floorspace demand over the next 20 years, with the lower bound of about 43,000 sqm and an upper bound estimate of about 82,000 sqm.

4.4 Employment floorspace capacity

Employment floorspace capacity was determined using SGS's Geoscape layer as an input. The following steps were used to understand both industrial (IN1Z) and commercial (C1Z, C2Z and MUZ) employment capacity.

- Determine available land. This is land that is zoned appropriately and does not have an existing use on it and/or, can be intensified.
- Calculate site coverage for each land use type. This is the proportion of usable floorspace per square metre of available land.
- Calculate net capacity. This is the portion of available land that is assumed to be usable. It will be usable if the land is vacant, or if it is determined that intensification can occur on the land.

Available land

The capacity assessment starts with all property parcels within commercial zones (C1Z, C2Z, and MUZ) and Industrial Zones (IN1Z). By definition this excludes any roads/footpaths or other non-developable areas.

For available lots a number of built form assumptions were applied to determine the potential development yield or total employment floorspace capacity. Built form employment modelling assumptions include:

- Site coverage –how much of the land a building would likely cover, is assumed to be 50 per cent and two storeys for commercial land, and 30 per cent for industrial land.
- Building efficiency - how much of the building footprint is useable (i.e., accounting for services, lift areas, stairs, etc), is assumed to be 100 per cent of the total floorspace (particularly relevant to commercial floorspace).

These assumptions are summarised in the following table.

TABLE 20: COMMERCIAL AND INDUSTRIAL SITE USE ASSUMPTIONS

Land use	Site Cover	Building levels	Capacity yield
Commercial	50%	2	1.0
Industrial	30%	1	0.3

source: SGS Economics & Planning

This calculation of site cover and building levels is then used to understand the floorspace could be built, known as *capacity.*

Net capacity

Net capacity is the amount of additional employment floorspace capacity that is potentially available, after existing floorspace (and already occupied land) has been accounted for. This is the amount of floorspace that could be realised to meet the additional employment demand needs by 2041. This is calculated by comparing the total employment floorspace capacity less the existing employment floorspace.

Further details on this method are provided in Appendix B.

While there is significantly more land zoned for commercial or industrial uses, the assessment identifies 'realisable'; that is, readily developable capacity. The assumptions for this are detailed in the following sections.

Commercial floorspace capacity

For commercial floorspace, vacant sites have been assumed to be readily realisable, while 25% of existing floorspace is assumed to be able to be better utilised (implying an intensification of floorspace usage i.e. assuming it is 'vacant') by 2041. The table below shows the subdividable commercial zoned land for each township.

TABLE 21: COMMERCIAL LAND CAPACITY IN HEPBURN SHIRE TOWNSHIPS

Area	Existing floorspace	Realisable intensification (25% of existing floorspace)	Vacant capacity	Total
Clunes	13,700	3,400	1,800	5,200

Creswick	29,400	7,400	6,900	14,300
Trentham	14,900	3,700	2,200	5,300
Glenlyon	0	0	-	0
Daylesford-Hepburn	63,600	15,900	1,600	18,100
Hepburn Shire	**121,600**	**30,400**	**12,500**	**42,900**

Source: SGS Economics & Planning

Industrial floorspace capacity

For industrial floorspace, only vacant sites are included as developable, that is, industrial lots where there are no existing buildings using floorspace for the purpose of employment. Lots that already have buildings are not included in the capacity calculation on the (conservative) assumption that their potential for intensification is modest.

As the table below**Error! Not a valid bookmark self-reference.** shows, there is no vacant industrial capacity in the western portion of the Shire and there is only limited capacity overall, mostly concentrated in Trentham. It indicates that future industrial employment would either need to be concentrated in Trentham, or further capacity would need to be unlocked across the LGA. Realistically Clunes and Creswick should have their own industrial expansion capacity for small scale and light industrial activities to meet the needs of these towns as they grow. Glenlyon has no employment floorspace capacity at all, but it is close to Trentham and Daylesford where there is capacity.

TABLE 22: INDUSTRIAL CAPACITY (SQM) BY TOWN – VACANT LAND

Area	Vacant industrial lots - sqm
Clunes	-
Creswick	-
Trentham	7,200
Glenlyon	-
Daylesford-Hepburn Springs	1,400
Hepburn Shire	**8,600**

Source: SGS Economics & Planning

4.5 Gap analysis

Commercial capacity gap analysis

There is very little vacant commercial zoned land in Hepburn Shire, with over four times as much floorspace demand over the next 20 years as there is vacant sites able to meet the demand. However, it is anticipated that a share of the projected future demand will be accommodated in some non-commercial zoned areas or precincts (for example, some of the floorspace will be in existing school or hospital precincts) or can be met by more efficient utilisation when sites are redeveloped, leaving a lesser overall shortfall in capacity to 2041.

There are local capacity shortfalls and surpluses, most notably, an apparent shortfall in Daylesford-Hepburn Springs, projected to attract more than half of the Shire's total commercial floorspace demand, with only about 10 years' capacity available, even through intensification. With limited additional demand in the eastern portion of the shire, excess capacity in Trentham may be able to cover

some of the shortfall experienced in Daylesford-Hepburn Springs, though typically commercial and retail floorspace is more 'tied' to local residential growth than industrial floorspace.

In the western portion of the Shire, there appears to be sufficient capacity, though Creswick itself has a shortfall and Clunes a surplus. Additional opportunities for modest commercial and retail floorspace in Creswick should be considered in future structure planning.

TABLE 23: COMMERCIAL FLOORSPACE/LAND DEMAND AND CAPACITY BY TOWNSHIP (SQM), 2021-2041

Township	Commercial demand	Commercial capacity	Gap	Years capacity past 2041	Implied land requirement
Clunes	700	5,200	4,500	128.6	NA
Creswick	16,800	14,300	-2,500	-3.0	2,500
Trentham	3,900	5,300	1,400	7.2	NA
Glenlyon	2,400	0	-2,400	-20.0	2,400
Daylesford-Hepburn Springs	33,300	18,100	-15,200	-9.1	15,200
Hepburn Shire	**57,100**	**42,900**	**-14,200**	**-5.0**	**14,200**

Source: SGS Economics & Planning

TABLE 24: COMMERCIAL FLOORSPACE/LAND DEMAND AND CAPACITY BY SUB-AREA (SQM), 2021-2041

Sub-area	Commercial demand	Commercial capacity	Gap	Years capacity past 2041	Implied land requirement
Eastern	39,600	23,400	-16,200	-8.2	16,200
Western	17,500	19,500	2,000	2.3	NA
Hepburn Shire	**57,100**	**42,900**	**-14,200**	**-5.0**	**14,200**

Source: SGS Economics & Planning

Industrial capacity gap analysis

Excluding non-township demand

There is an overall shortfall of industrial land in Hepburn Shire, with most townships not containing any capacity at all. Capacity in the east is largely concentrated in Trentham, with only a few years of supply left in Daylesford-Hepburn Springs, whereas there is no capacity at all in the LGA's west. While Trentham has the majority of vacant industrial land, it is expected to have reduced demand over the next 20 years (and constraints to developing the existing industrial zoned land may exist), while towns with no capacity are expected to have rising demand.

TABLE 25: INDUSTRIAL FLOORSPACE/LAND DEMAND AND CAPACITY BY SUB-AREA (SQM), 2021-2041

Sub-area	Industrial demand	Industrial capacity	Gap	Years capacity past 2041	Implied land requirement
Clunes	6,400	0	-6,400	-20.0	21,333
Creswick	0	0	0	-	-
Trentham	0	7,200	7,200	-	NA
Glenlyon*	6,400	0	-6,400	-20.0	21,333
Daylesford-Hepburn Springs	12,000	1,400	-10,600	-17.7	35,333

Hepburn Shire	**24,800**	**8,600**	**-16,200**	**-13.1**	**54,000**

Source: SGS Economics & Planning

TABLE 26: INDUSTRIAL DEMAND AND CAPACITY BY SUB-AREA (SQM), 2021-2041

Sub-area	Industrial demand	Industrial capacity	Gap	Years capacity past 2041	Implied land requirement
Eastern	18,400	8,600	-9,800	-10.7	32,667
Western	6,400	0	-6,400	-20.0	21,333
Hepburn Shire	**24,800**	**8,600**	**-16,200**	**-13.1**	**54,000**

Source: SGS Economics & Planning

4.6 Conclusions

The following traffic light assessment points to where specific interventions and further studies should take place.

TABLE 27: EMPLOYMENT LAND GAP – TRAFFIC LIGHT ASSESSMENT

Township	Land use	Assessment
Clunes	Commercial	Sufficient capacity beyond 2041, modest demand forecast.
	Industrial	No capacity, modest growth – small industrial area say 2-3ha required.
Creswick	Commercial	Capacity shortfall by 2041; demand could be met by intensification and redevelopment but additional opportunities for modest commercial / retail floorspace in town centre should be considered in future structure planning.
	Industrial	No capacity, but no demand forecast over the next 20 years. Nevertheless, provision could be made for a small industrial area (of say 1-2 ha) to facilitate local activity not anticipated by the forecasts.
Daylesford-Hepburn	Commercial	Capacity shortfall in next 10 years. Demand could be met through redevelopment; additional opportunities for modest commercial / retail floorspace expansion in town centre should be considered in future planning.
	Industrial	Shortfall in short term (within say 5 years) due to limited vacant capacity – investigate opportunities for expansion of say 5-6 ha including absorbing Glenlyon demand – subject to understanding developability of existing Trentham area.
Glenlyon	Commercial	No capacity, while commercial demand is expected to marginally increase to 2041, so slight shortfall. Likely to be accommodated without rezoning.
	Industrial	No capacity, increase in demand for industrial land expected to 2041; but could be met in Trentham and/or Daylesford.
Trentham	Commercial	Sufficient capacity to 2041 and beyond.
	Industrial	Large surplus of vacant industrial land, with most of the shire's industrial capacity located here. Reduced demand is expected. Surplus may accommodate eastern area demand not met elsewhere (depending on developability of existing zoned area which should be).

Source: SGS Economics & Planning

5. Key findings

With this east-west housing sub-market distinction in mind, and with the addition of commercial and industrial land uses, Table 28 below summarises key capacity and demand conclusions for each of the townships.

TABLE 28: CAPACITY AND DEMAND CONCLUSIONS – FIVE TOWNSHIPS

Township	Use	Conclusion
Clunes	Residential	Sufficient capacity beyond 2041 to meet growth objectives, however only with a small surplus. Further opportunities should be investigated, given there are shortfalls elsewhere in the Shire and constraints with infrastructure.
	Commercial	Sufficient capacity beyond 2041, modest demand forecast.
	Industrial	No capacity, modest growth – a small industrial area of approx. 2-3ha required.
Creswick	Residential	Capacity shortfall by 2041, investigate future opportunities.
	Commercial	Capacity shortfall by 2041; demand could be met by intensification and redevelopment but additional opportunities for modest commercial / retail floorspace in town centre should be considered in future structure planning.
	Industrial	No capacity, but no demand forecast over the next 20 years. Nevertheless, provision could be made for a small industrial area (of say 1-2 ha) to facilitate local activity not anticipated by the forecasts.
Daylesford-Hepburn	Residential	There will continue to be strong demand for dwellings to 2041, including some overflow development from constrained towns in eastern settlements and towns under a "policy-on" scenario. Investigate opportunities for infill and medium-long term development in Daylesford (noting limits to further growth in Hepburn Springs).
	Commercial	Capacity shortfall in next 10 years. Demand could be met through redevelopment; additional opportunities for modest commercial / retail floorspace expansion in town centre should be considered in future planning.
	Industrial	Shortfall in short term (within say 5 years) due to limited vacant capacity – investigate opportunities for expansion of 5-6 ha including absorbing Glenlyon demand – subject to understanding developability of existing Trentham area.
Glenlyon	Residential	No additional capacity beyond 2041, limit future growth.
	Commercial	No capacity, while commercial demand is expected to marginally increase to 2041, so slight shortfall. Likely to be accommodated without rezoning.
	Industrial	No capacity, increase in demand for industrial land expected to 2041; but could be met in Trentham and/or Daylesford.
Trentham	Residential	Capacity shortfall by 2041, investigate future opportunities that consider existing services and infrastructure. For example, consider orderly development and intensification in the south west fringe area.
	Commercial	Sufficient capacity to 2041 and beyond.
	Industrial	Large surplus of vacant industrial land, with most of the shire's industrial capacity located here. Reduced demand is expected. Surplus may accommodate eastern area demand not met elsewhere (depending on developability of existing zoned area which should be).

Source: SGS Economics and Planning (2022-23)

In order to meet any additional demand beyond 2041, SGS recommends that further studies be conducted as part of ongoing structure planning work to explore future housing options. Any rezoning of land will need to consider a multitude of locational factors such as access to roads and services, impacts on traffic, biodiversity, flooding and bushfire and soil quality for intensive farming.

Appendix A: Towns assessments

Clunes

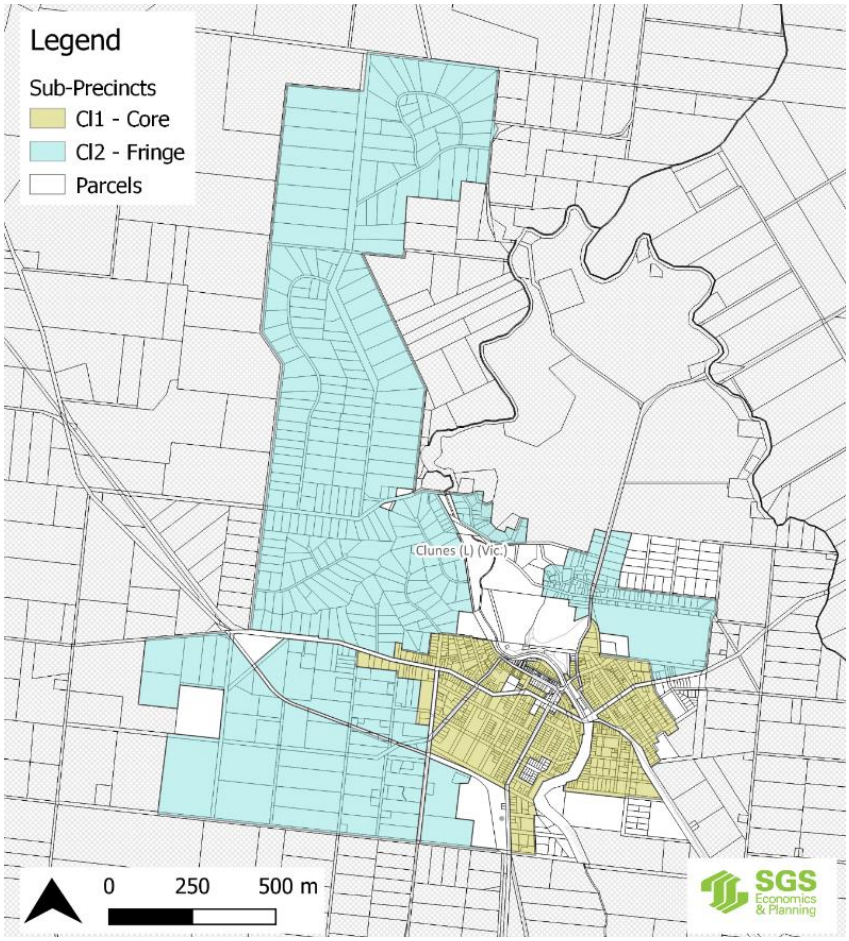
Introduction

This section details the residential, commercial, and industrial capacity and demand considerations for Clunes to 2041. It is intended to support structure planning and sustainable growth or other solutions in the case of any gaps.

Residential capacity and demand recommendations

The township of Clunes is in western portion of Hepburn shire, part of the housing market which is less constrained and in lower demand than the eastern half. It has sufficient capacity beyond 2041, with 272 dwellings required under the policy-on scenario, given the current share of growth experienced in the town over the last 10 years. SGS has identified capacity for 423 dwellings, leaving a surplus of 151 dwellings over the next 20 years.

FIGURE 6: CONTEXT MAP – CLUNES



Source: SGS Economics and Planning (2022-23)

Realisable housing capacity by sub-precinct (corresponding to NRZ in the core and LDRZ on the fringe) was calculated for both vacant lots and non-vacant lots that could be subdivided according to current planning controls. This is detailed in the table below.

TABLE 29: HOUSING CAPACITY TO 2041 – CLUNES

Location		Capacity (vacant)	Capacity (subdivision)	Total	Comment
Established infill (including backfilling of vacant lots)					
Cl1	Core	134	200	334	Subdivision capacity capped to past development trends + allowance for changing demographics.
Cl2	Fringe	18	71	89	Vacant + subdivision from Geoscape data + refined to account for limitations in sewerage. However, sewerage and groundwater issues may mean that Clunes fringe will not be able to accommodate any future demand.
Total capacity		**152**	**271**	**423**	

Source: SGS Economics and Planning (2022-23)

In comparing capacity and demand to 2041, there is sufficient capacity for development and intensification by further subdivision across Clunes to meet future demand.

TABLE 30: CAPACITY/DEMAND BALANCE TO 2041 – CLUNES

	Demand 2021-41	Capacity	Capacity / Demand Balance
Number of Dwellings	409	423	14

Source: SGS Economics and Planning (2022-23)

Commercial capacity and demand recommendations

The primary driver of floorspace demand in Clunes will be in health and education, along with, along with floorspace. This is likely a combination of modest population growth and changing demographics.

Demand for commercial employment land is expected to be negligible in Clunes over the next 20 years, although it could be required to cover adjacent local shortfalls. This could be met through redevelopment of existing buildings (subject to the conditions of heritage overlays) or development on vacant lots, the two largest being at 11 and 1 Fraser Street. There is a vacant capacity of 1,800 sqm and subdividable capacity of 3,400 sqm.

TABLE 31: COMMERCIAL CAPACITY/DEMAND BALANCE - CLUNES

Commercial	Demand	Capacity	Balance	Years capacity past 2041	Implied land requirement sqm)
Floorspace (sqm)	700	5,200	4,500	128.6	NA

Source: SGS Economics and Planning (2022-23)

Industrial capacity and demand recommendations

With no industrial floorspace within the township of Clunes, there is no additional capacity for industrial floorspace. With 10,400 sqm of demand including the demand for land outside of the township boundaries but within the catchment of Clunes, this is a not insignificant shortfall, and given the lack of capacity, the demand would potentially have to be absorbed elsewhere in the Shire, or further south along the Midland Highway in developments north of Ballarat.

TABLE 32: INDUSTRIAL CAPACITY/DEMAND BALANCE - CLUNES

Industrial	Demand	Capacity	Balance	Years capacity past 2041	Implied land requirement (sqm)
Floorspace (sqm)	6,400	0	-6,400	-20.0	21,333

Source: SGS Economics and Planning (2022-23)

Conclusions

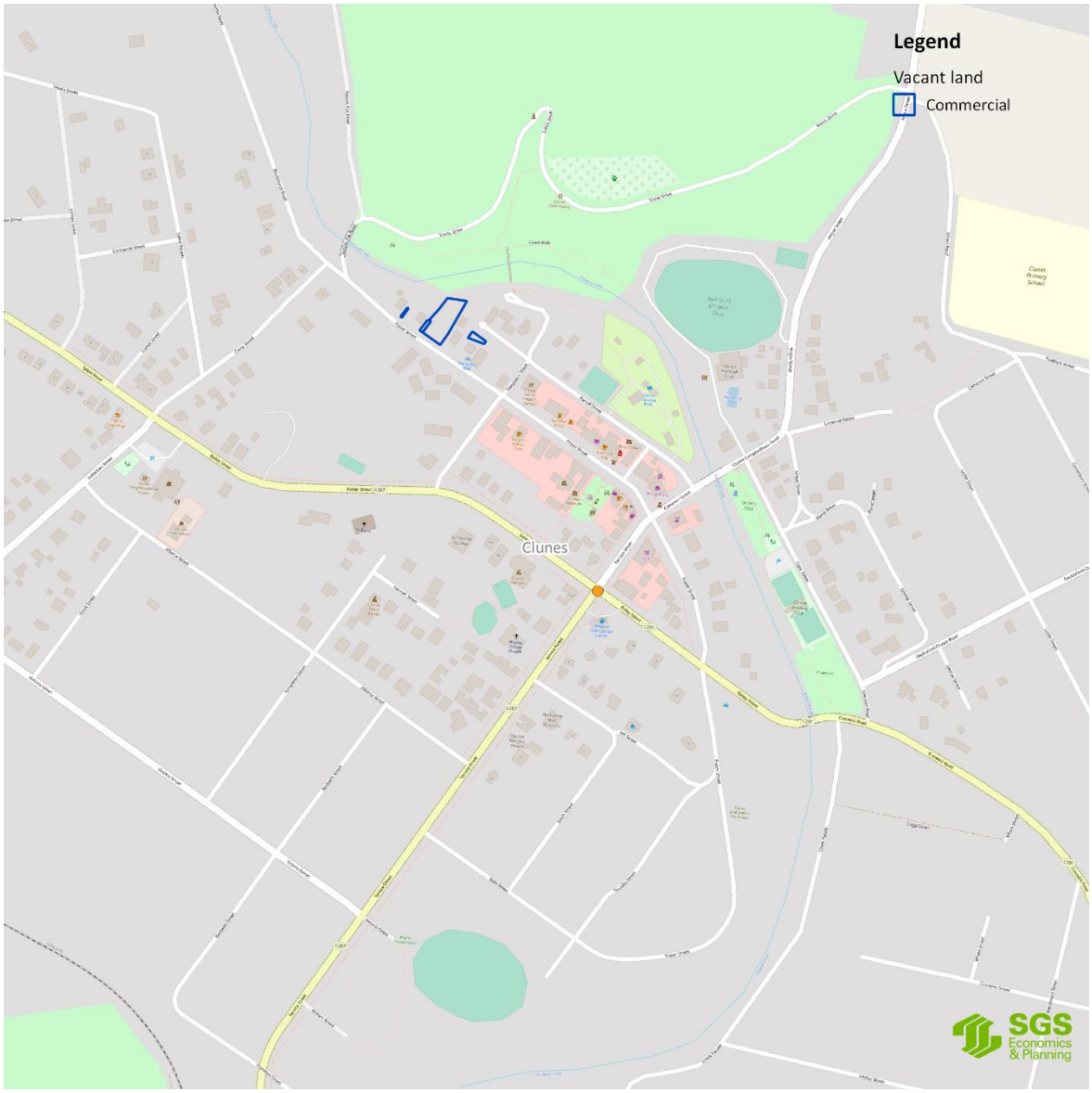
In consideration of the above, the following conclusions are drawn for the capacity and demand balance of residential, commercial, and industrial requirements to 2041. In the "traffic light system", green indicates no action, yellow indicates some consideration, and red indicates further action being required.

TABLE 33: CAPACITY AND DEMAND CONCLUSIONS - CLUNES

Use	Conclusion
Residential	Sufficient capacity beyond 2041 to meet growth objectives, however only with a small surplus. Further opportunities should be investigated, given there are shortfalls elsewhere in the Shire and constraints with infrastructure.
Commercial	Sufficient capacity beyond 2041, modest demand forecast.
Industrial	No capacity, modest growth – a small industrial area of approx. 2-3ha required.

Source: SGS Economics and Planning (2022-23)

FIGURE 7: EMPLOYMENT LAND CAPACITY IN CLUNES



Source: SGS Economics and Planning

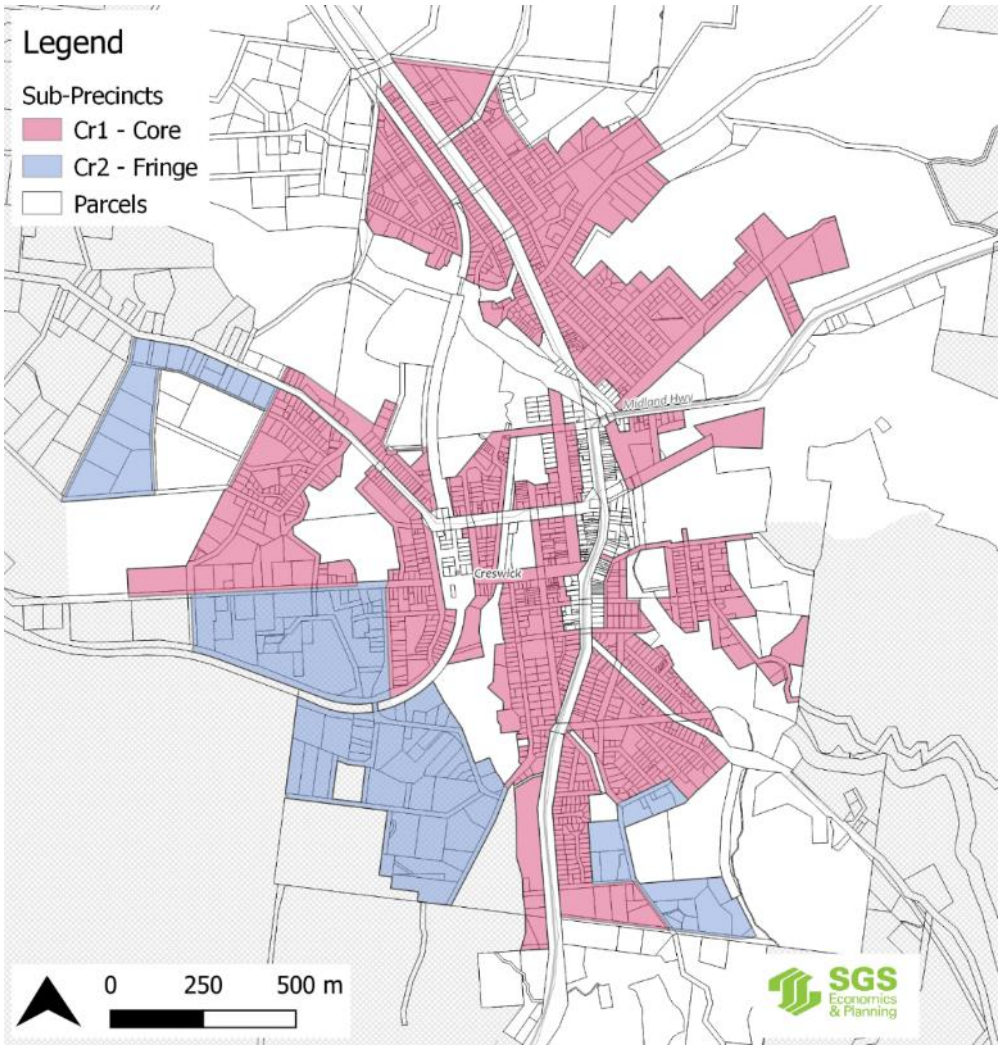
Creswick

Introduction

This section details the residential, commercial, and industrial capacity and demand considerations for Creswick to 2041. It is intended to support structure planning and sustainable growth or other solutions in the case of any gaps.

Residential capacity and demand recommendations

FIGURE 8: CONTEXT MAP – CRESWICK



Source: SGS Economics and Planning (2022-23)

Realisable housing capacity by sub-precinct (corresponding to GRZ in the core and LDRZ on the fringe) was calculated for both vacant lots and non-vacant lots that could be subdivided according to current planning controls. This is detailed in the table below.

TABLE 34: HOUSING CAPACITY TO 2041 – CRESWICK

Location		Capacity (vacant)	Capacity (subdivision)	Total	Comment
Established infill (including backfilling of vacant lots)					
Cr1	Core	117	200	317	Subdivision capacity in core limited to past development trends + allowance for changing demographics.
Cr2	Fringe	6	3	9	Vacant + subdivision from Geoscape data + refined to account for limitations in sewerage. Some fringe LDRZ lots are vulnerable to bushfire and not suitable for increased residential densities.
Total capacity		**123**	**203**	**326**	

Source: SGS Economics and Planning (2022-23)

In comparing capacity and demand to 2041, Creswick shows a relatively significant shortfall in capacity to meet its future demand.

TABLE 35: RESIDENTIAL CAPACITY/DEMAND BALANCE TO 2041 – CRESWICK

	Demand 2021-41	Capacity	Capacity / Demand Balance
Number of Dwellings	545	326	-219

Source: SGS Economics and Planning (2022-23)

Commercial capacity and demand recommendations

Commercial floorspace demand to 2041 in Creswick will comprise 11,000 sqm in health and education, primarily health services for an ageing population.

There is sufficient commercial floorspace capacity to meet demand beyond 2041. The limited vacant development capacity is spread along Albert Street, the largest of which (assume a development capacity of 3,145 sqm over two stories) sits to the north of the Creswick Motel. However, there more than sufficient subdividable capacity to meet projected demand to 2041.

TABLE 36: COMMERCIAL CAPACITY/DEMAND BALANCE TO 2041 -CRESWICK

Commercial	Demand	Capacity	Balance	Years capacity past 2041	Implied land requirement (sqm)
Floorspace (sqm)	16,800	14,300	-2,500	-3.0	2,500

Source: SGS Economics and Planning (2022-23)

Industrial capacity and demand recommendations

With no industrial floorspace within the township of Creswick barring the Creswick landfill (which was excluded from these calculations as it is not currently feasible to develop that site), there is no

additional capacity for industrial floorspace. Demand for industrial floorspace is expected to remain stagnant to 2041, so this lack of vacant industrial land would not lead to a shortfall.

TABLE 37: INDUSTRIAL CAPACITY/DEMAND BALANCE – CRESWICK

Industrial	Demand	Capacity	Balance	Years capacity past 2041	Implied land requirement (sqm)
Floorspace (sqm)	0	0	0	-	-

Source: SGS Economics and Planning (2022-23)

Conclusions

In consideration of the above, the following conclusions are drawn for the capacity and demand balance of residential, commercial, and industrial requirements to 2041. In the "traffic light system", green indicates no action, yellow indicates some consideration, and red indicates further action being required.

TABLE 38: CAPACITY AND DEMAND CONCLUSIONS - CRESWICK

Use	Conclusion
Residential	Capacity shortfall by 2041, investigate future opportunities.
Commercial	Capacity shortfall by 2041; demand could be met by intensification and redevelopment but additional opportunities for modest commercial / retail floorspace in town centre should be considered in future structure planning.
Industrial	No capacity, but no demand forecast over the next 20 years. Nevertheless, provision could be made for a small industrial area (of say 1-2 ha) to facilitate local activity not anticipated by the forecasts.

Source: SGS Economics and Planning (2022-23)

FIGURE 9: EMPLOYMENT LAND CAPACITY IN CRESWICK

Source: SGS Economics and Planning

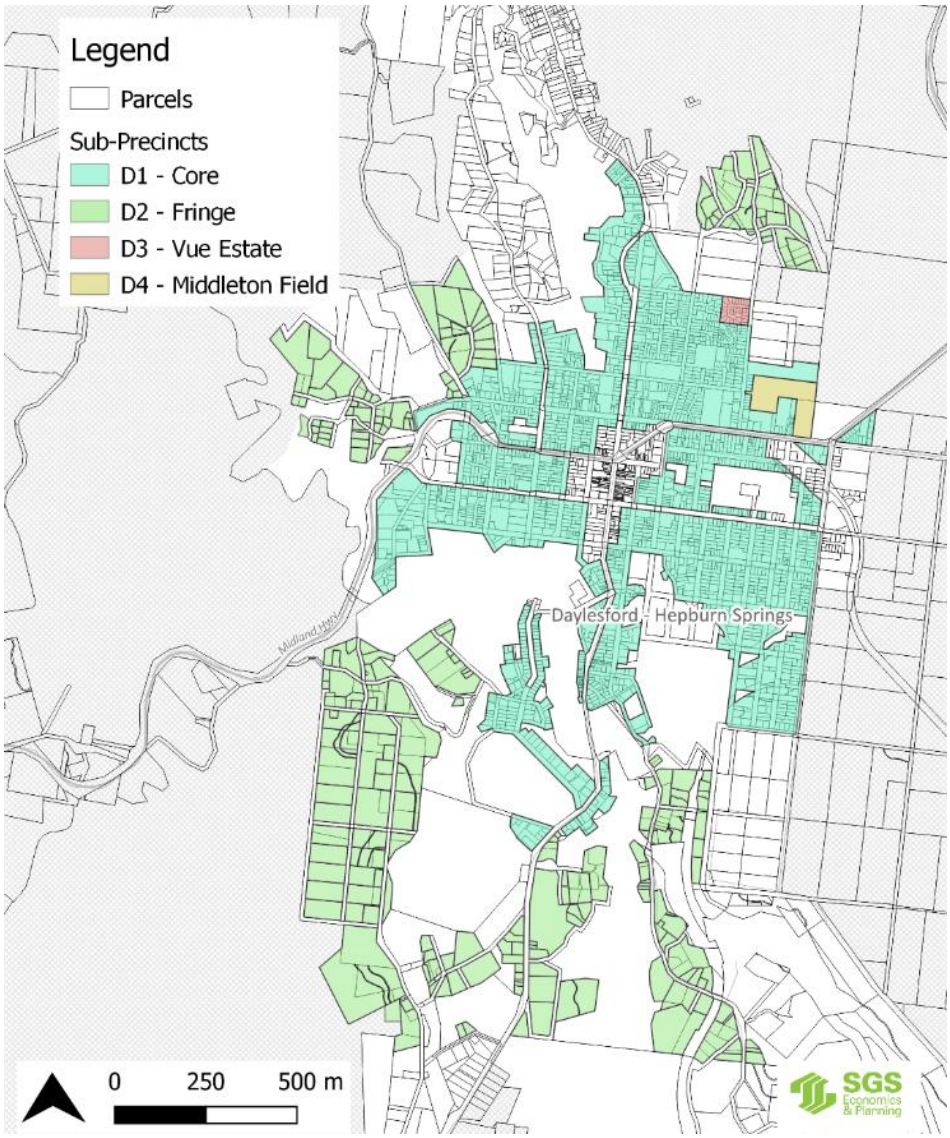
Daylesford-Hepburn

Introduction

This section details the residential, commercial, and industrial capacity and demand considerations for Daylesford and Hepburn Springs to 2041. It is intended to support structure planning and sustainable growth or other solutions in the case of any gaps.

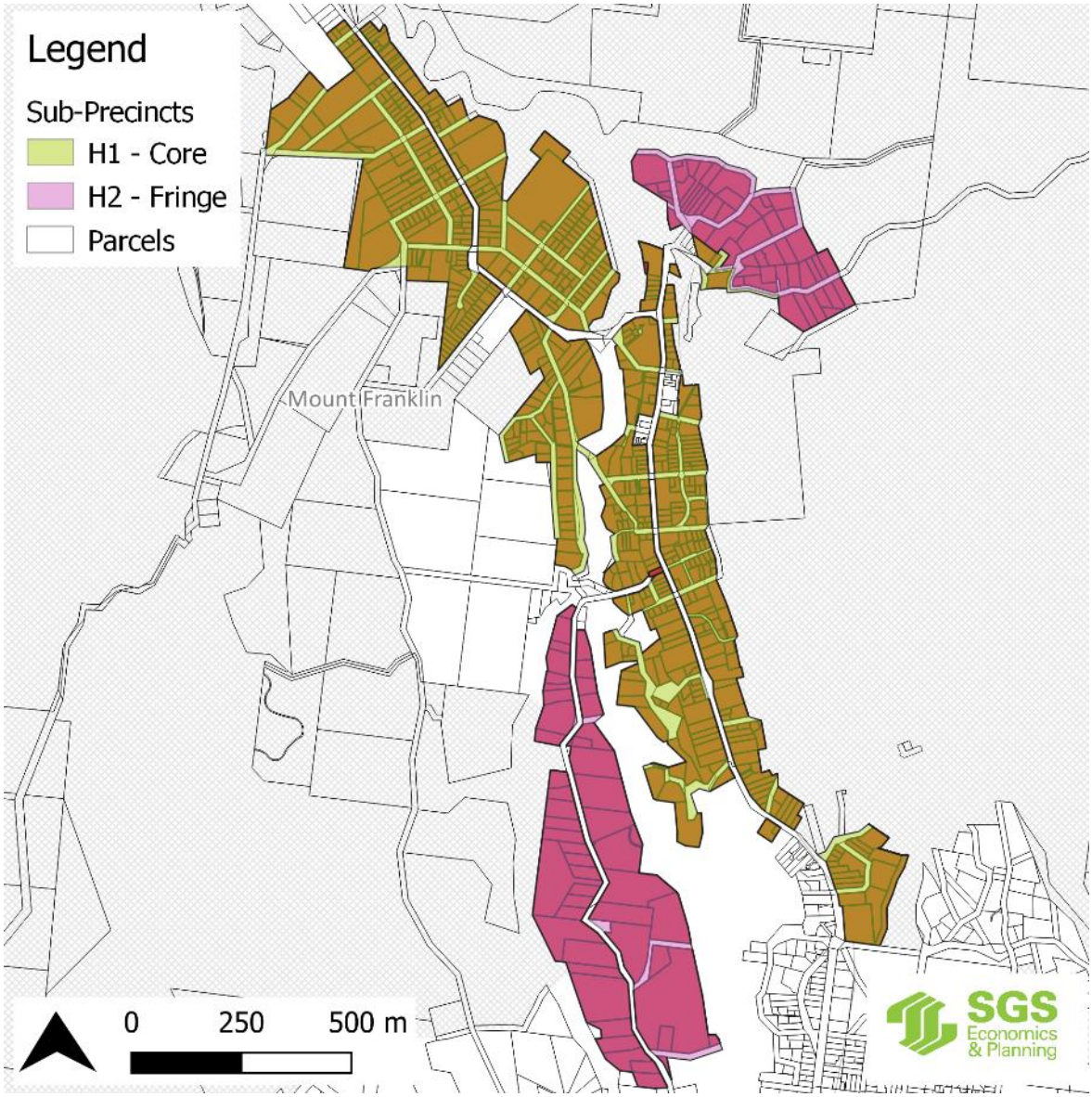
Residential capacity and demand recommendations

FIGURE 10: CONTEXT MAP – DAYLESFORD



Source: SGS Economics and Planning (2022-23)

FIGURE 11: CONTEXT MAP – HEPBURN SPRINGS



Source: SGS Economics and Planning (2022-23)

Realisable housing capacity by sub-precinct (corresponding to GRZ in the core and LDRZ on the fringe of both Daylesford and Hepburn Springs) was calculated for both vacant lots and non-vacant lots that could be subdivided according to current planning controls. This is detailed in the table below.

TABLE 39: HOUSING CAPACITY TO 2041 – DAYLESFORD-HEPBURN SPRINGS

Location		Capacity (vacant)	Capacity (subdivision)	Total	Comment
Established infill (including backfilling of vacant lots)					
D1	Core	261	700	961	Vacant + subdivision from Geoscape data + assumptions using current zoning. Hypothetical capacity is for 1,647 subdivided lots, leaving scope for intensification beyond. However, the D2 lots are vulnerable to bushfire and likely not suitable for residential intensification.
D2	Fringe	27	30	57	
H1	Core	76	200	276	Vacant + subdivision from Geoscape data + refined to account for limitations in sewerage. Subdivision capacity in core limited to past development trends + allowance for changing demographics.
H2	Fringe	6	0	6	Vacant + subdivision from Geoscape data + refined to account for limitations in sewerage.
Planned greenfield development					
D3	Vue Estate	5	0	5	Based on desktop research of remaining vacant lots
D4	Middleton Fields	0	62	62	Derived from planning application, + 20 for expansion site
Total capacity		**375**	**992**	**1,367**	

Source: SGS Economics and Planning (2022-23)

In comparing capacity and demand to 2041, there is sufficient scope to meet future demand, but there may be additional demand pressures across the Eastern portion of the Shire. Only about half of modelled capacity is projected to be met by demand so the town can potentially accommodate some unmet demand from elsewhere in the Shire.

TABLE 40: RESIDENTIAL CAPACITY/DEMAND BALANCE TO 2041 – DAYLESFORD-HEPBURN SPRINGS

	Demand 2021-41	Capacity	Capacity/ Demand Balance
Number of Dwellings	681	1,367	686

Source: SGS Economics and Planning (2022-23)

Commercial capacity and demand recommendations

Commercial floorspace demand to 2041 in Daylesford-Hepburn Springs will make up over half of the shire's total demand, primarily for health services for an ageing population. As the economic hub of the region, employment is expected to be concentrated here.

There is expected to be a significant shortfall of commercial floorspace capacity. The potential development capacity is spread along sites on Vincent and Howe Streets in Daylesford, and Main Road in Hepburn-Hepburn Springs. This assumes a site cover of 50%, and two stories of commercial

development in keeping with local character. The demand for commercial employment land in Daylesford-Hepburn is greater than the capacity of vacant lots in commercial zones in the entire LGA, so could not be covered by additional capacity in other townships. Subdividable capacity will not be able to cover the excess demand unmet by vacant lots either.

TABLE 41: COMMERCIAL CAPACITY/DEMAND BALANCE – DAYLESFORD-HEPBURN SPRINGS

Commercial	Demand	Capacity	Balance	Years capacity past 2041	Implied land requirement (sqm)
Floorspace (sqm)	33,300	18,100	-15,200	-9.1	15,200

Source: SGS Economics and Planning (2022-23)

Industrial capacity and demand recommendations

There is a shortfall in capacity across Daylesford-Hepburn for industrial floorspace, with very little vacant industrial land. Some of the excess demand may be able to be covered in Trentham, however, when including the demand for industrial land outside of township boundaries but within the catchment of Daylesford-Hepburn Springs, the shortfall is not one that could be covered by vacant industrial land.

TABLE 42: INDUSTRIAL CAPACITY/DEMAND BALANCE – DAYLESFORD-HEPBURN SPRINGS

Industrial	Demand	Capacity	Balance	Years capacity past 2041	Implied land requirement (sqm)
Floorspace (sqm)	12,000	1,400	-10,600	-17.7	35,333

Source: SGS Economics and Planning (2022-23)

Conclusions

In consideration of the above, the following conclusions are drawn for the capacity and demand balance of residential, commercial, and industrial requirements to 2041. In the "traffic light system", green indicates no action, yellow indicates some consideration, and red indicates further action being required.

TABLE 43: CAPACITY AND DEMAND CONCLUSIONS – DAYLESFORD-HEPBURN SPRINGS

Use	Conclusion
Residential	There will continue to be strong demand for dwellings to 2041, including some overflow development from constrained towns in eastern settlements and towns under a "policy-on" scenario. Investigate opportunities for infill and medium-long term development in Daylesford (noting limits to further growth in Hepburn Springs).
Commercial	Capacity shortfall in next 10 years. Demand could be met through redevelopment; additional opportunities for modest commercial / retail floorspace expansion in town centre should be considered in future planning.

Industrial	Shortfall in short term (within say 5 years) due to limited vacant capacity – investigate opportunities for expansion of 5-6 ha including absorbing Glenlyon demand – subject to understanding developability of existing Trentham area.

Source: SGS Economics and Planning (2022-23)

FIGURE 12: EMPLOYMENT LAND CAPACITY IN DAYLESFORD-HEPBURN

Source: SGS Economics and Planning

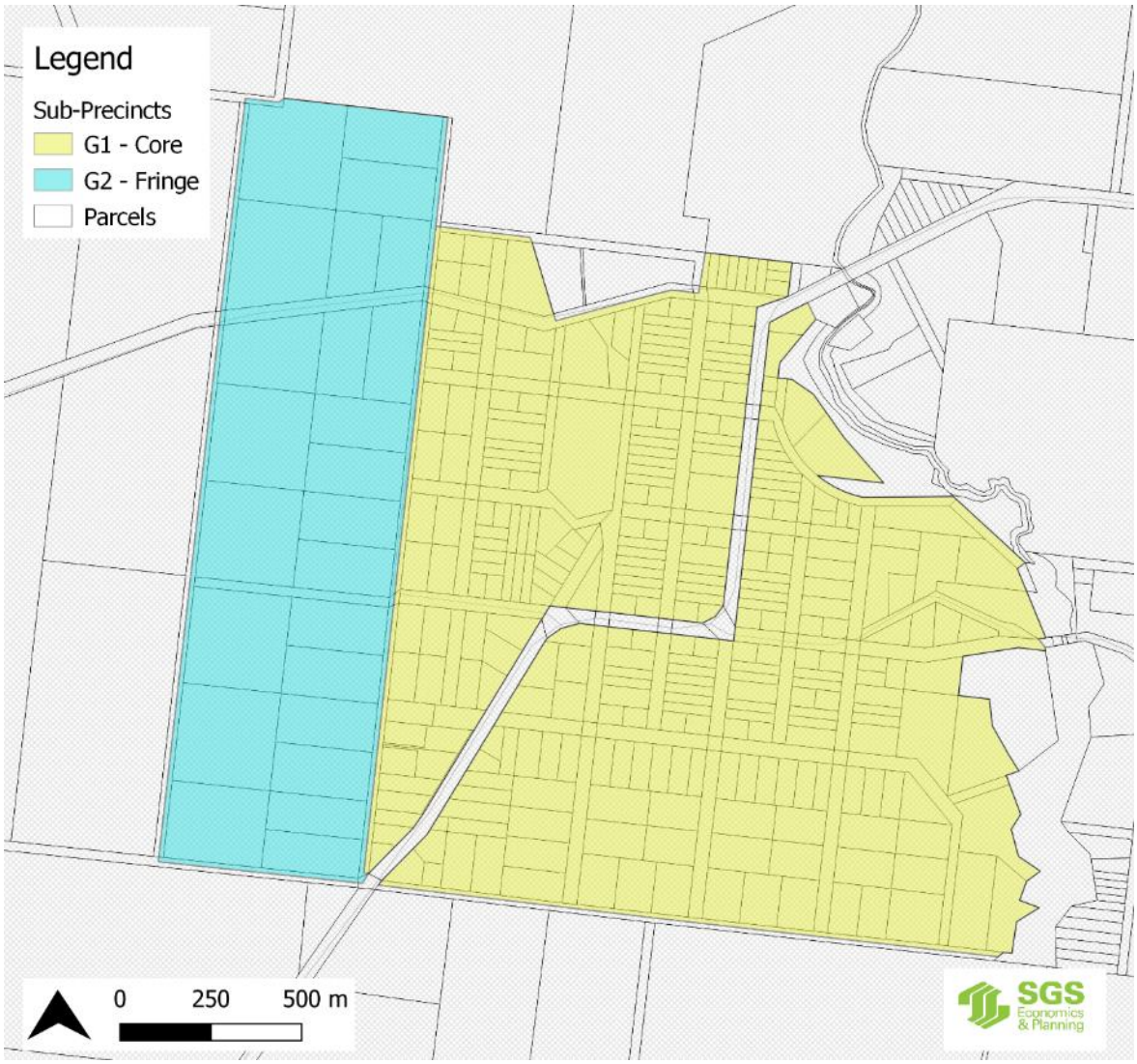
Glenlyon

Introduction

This section details the residential, commercial, and industrial capacity and demand considerations for Glenlyon to 2041. It is intended to support structure planning and sustainable growth or other solutions in the case of any gaps.

Residential capacity and demand recommendations

FIGURE 13: CONTEXT MAP – GLENLYON



Source: SGS Economics and Planning (2022-23)

Realisable housing capacity by sub-precinct (corresponding to Township Zone in the core and Rural Living Zone on the fringe) was calculated for both vacant lots and non-vacant lots that could be subdivided according to current planning controls. This is detailed in the table below.

TABLE 44: HOUSING CAPACITY TO 2041 – GLENLYON

Location		Capacity (vacant)	Capacity (subdivision)	Total	Comment
Established infill (including backfilling of vacant lots)					
G1	Core	37	3	40	Vacant + subdivision from Geoscape data + refined to account for limitations in sewerage
G2	Fringe	-	7	7	
Total capacity		**37**	**10**	**47**	

In comparing capacity and demand to 2041, there is not sufficient capacity to meet future demand past 2041, although this shortfall is minor. Expanding capacity in Glenlyon is not proposed.

TABLE 45: RESIDENTIAL CAPACITY/DEMAND BALANCE TO 2041 – GLENLYON

	Demand 2021-41	Capacity	Capacity/Demand Balance
Number of Dwellings	54	47	-7

Source: SGS Economics and Planning (2022-23)

Commercial capacity and demand recommendations

With no commercial floorspace within the township of Glenlyon (apart from the popular General Store), there is no obvious additional potential for commercial floorspace. A demand of only 2,400 sqm, while not a significant shortfall could not necessarily be met by additional capacity in adjacent townships, as those townships generally suffer from similar shortfalls.

TABLE 46: COMMERCIAL CAPACITY/DEMAND BALANCE – GLENLYON

Commercial	Demand	Capacity	Balance	Years capacity past 2041	Implied land requirement (sqm)
Floorspace (sqm)	2,400	0	-2,400	-20.0	2,400

Source: SGS Economics and Planning (2022-23)

Industrial capacity and demand recommendations

With no industrial areas within the township of Glenlyon and no plausible industrial expansion areas, there is no additional capacity for industrial floorspace. With 10,400 sqm of demand (including within the Glenlyon catchment but outside township boundaries), the shortfall is fairly significant, and would potentially have to be accommodated in Trentham, where there is excess vacant industrial capacity. However, the viability of future industrial demand being accommodated in the area is tempered by the lack of reticulated water and sewerage in Glenlyon, as most homes rely on ground water and rain water for drinking.

TABLE 47: INDUSTRIAL CAPACITY/DEMAND BALANCE - GLENLYON

Industrial	Demand	Capacity	Balance	Years capacity past 2041	Implied land requirement (sqm)
Floorspace (sqm)	6,400	0	-6,400	-20.0	21,333

Source: SGS Economics and Planning (2022-23)

Conclusions

In consideration of the above, the following conclusions are drawn for the capacity - demand balance of residential, commercial, and industrial requirements to 2041. In the "traffic light system", green indicates no action, yellow indicates some consideration, and red indicates further action being required.

TABLE 48: CAPACITY AND DEMAND CONCLUSIONS - GLENLYON

Use	Conclusion
Residential	No additional capacity beyond 2041, limit future growth.
Commercial	No capacity, while commercial demand is expected to marginally increase to 2041, so slight shortfall. Likely to be accommodated without rezoning.
Industrial	No capacity, increase in demand for industrial land expected to 2041; but could be met in Trentham and/or Daylesford.

Source: SGS Economics and Planning (2022-23)

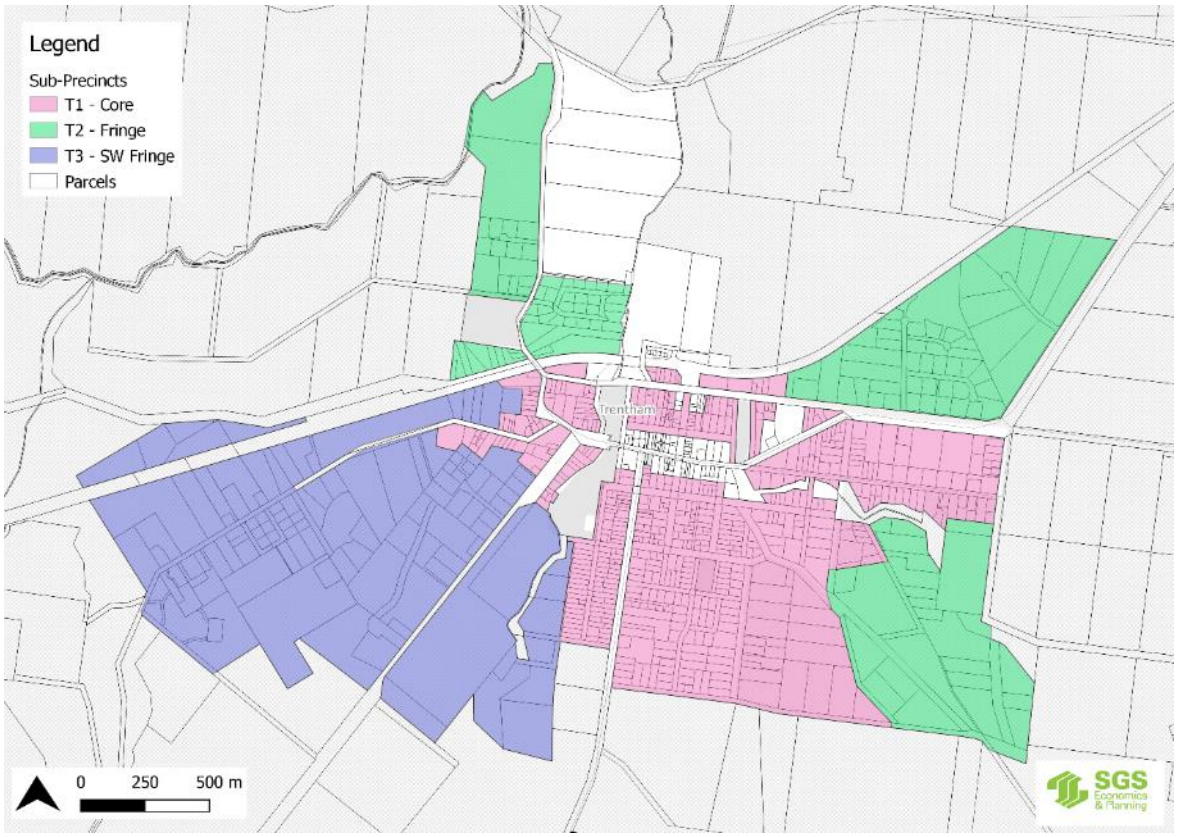
Trentham

Introduction

This section details the residential, commercial, and industrial capacity and demand considerations in Trentham to 2041. It is intended to support structure planning and sustainable growth or other solutions in the case of any gaps.

Residential capacity and demand recommendations

FIGURE 14: CONTEXT MAP – TRENTHAM



Source: SGS Economics and Planning (2022-23)

Housing capacity by sub-precinct (corresponding to NRZ in the core and LDRZ on the fringe), realisable capacity was calculated for both vacant lots, and non-vacant lots that could be subdivided according to current planning controls. This is detailed in the table below.

TABLE 49: HOUSING CAPACITY TO 2041 – TRENTHAM

Location		Capacity (vacant)	Capacity (subdivision)	Total	Comment
Established infill (including backfilling of vacant lots)					
T1	Core	49	2	51	Vacant + subdivision from Geoscape data + refined to account for limitations in sewerage
T2	Fringe	19	21	40	
T3	SW Fringe	4	25	29	
Total Capacity		**72**	**48**	**120**	

Source: SGS Economics and Planning (2022-23)

In comparing capacity and demand to 2041, there appears to be insufficient capacity to meet future demand. Utilising the available capacity in Trentham depends on effective and efficient intensification in the SW Fringe sub-area (zoned LDRZ). This area should be subject to careful planning to include better connections and design and settlement outcomes. Expanding capacity with new residential areas on the edge of Trentham is not proposed due to more intensive farming zones in the north and Public Conservation and Resource Zone (PCRZ) to the south. Trentham also does not have the same public infrastructure to support intensive population growth. Therefore, it is recommended that existing zoned land be carefully considered.

TABLE 50: RESIDENTIAL CAPACITY/DEMAND BALANCE TO 2041 – TRENTHAM

	Demand 2021-41	Capacity	Capacity/Demand Balance
Number of Dwellings	272	120	-152

Source: SGS Economics and Planning (2022-23)

Commercial capacity and demand recommendations

There is demand for around 3,900sqm of commercial floorspace to 2041 in Trentham, comprising a relatively even split of population services, knowledge services, and health and education floorspace.

There is sufficient commercial floorspace capacity to meet demand beyond 2041. There are only four vacant lots of commercial land in Trentham, and only one which is over 1,000 sqm, so the opportunity to meet the demand for commercial employment is limited. However, the subdividable capacity should be more than enough to cover commercial demand.

TABLE 51: COMMERCIAL CAPACITY/DEMAND BALANCE - TRENTHAM

Commercial	Demand	Capacity	Balance	Years capacity past 2041	Implied land requirement (sqm)
Floorspace (sqm)	3,900	5,300	1,400	7.2	NA

Source: SGS Economics and Planning (2022-23)

Industrial capacity and demand recommendations

There is sufficient industrial floorspace capacity to meet demand beyond 2041. Trentham has the greatest endowment of vacant industrial land in the shire, with over 80% of industrial capacity in the

LGA located here. The potential development capacity is spread along Albert Street, the largest of which comprises now vacant industrial land at 6-8 Victoria Street with a potential development capacity of 2,500 sqm assuming one storey and 30% site cover. Notably, this site is contested, and despite being vacant, it is not necessarily ready or able to be developed. Nevertheless, demand for industrial land is not projected grow over the next 20 years, so there is potential to explore other uses in future studies.

TABLE 52: INDUSTRIAL CAPACITY/DEMAND BALANCE - TRENTHAM

Industrial	Demand	Capacity	Balance	Years capacity past 2041	Implied land requirement (sqm)
Floorspace (sqm)	0	7,200	7,200	-	NA

Source: SGS Economics and Planning (2022-23)

Conclusions

In consideration of the above, the following conclusions are drawn for the capacity and demand balance of residential, commercial, and industrial requirements to 2041. In the "traffic light system", green indicates no action, yellow indicates some consideration, and red indicates further action being required.

TABLE 53: CAPACITY AND DEMAND CONCLUSIONS - TRENTHAM

Use	Conclusion
Residential	Capacity shortfall by 2041, investigate future opportunities that consider existing services and infrastructure. For example, consider orderly development and intensification in the south west fringe area.
Commercial	Sufficient capacity to 2041 and beyond.
Industrial	Shortfall in short term (within say 5 years) due to limited vacant capacity – investigate opportunities for expansion of 5-6 ha including absorbing Glenlyon demand – subject to understanding developability of existing Trentham area.

Source: SGS Economics and Planning (2022-23)

FIGURE 15: EMPLOYMENT LAND CAPACITY IN TRENTHAM

Source: SGS Economics and Planning (of note, the "Arch Wood Site" at Station Street has been excluded from this analysis as it is a major hazard facility. This should be subject to an analysis outside of this report due to site/ground contamination considerations).

Appendix B: Land use capacity methodology

Housing capacity modelling

SGS's housing capacity approach uses a four-step process to calculate local housing capacity. Each step of this method involves assumptions about what kinds of housing development are permissible, reasonable, and most likely to occur. In contrast to centralised capacity tools, SGS develops specific assumptions for individual areas based on recent development trends and data and local planning controls in consultation with Council planners.

The model is typically applied to infill areas but can be supplemented by analysis of potential greenfield areas to identify total housing capacity in the event that both some infill and greenfield development is anticipated. The need for this would be resolved with Council officers during the project's inception phase. It may be that renewal and redevelopment in some infill areas is so modest that they could be excluded from close examination, whether based on local heritage values, or due to other servicing constraints (for example). Areas of growth potential would also be highlighted at the start of the project based on discussions with Council officers, and then verified through the capacity analysis modelling considering servicing, environmental, landscape and other development constraints as necessary.

FIGURE 16: SGS HOUSING CAPACITY MODEL

STEP 1: NET LAND AREA IDENTIFICATION

Removal of land that cannot be developed for residential purposes.

E.g. roads, footpaths

STEP 2: AVAILABLE LAND ASSESSMENT

Exclusion of lots that would not be able, or would be unlikely, to yield additional housing beyond what already exists.

E.g. Small lot size, recently developed sites, heritage status

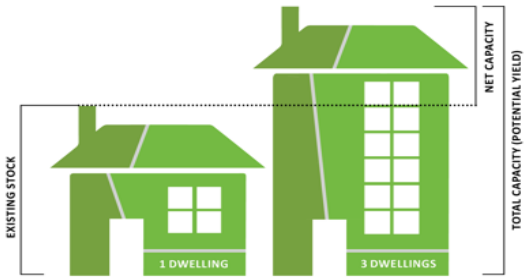
STEP 3: POTENTIAL YIELD ASSESSMENT

Density and yield assumptions (using statutory height limits, setbacks, garden area requirements etc.) are applied to lots defined as available.

The total 'yield' for individual sites is then compared to the current number of dwellings on each lot to determine net capacity.

STEP 4: NET CAPACITY

Existing dwellings are subtracted from potential yield to calculate net capacity



Source: SGS Economics and Planning (2021)

In greenfield areas, housing capacity is usually estimated based on the expected overall housing development density, which is influenced by subdivision lot sizes and the amount of land which will be devoted to roads and other parts of the public domain. Assumptions regarding development density will be developed from profiling of recent development as well as from local planning controls. For Hepburn Shire, the following density assumptions were used:

- 1 dwelling per hectare in Township Zones/Neighbourhood Residential Zone;
- 1 dwelling per 2 hectares in the Rural Living Zone; and
- 1 dwelling per 400sqm in the General Residential Zone and Residential Zones.

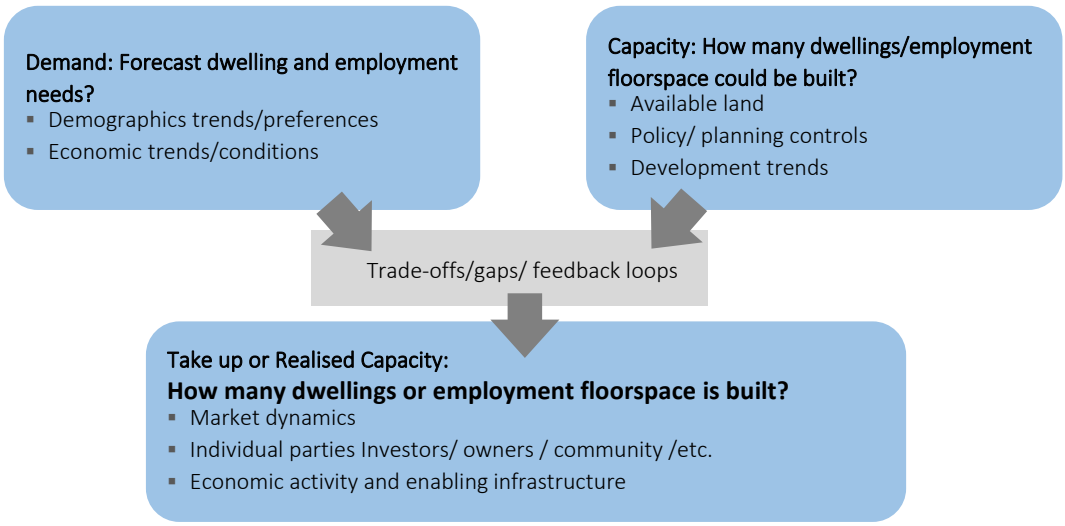
Employment floorspace and land methodology

Model

The following provides and overview of the analysis approach used.

- Demand assessment of commercial floorspace needs based on the latest economic trends and population projections for Hepburn Shire.
- Capacity assessment of employment floorspace based on current and proposed planning controls. This included a sensitivity around the amount of first floor floorspace available for employment uses.
- Realisation, alignment, and recommendations compares demand and capacity to estimate likely take up for each centre. Any gaps and other recommendations are then highlighted to inform centre planning.

FIGURE 17: DEMAND, CAPACITY AND TAKE UP APPROACH



Source: SGS Economics and Planning (2021)

Modern employment uses increasingly operate on a continuum as they adapt to changing consumer needs and operational models.

SGS Small Area Model (SAM) and floorspace needs

The demand for commercial and retail services floorspace is established using the SGS Small Area Model, which provides employment forecasts at a fine grain geography.

SGS SAM creates a suite of forecast variables which are:

- Estimated using a combination of 'top-down' and 'bottom-up' methodologies, ensuring that macroeconomic drivers are integrated with micro spatial data and trends
- Disaggregated to a fine-grain spatial scale, allowing for custom geographies to be defined based on the scope of analysis, such as an activity centre or renewal precinct

One of SAM's key outputs is employment by industry, by location of the job. This is the key input for forecasting demand for commercial and retail services floorspace.

Employment floorspace capacity

Capacity is a measure of how much housing or employment floorspace could (theoretically) be built under current planning controls (including structure plans) if all opportunities were full realised.

It is a theoretical assessment of the maximum number of dwellings, and maximum amount of employment floorspace that could be developed and is intended to be indicative for planning, rather than absolute.

Realising theoretical capacity requires all existing opportunities to be fully realised. It does not consider market feasibility, or an owner's willingness to develop.

The first step of capacity modelling is identifying all the land available for development. The second step is applying potential yield assumptions to available land to assess how much additional housing or employment floorspace could be developed. These steps are described below.

Available land

Available land represents all land that has the potential to generate additional housing and or employment floor space capacity for the towns assessed in Hepburn Shire. This does not mean that it is necessarily feasible or that property owners are ready or willing to develop these sites. Typically, only a small portion of available lots are likely to be developed in any one year.

Net land area, is defined as all land that is able to be developed for commercial and retail purposes, was derived by taking all applicable zones that could have the capacity for providing additional floorspace.

Available land is then calculated by excluding lots with site-specific limitations (e.g., individual heritage significance) from net land area using Council's rates database and DELWP's (now DTP's) Housing Development Data.

Development yield (total capacity)

Using the outputs of the lot level available land analysis, a series of yield and built form assumptions based on both prescriptive controls (i.e., heights, setbacks), the planning intent of each zone (i.e.,

employment at ground floor and mixed use) or the planning intent of structure/framework plans were applied.

Assumed building typologies are translated into floorspace development ratios which are then applied to the available land parcel areas. This includes assumptions around site coverage, building efficiency and share of floorspace allocated to employment uses.

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