



AM C231: EVIDENCE STATEMENT OF ANDREW SPENCER

FINAL
1 AUGUST 2019

Prepared on behalf of
City of Yarra

Independent
insight.



SGS Economics and Planning Pty Ltd
ACN 007 437 729
www.sgsep.com.au
Offices in Canberra, Hobart, Melbourne, Sydney

TABLE OF CONTENTS

SUMMARY	1
1. INTRODUCTION	2
2. IMPACT OF THE AMENDMENT	5
3. CONCLUSION	14
APPENDIX A: PLANNING PANELS VICTORIA EXPERT WITNESS DECLARATION	15
APPENDIX B: CV	17
APPENDIX C: INSTRUCTIONS	20
APPENDIX D: SEES EMPLOYMENT CAPACITY ASSESSMENT APPROACH AND ASSUMPTIONS	21

LIST OF TABLES

TABLE 1: CAPACITY ASSUMPTIONS – EXHIBITED VERSION OF DDO16	8
TABLE 2: CAPACITY ASSUMPTIONS – PREFERRED VERSION OF DDO16	9
TABLE 3: CAPACITY ESTIMATE – EXHIBITED VERSION OF DDO16	9
TABLE 4: CAPACITY ESTIMATE – PREFERRED VERSION OF DDO16	9
TABLE 5: CAPACITY ESTIMATES – YARRA'S ACTIVITY CENTRES	10
TABLE 6: DWELLINGS SUPPLY ESTIMATES – QUEENS PARADE	11
TABLE 7: SEES EMPLOYMENT FLOOR SPACE CAPACITY ASSESSMENT ASSUMPTIONS	21

SUMMARY

1. I have been instructed by Maddocks Lawyers, acting on behalf of Yarra City Council (Council), to provide expert evidence in relation to Amendment C231 to the Yarra Planning Scheme.
2. A summary of the key points from my evidence is provided below.
3. I have been instructed to consider the impact of the proposed Amendment on the demand and realisation of residential and commercial development within the City of Yarra and the Queens Parade precincts.
4. In relation to residential development I find that:
 - Demand for dwelling growth for Queens Parade and surrounds between 2016 and 2031 will be in the order of 780 additional dwellings.
 - The capacity for dwellings in the Exhibited Version of DDO16 is estimated to be 1,920 dwellings.
 - The capacity for dwellings in the Preferred Version of DDO16 is estimated to be 1,650 dwellings.
 - A further 1,100 dwellings are planned for the Gasworks site, which is not affected by the Amendment.
 - Therefore, there is considerable capacity for new dwellings in Queens Parade (based on either the Exhibited or Preferred Versions of DDO16) compared to demand.
 - Furthermore, there is also considerable capacity for new dwellings across Yarra's activity centres broadly, compared to forecast dwelling demand across Yarra to 2031.
5. In relation to commercial development I find that:
 - Forecast employment growth in employment for Queens Parade and surrounds between 2016 and 2031 is in the order 900 jobs.
 - Assuming a mix of office, health and retail employment accommodating this growth would require approximately 27,000 square metres of additional employment floor space.
 - The total capacity for employment floor space in the Exhibited Version of DDO16 is estimated to be 52,100 square metres
 - The total capacity for employment floor space in the Preferred Version of DDO16 is estimated to be 53,200 square metres
 - The demand for employment floor space to 2031 is therefore approximately 50% of the identified capacity. This suggests there is ample capacity within the Queens Parade precincts to accommodate the forecast growth in employment.
 - A further 4,300 square metres of employment floor space, a child care centre and a secondary school are planned for the Gasworks site.
6. I conclude that the Amendment provides ample capacity for dwelling and employment floor space compared to the likely demand to 2031. Although the Preferred Version of DDO16 provides less capacity than the Exhibited Version, I do not believe this reduction in capacity will have a noticeable effect on the realisation of dwellings or employment floor space in the Queens Parade precincts or the City of Yarra broadly, in the medium to longer term. On this basis, I support the Preferred Version of the Amendment.

1. INTRODUCTION

7. Credentials

8. My full name is Andrew Frank Spencer and I am a Senior Associate at SGS Economics & Planning Pty Ltd (SGS), based in the firm's Melbourne office at Level 14, 222 Exhibition Street, Melbourne, Victoria.
9. I hold the following academic qualifications:
 - Bachelor of Science (Geography) University of New South Wales, 2001
 - Bachelor of Arts (Comparative Development) University of New South Wales, 2001
 - Master of Urban Design, Sydney University, 2009
 - Master of Analytics, RMIT University (in progress)
10. I am an urban planner and urban designer with expertise in urban economics. Over the past 19 years I have contributed to a wide range of housing, employment, strategic planning, urban design and urban economics assignments for local, state and federal governments and the private sector. I have worked in this capacity in New South Wales for ten years and Victoria for the past nine years.
11. I have previously presented expert evidence at Planning Panels Victoria hearings.
12. Additional information regarding my qualifications and experience is included in Attachment B.

13. Instructions

14. I have been instructed by Maddocks Lawyers, acting on behalf of Yarra City Council, to provide expert evidence in relation to Amendment C231 to the Yarra Planning Scheme.
15. My instructions were set out in a written brief from Maddocks Lawyers and are reproduced at Appendix C.
16. The primary matters I have been instructed to consider relate to the impact of the proposed Amendment on the realisation of residential development and commercial development in the City of Yarra and the Queens Parade precincts.

17. Overview of evidence

18. The substantive content of my evidence addresses the issue of the likely impact of the proposed Amendment on the realisation of residential development and commercial development in the City of Yarra and the Queens Parade precincts.
19. The opinions in this expert evidence statement are my own.

20. Summary of previous studies undertaken for Council

21. SGS Economics and Planning have provided advice to Council on a range of economic and planning matters over the period 2014 to 2019 that I have been involved in.
22. In 2014 SGS Economics and Planning were engaged by Council to prepare the Yarra Spatial Economic and Employment Strategy (SEES). The purpose of this study was to provide analysis and advice to aid Council to understand and capitalise on Yarra's economic strengths and respond to key trends and economic drivers over the next 10 to 15 years.
23. The SEES included estimates of floor space demand to 2031 and employment floor space capacity, for Yarra's employment precincts.
24. The SEES can be thought of as a 'future proofing strategy' for employment in Yarra. For the most part it recommends Yarra's employment land be kept for employment, retaining zones that prohibit residential development.
25. The corollary of this strategy is Council's intention to host the majority of new housing development in and around activity centres, where residents will benefit from access to transport, services and facilities.
26. The SEES was finalised in 2018. The process of drafting and finalising the SEES included two stages of community consultation. Early in 2018 the employment forecasts in the SEES were updated, drawing on updated VIF data and data from the 2016 ABS Census, resulting in an increase in the employment growth forecasts.
27. Later in 2018 SGS developed a model for Council to assess the residential growth potential in Yarra's activity centres. The Residential Capacity in Activity Centres (RCAC) model is an interactive spreadsheet designed to interrogate development capacity and take-up (that is, the realisation of new development). The model allows various parameters to be adjusted and the results are immediately updated. User adjustable parameters include assumptions concerning land available for redevelopment, proposed building heights, floor space mix (residential vs non-residential), site cover and building efficiency.
28. SGS produced a report dated June 2018 titled "Residential Capacity in Activity Centres" which reported on the preliminary outputs of the RCAC model.
29. In November 2018 I prepared an expert evidence statement in relation to Amendment C220 (the Johnston Street Structure Plan). Revised capacity modelling for Yarra's other activity centres was undertaken in preparing that evidence statement and the findings of this analysis are reproduced, in part, below.

30. Overview of Amendment C231

31. Amendment C231 to the Yarra Planning Scheme proposes to:
 - Introduce Schedule 16 to the Design and Development Overlay (DDO16) to five precincts along Queens Parade
 - Rezone land at 660-668 Smith Street and 1-14 Queens Parade from Commercial 2 Zone to Commercial 1 Zone
 - Apply the Heritage Overlay to selected properties
 - Introduce a new reference document at Clause 22.02, being "Yarra High Streets: Statements of Significance by GJM Heritage October 2017 (updated November 2017)
 - Amend the heritage grading of selected properties, and
 - Amend the Incorporated Document, City of Yarra Review of Heritage Overlay Areas 2007, Appendix 8, Revised December 2017.

32. The purpose of the Amendment is described in the explanatory report as being "to introduce built form controls to manage changes along Queens Parade and guide the scale of future buildings to provide certainty about development outcomes."
33. In relation to my evidence, DDO16 is the most pertinent element of the Amendment as it contains a series of planning controls that will affect the scale and form of new development in the Queens Parade precincts. The DDO includes a combination of preferred and mandatory controls in relation to:
- Maximum overall building heights
 - Maximum street wall heights
 - Maximum street wall setbacks
 - Minimum upper level setbacks (above the street wall height)
 - Minimum setbacks to side and rear boundary setbacks.
34. These controls are both mandatory and preferred. For the purpose of assessing capacity within the Queens Parade precincts I have assumed that any numerical standards in relation to preferred controls would be adhered to.
35. The proposed rezoning of approximately 5,000 square metres of C2 zone land will reduce the area of land dedicated to employment uses but will increase opportunities for residential development.
- 36. Exhibited vs Preferred version of DDO16**
37. Council has exhibited a version of the DDO16 and received approximately 400 submissions. Council subsequently prepared a revised version of the DDO to respond to some of the issues raised. The most significant changes to the DDO in relation to my evidence is the reduction of building heights in Precincts 4 and 5.
38. I have estimated the floor space capacity of both the Exhibited Version of the DDO and the Preferred Version of the DDO.

2. IMPACT OF THE AMENDMENT

39. **Impact of the proposed Amendment on residential and commercial development in the City of Yarra and Queens Parade**
40. I have been asked to consider the impact of the proposed Amendment on residential and commercial development in the City of Yarra and the Queens Parade precincts.
41. In considering these matters I have:
- Considered the forecast demand for housing and employment for the 15 years from 2016 to 2031 in the City of Yarra and Queens Parade
 - Estimated the floor space capacity of the area that would be subject to DDO16
 - Considered floor space that has been provided in major developments since 2016
 - Considered existing planning permit approvals that are yet to be constructed
 - Considered capacity in the Gasworks site which is not subject to the Amendment but will contribute to the supply of housing and employment floor space, and
 - Consider rate of new residential development that would be required to balance supply with demand for the period 2016 to 2031.
42. My analyses draw on the existing SGS studies referred to above, the City of Yarra's Housing Strategy, a previous expert evidence statement prepared in relation to Amendment C220 (the Johnston Street Structure Plan) and revised capacity modelling that I have undertaken for the Queens Street Precincts based on the planning controls in DDO16.
43. **Demand for housing in the City of Yarra**
44. Victoria in the Future (VIF) forecasts from 2016, cited in the City of Yarra's Housing Strategy (2018), estimate that an additional 29,412 residents and 13,431 dwellings might be accommodated in the City of Yarra between 2016 and 2031.
45. Updated Victoria in the Future forecasts were released this year. These forecasts suggest that an additional 32,970 residents and 16,540 dwellings might be accommodated in the City of Yarra between 2016 and 2031 – slightly higher forecasts than the previous release.
46. To accommodate this level of growth Yarra would need to provide an average of 1,100 new dwellings, per annum, over that 15 year period.
47. The Housing Strategy notes that for the period 2005 to 2014 Yarra accommodated an average of 830 dwellings per annum. It also notes that between 2011 to 2015, the number of apartments approved in developments over four storeys was 4,904, indicating a significant number of apartments in the development pipeline.
48. The Housing Strategy does not include dwelling demand estimates by specific geographies (e.g. activity centres or suburbs) within Yarra. There are therefore no specific demand estimates for the precincts affected by the Amendment, or the broader locality around Queens Parade.

49. Demand for housing in the Queens Parade precincts

- 50. SGS routinely prepares small area land use forecasts for the State Government. The most recent forecasts were prepared in 2017 and are based on the 2016 Victoria in Future population projections. The purpose of the small area forecasts is to allocate growth forecasts for larger areas to smaller geographies in order to assist with future planning.
- 51. The small area forecast are derived by allocating forecast growth for larger geographies (generally ABS statistical area 2s) to smaller areas based on existing land uses, zoning, planned developments, demographics and growth trends.
- 52. The figure below shows the extent of SGS small areas that correspond with the precincts affected by the Amendment and their surrounds.
- 53. I have extracted forecasts of demand for housing and employment floor space for this broader area. As the small area forecast geographies do not align entirely with Queens Parade precincts, it is reasonable to assume that only a share of the identified growth will be accommodated in the area affected by the Amendment. However, it could also be argued that the majority of new dwelling and employment growth in this location is likely to be accommodated on land zoned Commercial 1 and Mixed Use (i.e. the areas affected by the Amendment) rather than within established residential areas with relatively small lot sizes.
- 54. The SGS small area land use forecasts are derived from the 14 areas identified in Figure 1 below. In 2016, these areas accommodated a total population of 4,350 people and 2,060 dwellings.
- 55. The forecast population and dwelling growth between 2016 and 2031 for these 14 areas is for 1,490 additional people and 780 additional dwellings.

FIGURE 1: SMALL AREA LAND USE FORECAST GEOGRAPHIES – QUEENS PARADE AND SURROUNDS



Source: SGSEP, 2019.

56. Recent developments

57. Two significant recent developments have been constructed in the Queens Parade precincts since 2016 (shown in lime green in Figure 1 above):

- A residential care facility at 217-241 Queens Parade of approximately 7,100 square metres (gross), accommodating 127 beds, and
- A mixed-use development at 243-247 Queens Parade of approximately 6,500 square metres (net), with 83 apartments and 90 square metres of retail floor space.

58. These developments have contributed in the order of 12,000 square metres of new floor space since 2016.

59. Recent planning approvals

60. There are three major developments with planning approvals in the Queens Parade precincts that are yet to be constructed:

- A mixed use development at 26-56 Queens Parade (Precinct 2A) of 263 dwellings and 496 square metres of commercial floor space
- A mixed use development at 81-89 Queens Parade (Precinct 2C) containing a supermarket, commercial office floor space and serviced apartments
- A mixed use development at 249-265 Queens Parade (Precinct 5C) of 115 dwellings.

61. If constructed, these developments would add in the order of 380 apartments, 110 serviced apartments, a 1,700 square metre supermarket and 4,500 square metres of new commercial floor space to the Queens Parade precincts.

62. Capacity for future development of the Gasworks site

63. Although outside the Queens Parade precincts, the Gasworks site is a significant renewal opportunity located between Precincts 2 and 3. The site, bounded by Queens Parade, Smith Street, Alexandra Parade and George Street, is approximately 38,000 square metres in area (highlighted in blue in Figure 1 above). Approximately 30,000 square metres of the site is Mixed Use Zone and the remainder is Public Use Zone.

64. The *Fitzroy Gasworks Master Plan Design Report* (November 2017) indicates that the site will accommodate a range of uses including:

- 1,100 apartments
- 4,300 square metres of employment floor space
- Community facilities including childcare and sports courts
- A vertical secondary school.

65. The redevelopment of the Gasworks site will thus provide a significant number of new dwellings and significant employment floor space.

66. Capacity for housing in the Queens Parade precincts

67. The City of Yarra's Housing Strategy includes a discussion of housing capacity in Chapter 8. The discussion of housing capacity in the Strategy does not actually include estimates of housing capacity but rather, forecasts of housing supply.

68. The Strategy describes the Residential Capacity in Activity Centre Model, which was prepared by SGS, and reports that the estimated supply of new dwellings between 2016 and 2031 across 12 Activity Centres alone could be in the order of 14,300 dwellings.

69. These supply estimates are based on the following assumptions:

- All dwellings in the development pipeline (at application stage, approved, or under construction) based on data from the 2017 Urban Development Program.
- The continuation of the rate of dwelling supply that occurred in activity centres in between 2011 to 2016, for the 15 years to 2031.

70. The Housing Strategy suggests that the estimated supply of dwellings in Queens Parade will be in the order of 1,900 dwellings, of which 1,300 dwellings will be supplied on the Gasworks site and the site at 26-52 Queens Parade.
71. Since the Residential Capacity in Activity Centres (RCAC) model was developed in the first half of 2018, planning for two Activity Centres (Johnston Street and Queens Parade) has progressed and the detailed built form controls for these two areas have been refined. As a consequence, the capacity modelling used in Council's Housing Strategy for these two centres has been superseded.
72. Revised estimates of capacity in the Johnston Street Activity Centre were provided in a previous expert evidence statement that I prepared in relation to Planning Scheme Amendment C220 in October 2018. The updated capacity estimates were based on the precinct-specific planning controls proposed in that Amendment.
73. In preparing the current evidence statement I have prepared revised capacity analysis for the Queens Parade precincts based on the precinct-specific planning controls set out in both the Exhibited and Preferred Versions of DDO16.
74. These capacity estimates are based on the assumptions set out in the tables below. The first table contains assumptions that reflect the planning controls in the Exhibited Version of the DDO16. The second table contains assumptions that reflect the planning controls in the Preferred Version of the DDO.
75. I have excluded the two recently developed sites at 217-241 Queens Parade and 243-247 Queens Parade from consideration in the capacity analysis as these sites are no longer available for development. I have however included those sites with existing permits that are as yet unbuilt and calculate their capacity based on the same assumptions as all other sites in the relevant precinct.
76. To estimate net floor space (being the occupied or 'saleable' floor space) from the estimated gross floor space (being the total building area that includes areas for access, circulation and services) I have applied a rate of 75%.

TABLE 1: CAPACITY ASSUMPTIONS – EXHIBITED VERSION OF DDO16

Precinct	Sub-precinct	Area (sqm)	Podium height (storeys)	Podium site coverage	Upper level height (storeys)	Upper level site coverage	Total height (storeys)	Non-residential floor space (floors)
Brunswick Street	1: 460 Brunswick+	783	2	90%	1	70%	3	1.0
Brunswick Street	1: All other sites	5,725	2	90%	1	70%	3	-
Boulevard	2A: Northwest	7,987	2	80%	8	50%	10	0.2
Boulevard	2D: Napier Street	1,131	2	90%	3	70%	5	-
Boulevard	2C: All other sites	6,387	5	90%	3	50%	8	All
St Johns	3: All sites	5,826	4	90%	1	50%	5	1.0
Activity Centre	4: All sites	26,094	2	90%	4	50%	6	1.0
North Eastern	5A: UK Hotel	437	2	90%	3	50%	5	-
North Eastern	5B: South	2,248	3	90%	6	50%	9	-
North Eastern	5C: North	2,955	11	80%	5	50%	16	0.2
Total		59,572						

Source: SGS (2019).

TABLE 2: CAPACITY ASSUMPTIONS – PREFERRED VERSION OF DDO16

Precinct	Sub-precinct	Area (sqm)	Podium height (storeys)	Podium site coverage	Upper level height (storeys)	Upper level site coverage	Total height (storeys)	Non-residential floor space (floors)
Brunswick Street	1: 460 Brunswick+	783	2	90%	1	70%	3	1.0
Brunswick Street	1: All other sites	5,725	2	90%	1	70%	3	-
Boulevard	2A: Northwest	7,987	2	80%	8	50%	10	0.2
Boulevard	2B: Napier Street	1,131	2	85%	3	65%	5	-
Boulevard	2C: All other sites	6,387	5	85%	3	65%	8	All
St Johns	3A: North	4,952	4	90%	1	50%	5	1.0
St Johns	3B: South	874	4	90%	0	50%	4	1.0
Activity Centre	4: All sites	26,094	2	90%	2	70%	4	1.0
North Eastern	5A: UK Hotel	437	2	90%	1	50%	3	-
North Eastern	5B: South - West	1,227	2	90%	3	50%	5	-
North Eastern	5B: South - East	1,022	3	90%	6	40%	9	-
North Eastern	5C: North	2,955	5	80%	9	50%	14	0.2
Total		59,572						

Source: SGS (2019).

77. My estimates of the capacity for new development in the Queens Parade precincts, based on the assumptions outlined above, are presented in two tables below. The first table is the estimated capacity based on the Exhibited Version of the DDO16. The second table is the estimated capacity based on the Preferred Version of the DDO16.

TABLE 3: CAPACITY ESTIMATE – EXHIBITED VERSION OF DDO16

Precinct	Employment floor space (net)	Residential floor space (net)	Total floor space (net)	Dwellings (@80 sqm per dw.)
Brunswick Street	500	11,700	12,200	140
Boulevard	29,700	35,900	65,600	450
St Johns	3,900	14,000	17,900	180
Activity Centre	17,600	56,800	74,400	710
North Eastern	400	35,400	35,800	440
Total	52,100	153,800	205,900	1,920

Source: SGS (2019).

TABLE 4: CAPACITY ESTIMATE – PREFERRED VERSION OF DDO16

Precinct	Employment floor space (net)	Residential floor space (net)	Total floor space (net)	Dwellings (@80 sqm per dw.)
Brunswick Street	500	11,700	12,200	140
Boulevard	30,700	35,700	66,400	450
St Johns	4,000	13,700	17,700	170
Activity Centre	17,600	45,000	62,600	560
North Eastern	400	26,200	26,600	330
Total	53,200	132,300	185,500	1,650

Source: SGS (2019).

78. The total net floor space capacity of the Exhibited Version of DDO16 is estimated at 205,900 square metres, comprising 1,920 dwellings and 52,100 square metres of employment floor space.
79. The total net floor space capacity of the Preferred Version of DDO16 is estimated at 185,500 square metres, comprising 1,650 dwellings and 53,200 square metres of employment floor space.
80. The Preferred Version provides 20,400 square metres less floor space than the exhibited version; about 12,000 square metres has been lost from Precinct 4 (the Activity Centre) and 9,000 square metres from Precinct 5 (North Eastern). These differences reflects the lowering of height limits within these two precincts in the

Preferred Version of DDO16.

81. Capacity for housing across all Activity Centres in the City of Yarra

82. In 2018, in anticipation of Amendment C220 Panel, Council populated the RCAC model with height estimates, by precinct, for Yarra’s activity centres.
83. I understand that the assumed building heights for the Swan Street, Bridge Road and Victoria Street Activity Centres were derived from built form framework analysis used to inform proposed interim planning controls. For those other centres without a built form framework, I understand that Council used preliminary estimates of likely building heights. I have assumed that these inputs to the model were accurate and correct.
84. Assumptions with respect to site cover, area for light courts or setbacks, and the ratio of gross floor space to net floor space applied to the remaining 10 activity centres were the same as those used to model capacity for the Johnston Street Activity Centre in my evidence for Amendment C220. Specifically: the site cover for lower levels was 80%; site cover for upper levels was 50%; area for light courts or setbacks was 10%; the ratio of gross floor area to net floor area was 75%.
85. The RCAC modelling excluded any sites in activity centres that have been recently developed, are strata-titled, or host public housing or community uses.
86. The results of this analysis are summarised in the table below. The analysis suggests that, based on adopted amendments and planning work that is currently in progress, the total potential capacity for new dwellings across Yarra's Activity Centres is in the order of 32,730 dwellings.

TABLE 5: CAPACITY ESTIMATES – YARRA'S ACTIVITY CENTRES

Activity Centre	Total floor space capacity (sqm)	Employment floor space capacity (sqm)	Residential floor space capacity (sqm)	Dwelling capacity (@80 sqm per dw.)
Smith Street	594,400	93,300	501,100	6,260
Victoria Street	556,400	133,300	423,100	5,290
Bridge Road	458,000	109,100	348,800	4,360
Brunswick Street	419,800	84,900	334,900	4,190
Swan Street	390,000	85,600	304,500	3,810
Johnston Street	297,300	53,600	243,700	3,050
Alphington	223,700	35,100	188,500	2,360
Queens Parade*	185,100	53,200	131,900	1,650
Nicholson Street	111,200	44,500	66,700	830
St Georges Road	60,900	24,300	36,500	460
Gertrude Street	37,300	14,900	22,400	280
Rathdowne Street	25,900	10,400	15,600	190
Total	3,360,000	742,200	2,617,700	32,730

Source: SGS (2018) RCAC modelling prepared for Amendment C220 Johnston Street Structure Plan.

*Revised capacity analysis for Queens Parade is based on the Preferred Version of Amendment C231, DDO16.

87. I use the term ‘total potential capacity’ here as the capacity estimates are largely based on proposed rather than adopted planning controls. But I believe these are a logical benchmark as they reflect Council current planning aspirations for each activity centre.
88. The application of the RCAC model to the activity centres other than Johnston Street and Queens Parade has not benefited from the same level of detailed built form modelling. However, on the basis of the information that was used, I believe the modelling does provide a plausible estimate of floor space capacity to inform Council’s planning efforts.

89. Demand and capacity for housing compared

90. Although there are no specific dwelling demand figures for the Queens Parade precincts, I provided an earlier estimate of demand for the next 15 years of 780 dwellings. This equates to 47% of the estimated dwelling capacity of 1,650 dwellings that I derived from the planning controls in the Preferred Version of the DDO. If I include the capacity on the Gasworks site of 1,100 dwellings (a total capacity of 2,750 dwellings), the 15 year demand would absorb just 28% of the available dwelling capacity.
91. Given recent new developments, current approvals and other development activity, it is plausible that residential development in Queens Parade will exceed this demand estimate. In the table below I have estimated the dwelling supply to 2031 by assuming the two existing major residential approvals are constructed and just 33% of the 1,110 dwellings on the Gasworks site are developed. These developments alone would provide over 800 dwellings, and leave capacity for a further 1,900.

TABLE 6: DWELLINGS SUPPLY ESTIMATES – QUEENS PARADE

Source	Total dwellings capacity	Share of capacity realised by 2031	New dwellings supplied by 2031	Remaining dwelling capacity
Recent developments (since 2016)	83	100%	83	-
Approved developments	378	100%	378	-
Remaining capacity	1,192	0%	-	1,192
Gasworks	1,100	33%	363	737
Total	2,753		824	1,929

Source: SGS (2019).

92. Turning to the demand and capacity alignment across Yarra's activity centres, the estimated dwelling demand in VIF (2019) of 16,540 dwellings across Yarra would absorb 51% of the estimated potential dwelling capacity in Yarra's activity centres.
93. However, it is unlikely that all new housing will be provided in activity centres. I have assumed that 75% of future dwelling supply might occur in activity centres – a slightly higher proportion than the historic rate of 72% reported in the Yarra Housing Strategy. This proportion equates to 12,400 dwellings. Achieving this target would require just 38% of the total estimated potential dwelling capacity across Yarra's activity centres. Therefore, there is ample dwelling capacity in Yarra's activity centres to meet demand to 2031.
94. To provide a further check of the likelihood of dwelling supply meeting forecast demand, I have considered the past rate of dwelling supply for Yarra's activity centres between 2011-2016. I have then projected this rate forward for 15 years, to estimate the supply that might be achieved in the period 2016 to 2031, assuming recent past rates of growth will continue.
95. The average rate of dwelling supply in Yarra's activity centres between 2011 and 2016 was 25.8 net additional dwellings, per hectare, per five years.¹
96. Based on this rate of supply, and apartment projects in the development pipeline (identified in the Urban Development Program), Yarra's activity centres will provide an estimated 12,200 dwellings between 2016 and 2031. This total aligns with the notional figure of 12,400 dwellings required in activity centres to meet the overall demand for 16,540 dwellings over 15 years.
- 97. Impact of the Amendment on the realisation of residential development**

¹ Rates calculated using the Housing and Development Data (2016), a data set collected by the Department of Environment, Land, Water and Planning to monitor housing supply.

98. Based on the analysis presented above I am satisfied that there is considerable capacity for new dwellings in both Queens Parade (based on either the Exhibited or Preferred Versions of DDO16) and across Yarra's activity centres broadly, when compared to forecast dwelling demand for the next 15 years. The forecast demand for to 2031 will require 28% of the dwelling capacity in the Queens Parade precincts and Gasworks site. Across all of Yarra's activity centres, I estimate that 38% of the dwelling capacity will be required providing opportunities for further growth beyond 2031.
99. The rezoning of land from C2 to C1 proposed by the Amendment will increase opportunities for residential development, while the proposed DDO controls are likely to provide greater certainty for land owners, developers and the community about the preferred built form outcomes.
100. All other things being equal, these changes could increase the rate of residential development on land affected by the Amendment compared to retaining the existing planning regime by providing greater certainty and less prospect of delay and uncertainty associated with approval processes.

101. Demand for employment floor space in the City of Yarra

102. The Yarra Spatial Economic and Employment Strategy (SEES) provides employment growth forecasts for the City of Yarra to 2031 and estimates the additional employment floor space required to accommodate this growth.
103. Employment in Yarra is forecast to increase by 50,000 jobs: from 98,000 jobs in 2016 to 148,000 in 2031. To accommodate this growth, additional employment floor space will be required. It is estimated that Yarra contained 3,590,000 square metres of employment floor space in 2016 and will require 3,860,000 square metres by 2031 – an increase of 270,000 square metres.
104. Despite the large forecast increase in the total number jobs, the predicted increase in employment floor space is relatively modest. This is due to the continued shifts in Yarra's employment away from industrial and low-intensity employment uses towards office-based employment in knowledge and health sectors, and the creative industries that have lower job to floor space requirements.

105. Demand for employment floor space in the Queens Parade precincts

106. The Queens Parade activity centres was not considered a large employment precinct in the SEES and therefore specific employment floor space forecasts were not provided in that Strategy.
107. I have therefore again utilised data from the SGS small area land use forecasts to determine the likely demand for employment floor space in and around Queens Parade.
108. I have estimated the growth in employment between 2016 and 2031, across the 14 areas identified in Figure 1 above, to be in the order of 900 jobs.
109. Assuming an average job to floor space ratio of 30 square metres (based on a mix of office, health and retail employment), accommodating this growth would require 27,000 square metres of additional employment floor space.

110. Capacity for employment floor space across the City of Yarra

111. Estimates of the capacity for employment floor space were also developed for the SEES. These were derived using high-level capacity assumptions, based on zone and location. A description of the approach and assumptions used is provided in Appendix D.

112. The total estimated capacity for employment floor space in Yarra was 4.9 million square metres.

113. Capacity for employment floor space in the Queens Parade precincts

114. The capacity for employment floors space in the Queens Parade precincts was 52,100 in the Exhibited Version of DO16 and 53,200 in the Preferred Version (see Table 3 and Table 4 above). The difference between the two estimates is largely the result of changes to the upper level setback requirements in Precinct 2C that have been made in the Preferred Version of the DDO.

115. Capacity and demand for employment floor space compared

116. The estimated total employment floor space in Yarra in 2016 of 3.59 million square metres accounts for 73% of the total Yarra-wide capacity estimate of 4.9 million square metres. The 2031 forecast employment floor space estimate of 3.9 million square metres would account for 79% of total employment floor space capacity.

117. This comparison suggests that Yarra's capacity for growth in employment floor space exceeds forecast demand.

118. I have estimated that the demand for employment growth in the Queens Parade precincts and surrounds could require an additional 27,000 square metres of employment floor space. This is approximately half the identified capacity for employment floor space on land affected by the Amendment. This suggests there is ample capacity within the Queens Parade precincts to accommodate the forecast growth in employment to 2031.

119. The recently approved development at 81-89 Queens Parade would provide over 6,000 square metres of retail and commercial floor space and 110 serviced apartments. This development alone would accommodate a significant share of the 15 year employment growth forecast.

120. The mooted plans for the Gasworks site include a further 4,300 square metres of employment floor space as well as childcare and a secondary school. Redevelopment of this site would provide further opportunities for employment uses along Queens Parade.

121. Impact of the Amendment on the realisation of commercial development

122. The Amendment would result in approximately 5,000 square metres of Commercial 2 zoned land in Precinct 3 (St Johns) being rezoned to Commercial 1. Recent development trends would suggest that residential floor space is likely to be maximised on C1 zone land, as this is typically the most profitable land use.

123. The Amendment could therefore result in a reduction in the realisation of commercial development in this particular precinct, if new development on those rezoned sites provides less commercial floor space than would have otherwise been provided if the land had retained the C2 zoning.

124. The potential for a change of zone in this location was identified the SEES (Strategy 5) in Tables 7 and Figure 40 which provide guidance for C2 zoned land.

125. However, given there is capacity for employment elsewhere in the Queens Parade precincts, and in other employment precincts in Yarra, I do not view this change as a significant issue for the realisation of commercial development.

3. CONCLUSION

126. I conclude that the Amendment provides ample capacity for dwelling and employment floor space compared to the likely demand to 2031. Although the Preferred Version of DDO16 provides less capacity than the Exhibited Version, I do not believe this reduction in capacity will have a noticeable effect on the realisation of dwellings or employment floor space in the Queens Parade precincts or the City of Yarra broadly, in the medium to longer term. On this basis, I support the Preferred Version of the Amendment.

APPENDIX A:

PLANNING PANELS VICTORIA

EXPERT WITNESS DECLARATION

a) The name and address of the expert

Andrew Frank Spencer
SGS Economics & Planning Pty Ltd
Level 14, 222 Exhibition Street
Melbourne

b) The expert's qualifications and experience

Bachelor of Science (Geography) University of New South Wales, 2001
Bachelor of Arts (Comparative Development) University of New South Wales, 2001
Master of Urban Design, Sydney University, 2009
Master of Analytics, RMIT University (in progress)

c) The expert's area of expertise to make the report

Andrew is an urban planner and urban designer with expertise in urban economics. Andrew's career spans 18 and a half years in consulting and public sector roles. Andrew has been responsible for preparing a wide variety of economic appraisals including feasibility studies, cost benefit analyses and policy advice on development contributions and value capture. Andrew has prepared a range of urban capacity studies and employment land studies for Council's and state government in New South Wales and Victoria over the past 10 years.

d) Other significant contributors to the report and where necessary outlining their expertise

None.

e) Instructions that define the scope of the report

My instructions in this matter were provided in writing by Maddocks Lawyers, acting on behalf of Yarra City Council (see Appendix C).

f) The facts, matters and all assumptions upon which the report proceeds

All these matters are detailed in my evidence statement.

g) Reference to those documents and other materials the expert has been instructed to consider or take into account in preparing the report, and the literature or other material used in making the report

All these matters are detailed in my evidence statement.

h) Provisional opinions that have not been fully researched for any reason (identifying the reason why such opinions have not been or cannot be fully researched)

These matters are detailed in my evidence statement.

i) Questions falling outside the expert's expertise and also a statement indicating whether the report is incomplete or inaccurate in any respect

None.

I have made all the inquiries that I believe are desirable and appropriate and no matters of significance which I regard as relevant have to my knowledge been withheld from the Panel.

Name: Andrew Spencer

Date: 2 August 2019

APPENDIX B: CV



Andrew Spencer
Senior Associate
Bachelor of Science (Geography) (UNSW)
Bachelor of Arts (Comparative Development) (UNSW)
Master of Urban Design (Sydney University)
Master of Analytics (in progress) (RMIT)

Andrew's expertise spans strategic planning, urban design and urban economics, with 19 years' experience in both consulting and public sector roles.

Andrew has been responsible for preparing a wide variety of economic appraisals includes feasibility studies, cost benefit analyses and policy advice on development contributions and value capture. Andrew managed cost benefit analyses of two key policy initiatives for the Victorian State Government: the Better Apartment Design Standards and the proposed changes to the built form controls and value capture arrangements for central Melbourne (City of Melbourne Planning Scheme Amendment C270). Both projects demonstrated a net community benefit as a result of these policy initiatives.

Andrew has also contributed to a range of employment land studies in New South Wales and Victoria over the past 10 years. Recent projects have included the West Melbourne Structure Plan for the City of Melbourne (2017), the Spatial Economic and Employment Strategy for the City of Yarra (2018) and the Gordon and Mephan Precinct Framework Plan for Maribyrnong City Council.

Andrew has taken lead roles in numerous housing policy projects in Victoria and New South Wales, including the Housing Capacity Assessment project, undertaken for the Victorian State Government. This project examined Melbourne's existing urban areas to understand the potential housing supply under existing policy settings.

In 2015 Andrew was seconded to the NSW Department of Planning and the Environment to assist in the development of Sydney's six District Plans. This role involved close liaison with departmental staff over a period of several months to collate various data sources into a unified set of long term housing projections.

Andrew was a central part of the team that delivered the influential State of the Market report for Landcom in New South Wales. This project involved analysis of the housing market and development conditions within the established areas of metropolitan Sydney. Research was undertaken to investigate barriers to infill housing supply in the metropolitan area and to identify the potential role for the government's development agency to unlocking housing supply in policy preferred locations.

Andrew also led a project for AHURI and the Residential Development Council which helped them gain a broader understanding of the issues affecting the performance of Australia's capital cities in achieving infill housing targets. Andrew conducted research to deepen the evidence base on factors that influence infill housing supply. The research used an Investigative Panel process designed to interrogate a specific question through direct engagement between expert panel members.

Other commission have included an assessment of options for funding affordable housing for the NSW Department of Premier and Cabinet, a wide range of site specific and strategic

feasibility assessment assignments for Councils in Victoria and New South Wales, and the preparation of policy advice and expert evidence.

Andrew has close ties with Melbourne University where he has taught planning theory and urban design studies. He contributed to 'Transforming Housing' a major research project on affordable housing, preparing a research paper on a range of planning mechanism that support social and affordable housing, including densities bonuses, value capture and inclusion housing policies.

Prior to working for SGS, Andrew held roles at the NSW Department of Urban Affairs and Planning, the Urban Design Advisory Service, HASSELL, COX Architecture, and the NSW Cities Taskforce.

Selected project experience:

Employment land studies

- Spatial Economic and Employment Strategy – City of Yarra (2018)
- Industrial land analysis for new zones – Launceston City Council (TAS) (2017)
- West Melbourne Structure Plan – City of Melbourne (2017)
- Peer review of Southport Priority Development Area Development Scheme – City of Gold Coast (2014)
- Implications of VPP employment zone changes – City of Yarra (2012)
- Strathfield Economic Land Use and Employment Study – Strathfield Council (NSW) (2009)
- Housing and Employment Study – City of Canada Bay (NSW) (2008)
- Strategic Planning Study – City of Botany Bay (NSW) (2007)

Capacity studies

- Residential Capacity in Activity Centres model, 2018, City of Yarra, Melbourne
- Monash Housing Capacity Assessment – Monash City Council (2016)
- Peer review of City of Yarra Capacity testing methodology, 2014, City of Yarra, Melbourne
- Housing Capacity Assessment, 2010, Department of Planning and Community Development Melbourne
- Housing Capacity Assessment Pilot Project Melbourne, 2009, Department of Planning and Community
- Housing and Employment Capacity Study, 2008, City of Canada Bay, Sydney
- Housing Capacity Study, 2007, City of Botany Bay, Sydney

Housing studies

- Cessnock Housing Study – Cessnock City Council (2016)
- Ballarat Infill Housing Study – Ballarat City Council (2014)
- Lower Hunter Urban Renewal framework – DP&I (NSW) (2013)
- State of the Market Report – Urban Growth NSW (2012)

Cost benefit analysis

- Economic Analysis of Apartment Design Policy – Department of Planning (WA) (2018)
- Passenger Rail Improvements Economic Analysis – Greater Shepparton Council (2017)
- Central City Built Form Review (Am C270) – DELWP (2016)
- Increased greenfield minimum densities – cost benefit analysis – DELWP (2016)
- South Road Expressway Alignment Study – DIPTI (South Australia) (2015)

Feasibility studies

- Hobart building height and feasibility study – Property Council (2019)
- Moonee Ponds Activity Centre feasibility analysis – Moonee Valley Council (2018)
- Development Feasibility study – Regenerate Christchurch (2018)
- Housing Market Review – Penrith City Council (NSW) (2017)
- Impact of affordable housing and development contribution on development feasibility – Department of Planning and Environment (NSW) (2017)

Development contributions and value capture

- Impact of regional greenfield ICP levies – DELWP (2018)
- Peer review of ICP levy method and rates – DELWP (2016)
- Bankstown to Liverpool corridor: value capture options – Transport for NSW (2016)
- Funding options for CBD public realm improvements – City of Adelaide (2014)
- *Economics aspects of design*
- Valuing urban design on the Gold Coast – Gold Coast Council (2017)
- Better Apartments economic appraisal – DELWP (2016)
- Benefits of Wayfinding – City of Melbourne (2015)

Car parking

- Impact of parking on the public realm – City of Melbourne
- Impact of Paid Parking on the Viability of Activity Centres – City of Yarra
- Cash-in-lieu of parking for sustainable transport – Moonee Valley City Council
- Paid Parking Policy - City of Port Phillip
- Economic impacts of removing parking charges - City of Greater Geelong

Teaching and research

- Development economics and finance – 2018 (UNSW)
- Architectural Professional Practice – 2017 (RMIT)
- Transforming Housing – 2016 (Melbourne University)
- Planning Theory and History – 2011 to 2013 (Melbourne University)
- Economies of City and Regions – 2012 (Melbourne University)
- Housing intensification and multi-dwelling housing typologies – 2009 (Masters Dissertation, Sydney University)

Expert evidence experience (Planning Panels Victoria and Advisory Committees):

- City of Melbourne Amendment C309: West Melbourne Structure Plan
- City of Melbourne Amendment C308: Urban Design in the Capital City Zone
- City of Yarra Amendment C220: Johnston Street Structure Plan
- City of Maribyrnong Amendment C143: Gordon and Mephan Street structure plan
- City of Monash Planning Scheme Amendment C125: new residential zones and development standard (2016)
- Moonee Valley Planning Scheme Amendment C132: Moonee Ponds Activity Centre Parking (2016)
- Flemington Hill and Epsom Road Advisory Committee: Evidence on on municipal boundaries, development contributions and open space (2015)

Publications:

- Spiller, M., Mackevicius, L. and Spencer, A. (2018) *Development contributions for affordable housing: theory and implementation*. SGS Economics and Planning Occasional Paper.
- Spiller, M., Fensham, P. and Spencer, A. (2017) *Value capture through development licence fees*. SGS Economics and Planning Occasional Paper.
- Spencer, A. (2015) *Land capture, value sharing and inclusionary housing policies: Options for increasing the supply of affordable housing in Melbourne*. Prepared for Transforming Housing research project, Melbourne University.
- Sheko, S., Martel, A. and Spencer, A. (2015) *Policy, Planning and Financing Options for Affordable Housing in Melbourne*. Prepared for Transforming Housing research project, Melbourne University.
- Schmahmann, L., Gill, J. and Spencer, A. (2015) *Urban or suburban? Examining the density of Australian cities in a global context*. State of Paper presented at the State of Australian Cities Conference, Australian Cities Research Network.

APPENDIX C: INSTRUCTIONS

APPENDIX D: SEES EMPLOYMENT CAPACITY ASSESSMENT APPROACH AND ASSUMPTIONS

127. Estimates of the capacity for employment floor space were developed for the SEES. These were derived using high-level capacity assumptions, varied by zone and location, to Yarra's employment precincts. The assumptions used are listed in the table below.

TABLE 7: SEES EMPLOYMENT FLOOR SPACE CAPACITY ASSESSMENT ASSUMPTIONS

Zone	Location	Site cover	Average floors of employment floor space	Notes
C1Z	All	70%	2	
C1Z	Botannica Office Park	70%	4	This office precinct supports a higher density of employment compared to Yarra's tradition retail centres.
C2Z	Gipps and Cremorne precincts	70%	3	A higher density of development has been assumed in these key employment precincts.
C2Z	All other C2Z land	70%	2	
MUZ	All	70%	Min. 0.5; Max. 1.0	Assumes some mixed uses zoned areas will lose employment floor space; but will host <i>not less than</i> half of one storey.
IN1	All	70%	1.2	Current average is 1.0. Assumes some opportunity for intensification.
IN3	All	70%	1.2	Current average is 0.9. Assumes some opportunity for intensification.
PUZ2	Public Housing, (Collingwood); University of Melbourne (Burley)	No capacity	No capacity	Assumed no capacity.
PUZ2	Kanga TAFE	70%	2.0	
PUZ2	Carpark, Gym and Police Station (Bridge Road); Fitzroy Public School; Neighbourhood Justice Centre; Melbourne Polytechnic (Collingwood Campus); Collingwood English Language School.	No capacity	No capacity	Assumed no capacity across this range of facilities. Melbourne Polytechnic already quite dense.
PUZ3	St Vincents Hospital	70%	9	Currently supports an estimated average of 6.3 employment floors. Capacity assessment assumes capacity for another 50% growth in floor space.
PUZ3	Aged Care Facility; Riverside House Nursing Home; Thomas Embling Hospital	No capacity	No capacity	Assumed no capacity across this range of facilities.
PUZ4	Queens Pde (com uses on Transport Zone)	70%	0.5	

Zone	Location	Site cover	Average floors of employment floor space	Notes
PUZ6	Yarra City Council (Bridge Road); Collingwood Town Hall; Richmond Rec Centre; Fitzroy Swimming Pool	No capacity	No capacity	Assumed no capacity across this range of facilities.
PUZ7	Fire Station (Church Street)	No capacity	No capacity	Assumed no capacity.
PDZ1	Green Square Development	70%	0.5	Lower employment capacity as mostly residential development
CDZ1	Ikea and Bus. Park	70%	3.3	Currently supports average of 53% and 3.3 employment floors.
CDZ3	Nylex Site	70%	1.0	Assumed one level of employment.
SUZ5	Epworth Hospital	70%	7.0	Currently supports average of 4.8 employment floors
SUZ4	Abbotsford Convent	No capacity	No capacity	Assumed no capacity.

Source: SGS (2018) SEES.

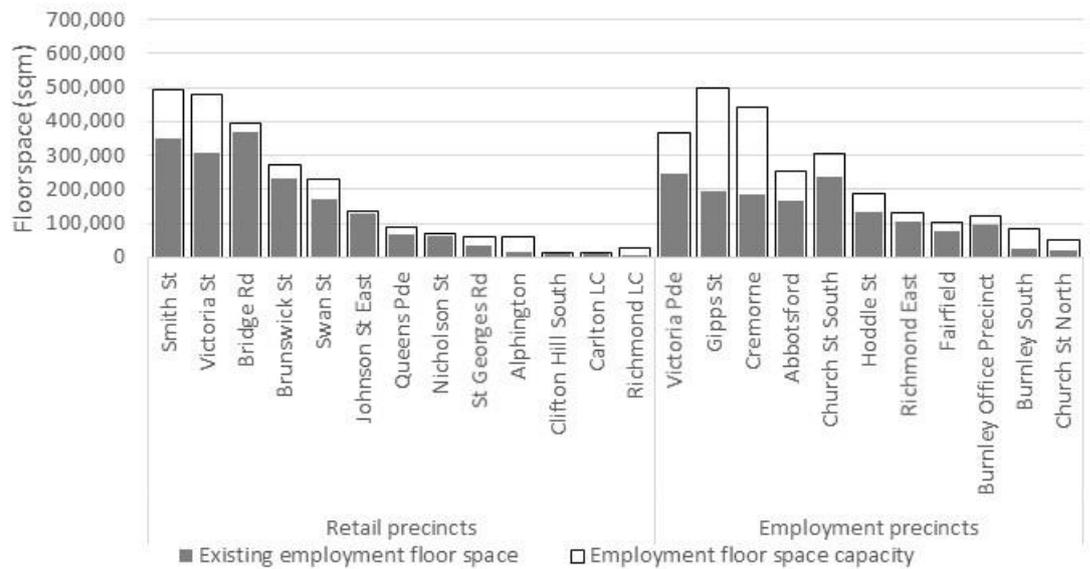
128. To estimate employment floor space capacity the area of employment land was multiplied by an estimated 'site cover' percentage (column 3) and the number of storeys (column 4). Site cover refers to the relationship between the net employment floor space and the area of the site.
129. In relation to C1 zoned land, the assumptions imply that the average capacity for employment floor space is two levels with 70% site coverage of net floor space for employment. For example, a site of 1,000 square metres would have capacity for 1,400 square metres ($1000 \times 0.7 \times 2 = 1400$).
130. Although more intense built form might be proposed in C1 zone areas, it was assumed that any additional floor space would be residential and unlikely to provide additional capacity for employment.
131. For C2 zoned land similar assumptions were applied to estimate employment floor space capacity, with the exception of the Gipps Street and Cremorne precincts, where an average of three storeys was used.
132. At the time these assumptions were made (early 2016), there was limited evidence of demand for taller and more intensive development on C2 zoned land (e.g. office buildings greater than 2 storeys). However, I note that since this capacity analysis was prepared there have been a number of planning applications for multi-storey office developments on C2 zoned land in Yarra. This suggests there is now an appetite for these larger commercial buildings.
133. One 9 storey office development has been approved at 80-90 Johnston and 53-63 Sackville Streets (9 storeys) and another is proposed at 122 Johnston Street (7 storeys). These may indicate interest in multi-level office developments in Johnston Street. Alternatively, they could be more speculative in nature, with a view to seeking a subsequent approval for residential development, assuming the zone changes foreshadowed in the Johnston Street Local Area Plan would eventually be implemented.
134. In light of this emerging trend the two and three storey assumptions used in the capacity analysis for C2 zoned land could be on the low side.
135. The SEES included a qualification in relation to the capacity assessment that warrants repeating as a reminder of the limitation of estimating capacity using broad assumptions, as opposed to detailed precinct-specific analysis:

"It should be noted that the capacity estimates presented here assume all sites are redeveloped to the average parameters described in (the table above). Not all sites will

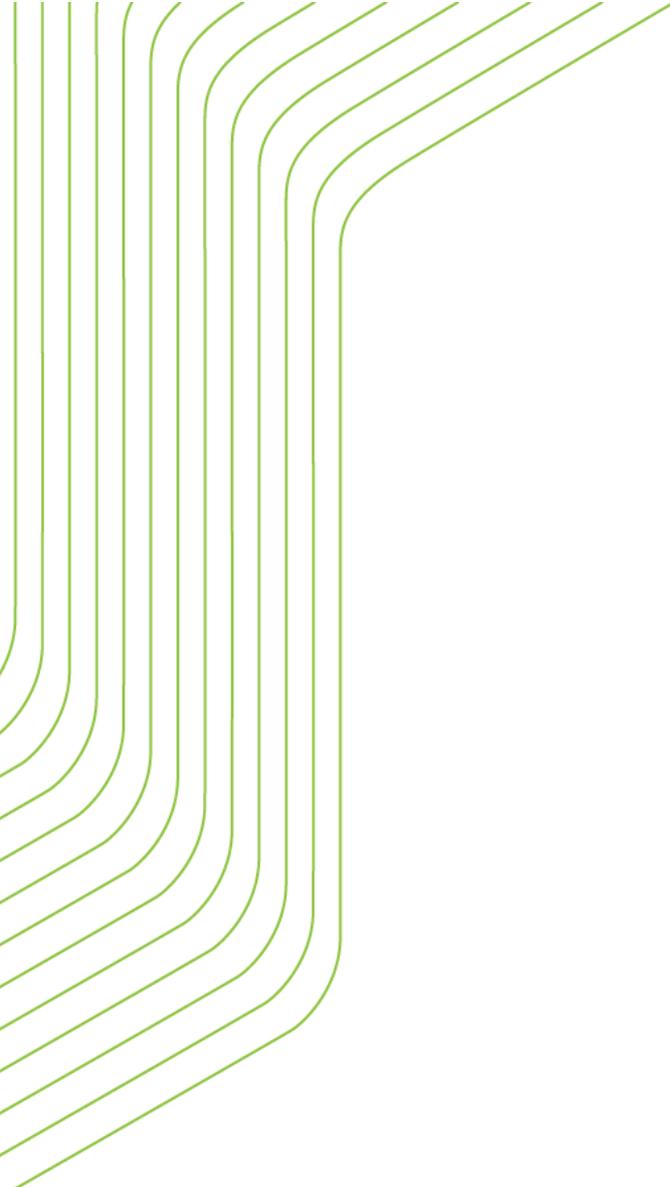
be redeveloped within the timeframe of this Strategy. Moreover, those sites that are developed might achieve higher or lower densities than the averages assumed. The exercise of estimate floor space capacity should therefore be treated as indicative only, however it is a logical process for assessing capacity. In the charts that follow the estimated floor space capacity is shown as a range from 10% below the theoretical capacity estimate to 10% above the theoretical capacity estimate. This range is intended to suggest the capacity estimates should be thought of as being accurate within a range, rather than a definitive value.”

- 136. Notwithstanding these caveats, the total estimated capacity for employment floor space in Yarra was 4.9 million square metres.
- 137. The chart below shows the distribution of capacity across 24 employment precincts. It also shows estimated employment floor space in 2016. All precincts have some capacity for additional employment floor space. However, in general, the Activity Centres (designated 'Retail precincts' on the left in the chart) have less available capacity (indicated by the size of the white area) when compared to the 'Employment precincts'.

FIGURE 2. SEES EMPLOYMENT FLOOR SPACE ESTIMATES: EXISTING VS CAPACITY



Source: SGS (2018) SEES.



Contact us

CANBERRA

Level 2, 28-36 Ainslie Place
Canberra ACT 2601
+61 2 6257 4525
sgsact@sgsep.com.au

HOBART

PO Box 123
Franklin TAS 7113
+61 421 372 940
sgstas@sgsep.com.au

MELBOURNE

Level 14, 222 Exhibition St
Melbourne VIC 3000
+61 3 8616 0331
sgsvic@sgsep.com.au

SYDNEY

209/50 Holt St
Surry Hills NSW 2010
+61 2 8307 0121
sgsnsw@sgsep.com.au