



AMENDMENT C309: EXPERT EVIDENCE OF JULIAN SZAFRANIEC

JUNE 2018

Prepared for
City of Melbourne

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 OF EVIDENCE	II
1. INTRODUCTION	1
1.1 Credentials	1
1.2 Instructions	2
1.3 Expertise relevant to draft Planning Scheme Amendment C309	2
1.4 Evidence preparation	3
1.5 Declaration	3
2. STATEMENT OF EVIDENCE	4
2.1 Summary of Amendment C309	4
2.1 Overview of relevant employment and population figures	5
2.2 Overview of SGS background reports	6
2.3 West Melbourne employment target	7
2.4 West Melbourne forecast population	13
2.5 Review of floorspace requirements and controls	14
2.6 Review of policy implementation from an economic basis	20
3. RESPONSE TO SUBMISSIONS	22
3.1 Review of submissions	22
3.2 Council post-amendment changes	25
ATTACHMENT A	26
ATTACHMENT B	27
ATTACHMENT C	28
Julian Szafraniec	28

SUMMARY OF EVIDENCE

1. I (Julian Szafraniec) have been instructed by the City of Melbourne to provide expert evidence regarding draft Planning Scheme Amendment C309.
2. A summary of my evidence is as follows:
 - My evidence relates to the economic basis that underpins the employment elements of the West Melbourne Structure Plan and associated Planning Scheme Amendment. My evidence also presents and draws on the three background reports prepared by SGS Economics and Planning. These reports are:
 - West Melbourne Economic and Employment Stage 1 Report
 - West Melbourne Economic and Employment Stage 2 Report
 - City of Melbourne 2036 Employment Forecasts studyI was Project Director and led the Stage 1 Report and Employment Forecast study and was also involve in components of the Stage 2 Report.
 - As new data has become available since the completion of these background reports. I have reviewed the original forecasts and findings against the latest relevant data and provided my opinion regarding any implication for the Structure Plan and Amendment. Overall, I adopt the original reports (excluding aspects of the SGS Stage 2 Report which I was not involved in and is separately addressed by my colleague Andrew Spencer in his statement of evidence) and I believe the original forecasts are still reasonable.
 - I have also reviewed City of Melbourne Capacity Modelling and the latest population projections and provided my opinion on this work in relation to the Amendment.
 - Based on review of the background reports and more recent data, I believe the employment target (10,000 total jobs by 2036) for West Melbourne is appropriate and aligns with the overall aspirations for the area. This level of employment supports a more mixed use environment and a diversity of employment opportunities and services beyond purely local retail and related uses (i.e. small cafes and shops).
 - I believe the minimum non-accommodation provisions in the Special Use Zone are appropriate and will ensure a minimum amount of employment is provided in West Melbourne. With respect to the 10,000 total jobs by 2036, the minimum controls only achieve 65 per cent of this level when applied to sites 'likely to change'. Further, this only represents 953 additional jobs compared to the current 2016 level.
 - However, these mandatory controls are also combined with a range of other supportive policies and investment to encourage employment generation above this minimum level.

If, on average, employment developments exceed the minimum controls and there is further intensification of employment in existing 'unlikely to change' sites then the 10,000 total jobs by 2036 could be achieved.

- I have also reviewed the latest population projections for West Melbourne. I believe, they are more realistic when considering the future amount of population that needs to be accommodated in West Melbourne, compared to those included in the Structure Plan. Capacity analysis indicates these updated population projections can still be accommodated under the proposed controls, even with an increased level of employment consistent with the Structure Plan job target.

1. INTRODUCTION

1.1 Credentials

3. My full name is Julian Wincenty Szafraniec. I am a Principal, Partner and Director of SGS Economics & Planning Pty Ltd, based in the firm's Melbourne office at Level 14, 222 Exhibition Street, Melbourne, VIC, 3000.
4. I hold the following academic qualifications:
 - Bachelor of Economics (Econometrics) (Honours) (Monash University)
5. I have over 11 years' experience in applying economic theories and models to urban and regional issues across Australia and internationally. I have provided advice to all tiers of government and the private sector, related to the dynamics of housing, transport, employment and the economy.
6. I have previously presented expert evidence at Planning Panels Victoria hearings.
7. Some of my relevant experience includes:
 - West Melbourne Employment and Economic Study Stage 1 and Stage 2 – City of Melbourne (2017)
 - Small Area Land Use Projections – Transport for Victoria (2008-2019)
 - Melbourne Employment Projections - City of Melbourne (2013, 2017)
 - Small Activity Centre Strategy - Bayside City Council (2017) (Review of 2014 SACS)
 - Fishermans Bend Economic and Employment Study - Fishermans Bend Taskforce (2016)
 - Employment and Visitation Forecasts - City of Port Phillip (2016)
 - Retail, Commercial and Employment Strategy - Bayside City Council (2016)
 - Retail and Other Commercial Floor Space Assessment - City of Casey (2016)
 - Review of Green Square and Southern Areas Retail Study - City of Sydney (2015)
 - Spatial Economic and Employment Strategy - City of Yarra (2015)
 - Darebin Retail Strategy - City of Darebin (2014)
 - Chapel Re-vision development projects and employment capacity update - City of Stonnington (2014)
8. Additional information regarding my experience is included in Attachment C.

1.2 Instructions

9. I have been instructed by City of Melbourne to:
- *review the Amendment and exhibited background documents generally;*
 - *review the submissions;*
 - *review the Amendment provisions updated by Council with recommended changes in response to submissions (attachment 5 to the officers' report to the FMC meeting of 7 May 2019);*
 - *Undertake a detailed review of the exhibited controls (as proposed to be amended), particularly the provision of the SUZ6 and the schedules to the Design and Development Overlay, and the relevant background reports; and*
 - *Prepare an expert report setting out your opinion in relation to key issues relating to the Amendment that are within your area of expertise, including the particular controls noted above and the response to submissions.*

1.3 Expertise relevant to draft Planning Scheme Amendment C309

10. I am an urban economist and have expertise in employment and demographic forecasting, economic analysis and related policy advice.
11. I was Project Director and led the West Melbourne Economic and Employment Stage 1 Report (SGS Stage 1 Report) and City of Melbourne 2036 Employment Forecasts study (SGS Employment Forecasts). I was assisted in the preparation of these reports by SGS staff acting under my direction.
12. I was also involved in the West Melbourne Economic and Employment Stage 2 Report (SGS Stage 2 Report). I lead Chapters 1 and 2 (Strategic Context and Demand Assessment) with support from staff acting under my instruction. My colleague Andrew Spencer led Chapter 3 (Feasibility Testing) and I was not directly involved in this feasibility work. He is separately providing expert evidence to this panel. Chapter 4 (Planning Implementation) was led by my colleague Elizabeth Mackevicius and sub-consultant Stephen Rowley.
13. I am able to comment on the preparation and findings of these reports as relevant to the Amendment and my involvement as stated above. This includes matters related to the employment forecasting, the demand for non-accommodation floorspace and whether the proposed controls (in particularly the Special Use Zone) deliver an appropriate mix of uses from an economic perspective.

1.4 Evidence preparation

14. I prepared this statement of evidence and the opinions in this statement are my own.
15. In the preparation of this statement I have relied on the following documents and data:
 - Relevant documents that form part of the Amendment
 - Relevant submissions to the Amendment
 - Attachment 5 to the officers' report to the FMC meeting of 7 May 2019
 - West Melbourne Economic and Employment Stage 1 Report (November 2016) – SGS Economic and Planning
 - West Melbourne Economic and Employment Stage 2 Report (June 2017) – SGS Economic and Planning
 - City of Melbourne 2036 Employment Forecasts Report and dataset (August 2016) – SGS Economic and Planning
 - West Melbourne Residential Population Forecast Memo (31/5/2019) (included at Attachment A) – City of Melbourne
 - Amendment C309 West Melbourne Structure Plan Capacity Modelling Outline (June 2019) (included at Attachment B) – City of Melbourne
 - 2017 Census of Land Use and Employment (CLUE) summary report and dataset (2017) – City of Melbourne
 - Development Activity Monitor (April 2019) – City of Melbourne

1.5 Declaration

16. I have made all enquiries 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.



Julian Szafraniec

Principal | Partner | Director

SGS Economics and Planning Pty Ltd

21 June 2019

2. STATEMENT OF EVIDENCE

2.1 Summary of Amendment C309

17. The draft Planning Scheme Amendment C309 (Amendment) for the City of Melbourne seeks to implement the West Melbourne Structure Plan 2018 (the Structure Plan) via a series of amendments to the Planning Scheme. Key elements of the Amendment include:
 - Amending the Municipal Strategic Statement (MSS) by inserting a new clause reflecting the Structure Plan vision for West Melbourne and including the Structure Plan as a reference document to the Planning Scheme.
 - Rezoning most of the Mixed Use Zoned (MUZ) area to a Special Use Zone (SUZ6). Where SUZ6 introduces requirements for a minimum proportion of non-accommodation floor space, affordable housing, and active ground floor uses (on parts of Spencer Street).
 - Amending Schedules 28, 29 and 33 and adding a new Schedule 72 to the Design and Development Overlay (DDO) to implement built form controls recommended in the Structure Plan, including a mandatory Floor Area Ratio (FAR).
 - Applying and amending the Parking Overlay and Environmental Audit Overlay.
18. As set out in the explanatory report, the strategic justification for the Amendment is to:
 - Support a genuine mix of uses, including retail and commercial uses that will help deliver the projected 10,000 jobs in West Melbourne by 2036.
 - Encourage the development of Spencer Street as a local high street
 - Encourage the delivery of affordable housing dwellings
 - Respond to the distinct character of West Melbourne's five precincts
 - Encourage sustainable transport use and more efficient use of parking spaces.
19. The Amendment and Structure Plan has been informed by a significant amount of background work and consultation as detailed in the explanatory report. This includes the West Melbourne Economic and Employment Study Stage 1 and Stage 2 reports (SGS Stage 1 Report and SGS Stage 2 Report) and the City of Melbourne 2036 Employment Forecasts (SGS Employment Forecasts) which were all completed by SGS and of which I was Project Director.
20. I will now provide a summary of these background reports and assess the appropriateness of the Amendment in relation to non-accommodation floorspace in West Melbourne. In addition, I will comment on the projected population for West Melbourne and how it relates to employment provision and the controls.

2.1 Overview of relevant employment and population figures

21. My evidence statement considers a range of employment and population figures related to the Amendment, various background reports and relevant datasets. To avoid confusion, I have provided a summary of all sources that are referenced throughout my statement along with their source and release date in the tables below.
22. It should be noted that 2016 is a forecast for datasets released before or in 2016 as actual information such as the 2016 Census was not available at that time.

TABLE 1 WEST MELBOURNE EMPLOYMENT FORECASTS AND CAPACITY

West Melbourne employment forecast	2016	2036	2015-36
SGS Stage 1 Report (Nov 2016) and SGS Employment Forecast - Scenario 1 (Aug 2016)	5,886	9,965	4,447
SGS Employment forecast - Scenario 2 (Aug 2016)	5,869	12,380	6,511
SGS Employment forecast - Scenario 3 (Aug 2016)	5,819	10,782	4,962
Structure Plan and the Amendment		10,000	4,500-7,000
City of Melbourne Capacity Modelling (June 2019)		6,506 (untimed)	

TABLE 2 WEST MELBOURNE POPULATION FORECAST AND CAPACITY

Population	2016	2036	2015-36
Existing controls – Geographia (2015)	5,013	7,767	2,754
SGS Stage 1 Report (Nov 2016) indicative range	5,013	14,000 – 21,000	
Existing controls – Geographia (Oct 2017)	5,511	8,009	2,498
Proposed controls (Special release) – Geographia (Nov 2017)	5,511	7,817	2,706
Existing controls - Id (April 2019)	5,809	18,687	12,878
Structure Plan and the Amendment		8,000-9,000	
City of Melbourne Capacity Modelling (June 2019)		23,593 (untimed)	

2.2 Overview of SGS background reports

23. In April 2016, SGS was engaged by City of Melbourne to prepare the West Melbourne Economic and Employment background reports which fed into the West Melbourne Structure Plan process. The SGS work was split into two stages:
- The **first stage** (SGS Stage 1 Report) was completed in November 2016 and involved analysis of the current economic context, consultation with local businesses, baseline employment and floorspace forecasting and identification of realistic opportunities and trade-offs to which the structure plan process will need to respond.
 - The **second stage** (SGS Stage 2 Report) was completed in June 2017 and further refined the economic context analysis, included high level feasibility analysis and exploration of potential planning implementation options.
24. In addition, SGS was engaged in April 2016 to prepare small area employment forecasts out to 2036 for the City of Melbourne (SGS Employment Forecasts). This project included employment and floorspace by industry forecasts for 13 small areas and five (overlapping) urban renewal areas across the City of Melbourne. The *West Melbourne (Residential)* Small Area aligns with the West Melbourne Structure Plan study area. Four Scenarios were also developed, including two related to *West Melbourne (Residential)*.
25. I believe the analysis of broad economic trends, locational characteristics, challenges and opportunities detailed in the SGS background reports remain relevant to this Amendment. This includes the analysis contained in the following chapters:
- SGS Stage 1 Report - Chapters 2, 3, 4 and 6
 - SGS Stage 2 Report – Chapters 1 and 2
 - SGS Employment Forecasts – Chapter 2
26. As new data has become available since the completion of these background reports. I have reviewed the original forecasts and findings against the latest relevant data. This includes the CLUE, DAM and the latest population projections. Based on my review I have provided an assessment as to if the original results are still appropriate and any implication on the Structure Plan and the Amendment.

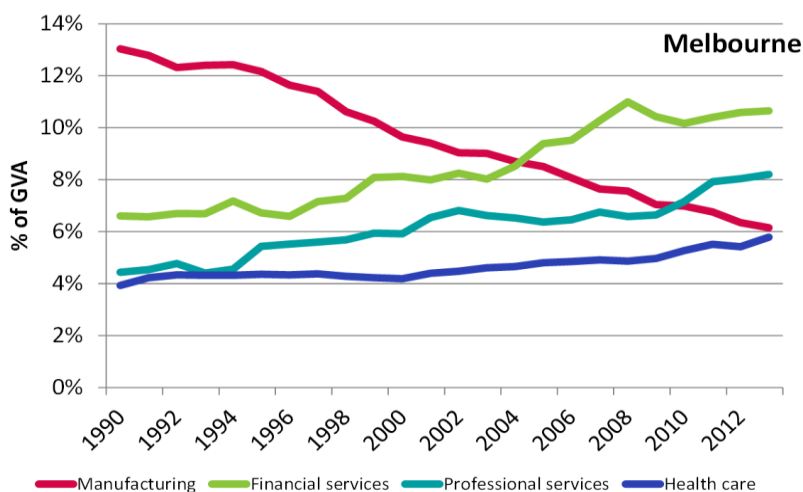
2.3 West Melbourne employment target

27. The Amendment identifies a need to plan for a total of 10,000 job in West Melbourne by 2036. There is also reference to a range and the potential types of employment.
 - “Objective 4: Support mixed use development to facilitate a range of business and employment opportunities” – p52 West Melbourne Structure Plan
 - “Employment floorspace requirements will help to deliver the projected 10,000 jobs in West Melbourne by 2036” – p2 Amendment C309 Explanatory Report
 - ‘It is predicted that there will be the need for between around 4500 to 7000 new jobs in West Melbourne by 2036” – Proposed Clause 21.16-6
 - “Support the delivery of the projected 10,000 jobs” – Proposed Clause 21.16-6
28. The following section reviews this employment target and the employment mix with refence to the original background reports and more recently available data.

Economic context

29. As summarised in Section 3 of the SGS Stage 1 Report, West Melbourne sits within the economic core of Greater Melbourne and is surrounded by a diverse mix of uses. As a result, West Melbourne’s employment opportunities and challenges are not solely driven by local needs, they are heavily linked with the broader economic context.
30. Melbourne’s economy, like that of many other cities, has undergone significant change. This structural change is illustrated in Figure 1, and discussed in Section 2 of the SGS Stage 1 Report and Section 2 of the SGS Employment Forecast report. As this is a structural, not cyclical, trend, any more recent data that is now available simply shows the continuation of this long running transition. Further, this trend is even more pronounced for the inner city as illustrated in Figure 6 on page 8 of the SGS Stage 1 Report.

FIGURE 1 GREATER MELBOURNE’S CHANING ECONOMIC STRUCTURE, 1990-14



Reproduction of Figure 4 – p7 SGS Stage 1 Report
Source: SGS drawing on ABS datasets

31. This structural trend has resulted in strong employment growth in, and around, the Melbourne CBD and other major economic nodes across Greater Melbourne.
32. I have reviewed the latest 2017 CLUE data which reaffirms the employment trends documented in the SGS Stage 1 Report and SGS Employment Forecast report.
- As of 2017 there are 461,000 jobs located in the City of Melbourne. The last two years of employment growth has remained largely consistent with the last decade (7,250 additional jobs per year compared with 7,820 additional jobs per year). The City of Melbourne has more than doubled since the early 1990s when the City of Melbourne had around 200,000 jobs (as presented in Figure 5 on page 8 of the SGS Stage 1 Report).
 - Over the last 15 years 80 per cent of the City of Melbourne's employment growth has occurred in the CBD, Docklands and Southbank. As these areas approach capacity constraints, other well-connected major renewal areas, such as Arden and Fishermans Bend, will provide continued employment growth opportunities for the inner city. Major institutional investment, such as in Parkville, has also supported significant employment growth in the health and education sectors. Over the last 15 years Parkville represents 27 per cent of health and education employment growth in the City of Melbourne.
 - Other inner-city precincts, such as Kensington, East Melbourne and North Melbourne have, and will increasingly play, a key employment role within this broader inner-city economy. Combined, they represent 8 per cent of the City of Melbourne's employment growth over the last 15 years. These precincts provide services for local residential populations, providing locations for various specialised or support employment functions.
33. The Section 3.6 of the SGS Stage 1 Report discusses recent employment trends for West Melbourne specifically. Table 4 in the SGS Employment Forecast Report also identifies West Melbourne as one of only two Small Areas in the City of Melbourne that had experienced a decline in employment over the previous 12 years. The latest 2017 CLUE indicates this trend has recently changed, with West Melbourne recording 5,600 total jobs in 2017, a small increase (100 additional jobs) over the last 2 years. However, West Melbourne has still recorded the second largest employment decline (2,100 fewer jobs) over the last 10 years.
34. Due to structural changes in the economy, continued urban renewal opportunities and infrastructure investment the City of Melbourne is forecast to see strong employment growth into the future – refer to Section 4.2 of the SGS Employment Forecast Report. I believe that these forecasts, based on 2015 CLUE data, are still generally appropriate and consistent with trends evident from the latest 2017 CLUE data and other employment data sources. The original SGS Employment Forecast highlight the city will need to accommodate 240,625 additional jobs from 2016 to 2036. These additional jobs will largely be in commercial and institutional (i.e. health and education) sectors.

West Melbourne economic opportunities

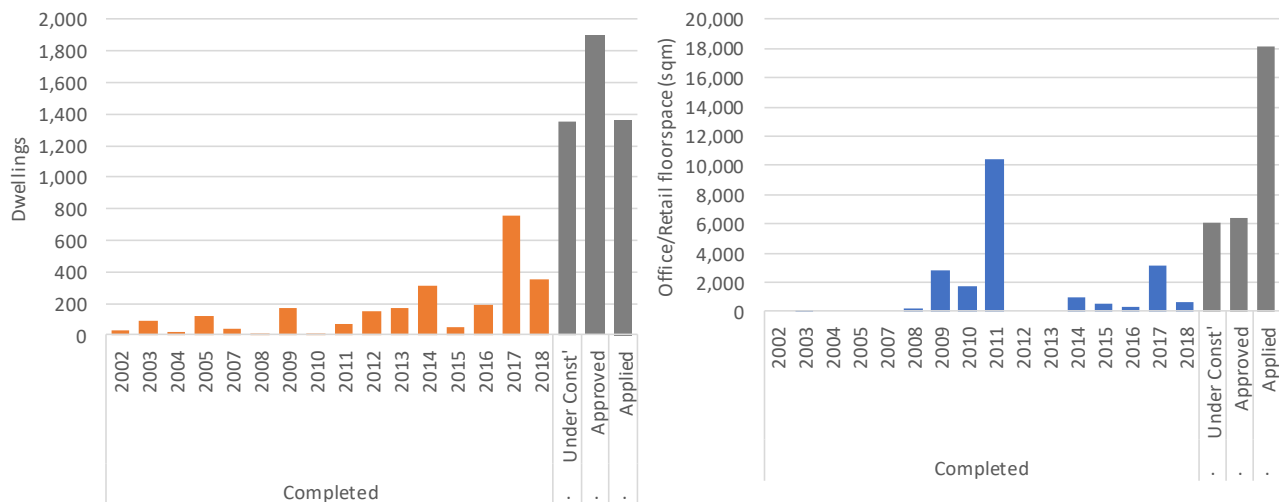
35. I believe that these broader economic forces and the level of employment growth forecast in the City of Melbourne have several implications for West Melbourne and the Amendment which were discussed in Section 2 of the SGS Stage 1 Report. These opportunities include:
- support urban services or niche/advanced manufacturing
 - support or emerging commercial office-based employment
 - Health related consulting services or aligned health businesses
 - Education providers and related student services
36. While not linked to broader economic forces, SGS also identified that there is a gap in the local retail service offer of the precinct. This came through analysis in both the SGS Stage 1 and Stage 2 reports and was reflected in the consultation completed during Stage 1. As the area continues to attract more local residents and office-based employment, I believe that it will need to establish a local convenience core, as is proposed on Spencer Street in the Amendment. This will ensure there are sufficient local services (i.e. daily grocery, cafes, restaurants and other local needs) and will be important for firms seeking to attract and retain high skilled workers to the area.
37. As discussed in Section 6.1 of the SGS Stage 1 Report West Melbourne could also potentially leverage off its proximate location to major tourism assets and play a role in providing a location for accommodation and local convenience facilities for tourists.
38. Importantly, the above opportunities are not independent, they overlap and interconnect. For example, stronger health and education linkages would support more office development which would be further encouraged through a more vibrant main street core.

West Melbourne economic challenges

39. As West Melbourne transitions from its industrial past to a dense urban environment, I believe there are a few key challenges, from an economic perspective, which were identified in the SGS Stage 1 Report and summarised below:
- The precinct has good, but not great, transport links which are discussed in detail in Section 3.3 of the SGS Stage 1 Report.
 - As detailed in Section 2.6 and 3.7 of the SGS Stage 1 Report there has been a dramatic increase in residential development and applications within West Melbourne in recent years which has placed pressure on employment outcomes. The latest 2017 CLUE data (as discussed at paragraph 33) and the latest DAM (April 2019) data (see Figure 2 below) shows that this balance has recently shifted. I believe it is unclear yet if this recent shift will be sustained, or if it will be significant enough to translate into ongoing positive employment growth for West Melbourne that could result in the 10,000 total jobs by

2036. Even with the recent shift, residential is still the dominant development type and once land is developed for residential purposes, it is almost impossible to transition to alternative uses at a later point due to various design factors and fragmented (i.e. strata) ownership structures. *This issue is largely investigated in the feasibility analysis in the SGS Stage 2 Report, which my colleague Andrew Spencer will address in his expert statement.*

FIGURE 2 DEVELOPMENT ACTIVITY, WEST MELBOURNE



Source: April 2019 Development Activity Monitor, City of Melbourne

Justifications for retaining employment

40. While somewhat challenging to quantify, and at times inter-related, the benefits of retaining employment in West Melbourne are considered in Section 1.6 of the SGS Stage 2 Report and are summarised below:
 - A mix of employment and residential activity contributes to the innate environmental quality and character of West Melbourne as a diverse mixed-use area.
 - The availability of affordable and flexible floorspace, in proximity to universities, cultural infrastructure and the CBD, supports the productivity and creativity of businesses in West Melbourne. This offer fulfils a niche function which is not readily substitutable.
 - The conversion of large floorplate commercial activity to residential development and the subdivision of lots on strata title, results in a fragmentation of ownership which is very difficult to reverse. Policy to require ongoing employment uses is a risk management approach to protect future choices and ensure the area can adapt to future needs.
 - Related to the above, a diversity of activity can prevent the development of a 'monoculture' or single use area. This diversity can support future resilience as demographic and economic trends change.
 - A mixed-use environment can also support a more diverse housing environment

West Melbourne employment forecast

41. To understand the implications of these trends and opportunities, baseline employment forecasts for West Melbourne and the rest of the City of Melbourne were developed. These forecasts were consistent between the SGS Stage 1 Report and SGS Employment Forecasts.
42. The approach used to develop these forecasts is detailed in Section 3 of the SGS Employment Forecast Report. The baseline forecasts drew on the latest data at the time (August 2016) and captured both broader macro-economic trends and local employment drivers.
43. Section 5.2 of the SGS Stage 1 Report details the West Melbourne baseline scenario. Under this baseline scenario West Melbourne is expected to stop seeing a decline in employment and will experience a modest increase in employment over the next 20 years. This is projected to be largely focused in the commercial and institutional (health and education) sectors which will see their share of total employment increase from 65 per cent in 2016 to 81 per cent by 2036. There will also be some growth in retail and entertainment related sectors, while industrial employment will continue to decline.
44. This level of growth for West Melbourne represents a slight increase in the share of the City of Melbourne's employment from 1.3 per cent in 2016 to 1.4 per cent by 2036. It would still be below its historical share of employment of 2.2 per cent back in 2003.

TABLE 3 EMPLOYMENT BY BROAD INDUSTRY, WEST MELBOURNE

Broad Industry	2003	2016	2021	2026	2031	2036	2015-36
Commercial	4,039	2,742	3,291	3,822	4,506	5,280	2,619
Institutional	442	1,071	1,575	2,017	2,391	2,777	1,753
Retail	645	498	511	524	541	559	63
Entertainment	450	374	540	668	793	973	639
Industrial	1,536	1,201	1,058	839	611	376	-627
Total	7,112	5,886	6,974	7,870	8,843	9,965	4,447

Reproduction of Table 6 – p54 SGS Stage 1 Report
Source: SGS Economics and Planning, 2016

45. As stated at paragraph 33, the 2017 CLUE data indicates West Melbourne now has 5,600 total jobs. Importantly this represents a slight increase from 2015 (100 additional jobs). While, it is still lower than the original forecast employment of 5,886 total jobs in 2016 it does represent a reverse in the long slow employment decline that had previously been observed in West Melbourne. Further the 2017 CLUE shows that employment growth has been occurring in commercial and retail sectors with a slight decline in industrial and flat growth in institutional.
46. Despite the variation between latest CLUE data and the 2016 forecast, I believe that the 2036 forecasts for West Melbourne is still appropriate and reflects a continued incremental transition consistent with the broader economic trends effecting the inner city.

47. In Section 4.3 of the SGS Employment Forecast Report two scenarios for West Melbourne were tested. These scenarios were:
- **Scenario 2** considered a situation where further residential growth in West Melbourne is focused into selected precincts only, a retail core is established and linkages with Parkville are developed to support increased commercial employment growth. This scenario largely aligns with the final Structure Plan vision and proposed Amendment. This scenario resulted in West Melbourne employment increasing to 12,380 total jobs by 2036. This would see West Melbourne's share of the City of Melbourne employment increasing slightly to 1.5 per cent by 2036.
 - **Scenario 3** considered leveraging the Queen Victoria Market redevelopment to create an arts and culture precinct in West Melbourne. This scenario resulted in West Melbourne seeing a small increase in employment over the baseline to 10,780 total jobs by 2036.
48. These original forecasts indicate a potential employment range for West Melbourne of between 9,965 to 12,380 total jobs by 2036 or between 4,079 to 6,493 additional jobs from 2016 to 2036. Overall, the original employment forecast for West Melbourne is similar to that anticipated in East Melbourne (additional 6,600 jobs from 2016 to 2036), Melbourne (Remainder) (8,700) and North Melbourne (15,500). It is also well below that forecast in the CBD (130,000), Docklands (31,000), Southbank (16,500) and Parkville (16,500).
49. As stated at paragraph 27, the Amendment identifies a need to accommodate 10,000 total jobs by 2036, or between 4,500 and 7,000 additional jobs by 2036, for West Melbourne. These are identified as largely being commercial or retail based with linkages to the health and education sectors. The Amendment also seeks to create a new local centre on Spencer Street. This broadly aligns with the level and type of employment growth forecast in the baseline and Scenario 2 forecasts which I believe are still reasonable and appropriate for West Melbourne. Creation of the Spencer Street local centre will also be critical to supporting a high amenity environment that will encourage knowledge sector workers and commercial office uses.

2.4 West Melbourne forecast population

50. The Amendment states the following regarding population and dwelling growth:
- 'The projected population of West Melbourne is between 8000-9000 residents by 2037' - Proposed Clause 21.16-6
 - 'Deliver approximately 5500 additional dwellings to meet the projected population growth' - Proposed Clause 21.16-6
51. The figures included in the proposed controls are based on the November 2017 Geographia forecasts for population for the City of Melbourne.
52. While not a focus of the SGS background work, SGS did review existing dwelling and population forecasts for West Melbourne in Section 5.1 of the SGS Stage 1 Report. Based on the latest trends and data at the time, SGS recommended more appropriate dwelling and population forecasts of between 7,000 to 10,500 total dwellings by 2036 and 14,000 to 21,000 total people by 2036. This reflected the increased development activity evident in the 2015 DAM and a larger average household size of 2.0 people per household (which is more consistent with other similar locations and recent trends).
53. The City of Melbourne has since updated their population projections (April 2019) which are also publicly available on their website. The City of Melbourne Smart City Office has provided a summary of the updated projections and how they compare to previous projections for West Melbourne (refer to Attachment A). The document identifies the following key reasons why the revised forecasts are different:
- *A higher assumed base population due to the latest ERP [Estimated Resident Population] available.*
 - *A higher number of assumed dwellings due to the latest development activity data available.*
 - *A higher assumed average household size.*
 - *Current planning controls for the area.*
54. Table 3 presents the latest population projections for West Melbourne. They fall within the ranges detailed in the SGS Stage 1 Report and, I believe, are more realistic when considering the future amount of population that needs to be accommodated in West Melbourne.

TABLE 4 POPULATION AND DWELLING PROJECTIONS, WEST MELBOURNE

	2016	2021	2026	2031	2036	2041
Population	5,809	10,432	12,040	14,655	18,687	21,498
Average household size	2.21	2.26	2.24	2.24	2.23	2.22
Dwellings	2,620	4,931	5,721	7,094	9,293	10,798

Source: .id consultants, City of Melbourne Population and Household Forecasts, April 2019

2.5 Review of floorspace requirements and controls

55. The Amendment links to the 10,000 jobs target by 2036 through specific controls for non-accommodation floorspace which align with a required amount of employment floorspace:

- In reference to 4500 to 7000 new jobs the local policy states a need for 'approximately 100,000m² to 200,000m² of employment floor space' - Proposed Clause 21.16-6

Floorspace implications

56. Based on employment forecasts a high-level assessment of floorspace implications was completed as part of the SGS Stage 1 Report in Section 5.3 and the SGS Employment Forecast work. This was based on existing floorspace to job ratio trends evident in the 2015 CLUE data. It represents potential floorspace demand based on the employment forecasts and did not consider capacity or individual site/firm characteristics required to realise the floorspace.
57. The original assessment indicated the forecast employment will require between 105,000 (baseline) and 195,000 (Scenario 2) additional square metres of employment floorspace by 2036. This represents an average of between 24 and 28 square meters per additional employee. It would see the average workspace ratio (floorspace per employee) in West Melbourne fall from 53 in 2015 to 40 in 2036 square meters per employee (See Table 5).

TABLE 5 EMPLOYMENT FLOORSPACE REQUIRMENTS, WEST MELBOURNE

	2015	2016	2021	2026	2031	2036	2015-36
Baseline							
Jobs	5,518	5,886	6,974	7,870	8,843	9,965	4,447
Floorspace (sqm)	294,899	307,112	345,676	357,209	376,617	400,129	105,230
Workspace ratio	53	52	50	45	43	40	24
Scenario 2							
Jobs	5,518	5,869	7,377	9,017	10,595	12,380	6,862
Floorspace (sqm)	294,899	305,425	361,162	399,345	440,748	489,973	195,074
Workspace ratio	53	52	49	44	42	40	28

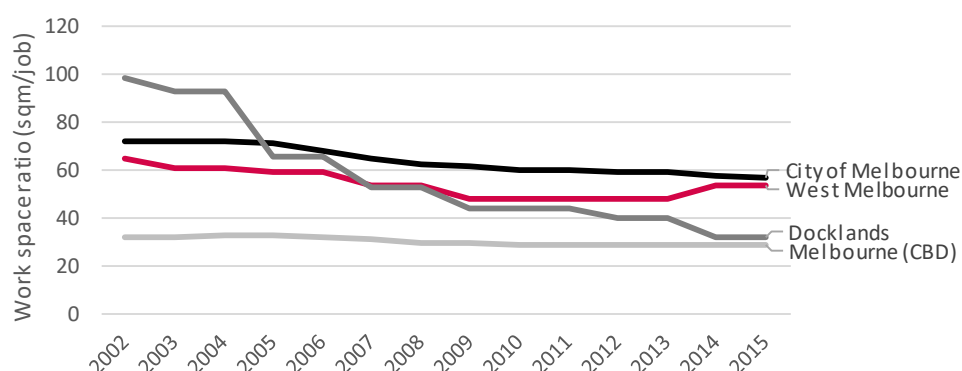
Data extracted from SGS Employment Forecast data tables provided with the original report

Source: SGS Economics and Planning, 2016

58. This represents a relatively gradual decline in the workspace ratio in West Melbourne as it continues to slowly transition away from space-intensive industrial uses to more labour-intensive service sectors. If the industry composition shifts more rapidly, a more rapid decline in the workspace ratio could be expected in West Melbourne.
59. To further understand the appropriateness of this original forecast employment floorspace requirement, I have completed some additional analysis of the 2015 and 2017 CLUE.
60. The following presents the trend in workspace ratios across the City of Melbourne, along with the CBD, Docklands and West Melbourne. This shows a gradual decline in the workspace ratio for the City of Melbourne overall. Established employment areas, such as the CBD, have seen relatively stable (though slightly declining) workspace ratios. However, renewal areas,

such as Docklands, have seen a rapid decline in their workspace ratio as their employment composition shifts, and will likely stabilise in the long term to a similar level to the CBD.

FIGURE 3 TRENDS IN WORKSPACE RATIOS



Source: 2002 to 2015 CLUE - City of Melbourne

61. Workspace ratios also vary significantly between economic sectors and even firms within the same sector (see Table 6). Core commercial office-based employment is typically around 15-30 square metres per employee. This is currently much higher in West Melbourne, likely due to less labour intensive operations and/or underutilised space. Other sectors require higher ratios, such as retail, which typically requires around 20-40 square metres per employee. Again, this is significantly higher in West Melbourne. Other sectors, such as accommodation, always have high ratios and require around 100-200 square metres per employee.

TABLE 6 WORKSPACE RATIOS BY INDUSTRY (SQM PER EMPLOYEE)

	West Melbourne 2015	Melbourne CBD 2015	Docklands 2015	City of Melbourne 2015
Admin and Support Services	11	18	14	22
Business Services	32	19	17	19
Finance and Insurance	31	18	13	16
Information Media and Telecommunications	90	22	17	26
Other Services	78	156	868	243
Public Administration and Safety	55	24	13	25
Real Estate Services	159	22	27	26
Rental and Hiring Services	268	89	37	95
Education and Training	50	39	193	56
Health Care and Social Assistance	41	26	30	22
Retail Trade	139	34	36	39
Food and Beverage Services	33	19	29	19
Arts and Recreation Services	73	51	110	301
Accommodation	240	145	228	145
Agriculture and Mining	60	32	13	32
Manufacturing	51	24	90	64
Electricity, Gas, Water and Waste Services	0	14	0	20
Construction	23	21	47	32
Wholesale Trade	71	28	22	39
Transport, Postal and Storage	63	20	74	271
All employment	53	29	32	57

Source: 2015 CLUE – City of Melbourne

62. The previous industry analysis includes a range of functions within each industry and does not isolate office-based employment specifically. However, the 2017 CLUE data estimates a workspace ratio of 18.3 square metres per employee for office-based employment. This is based on 296,600 office jobs across all industries (or 64 per cent of all jobs).

TABLE 7 OFFICE EMPLOYMENT AND FLOORSPACE 2017

CLUE Small Area	Jobs	Floor space	Workspace ratio
Melbourne (CBD)	169,800	3,101,900	18.3
Docklands	49,900	784,600	15.7
Southbank	27,100	440,500	16.3
Rest of City of Melbourne	49,800	1,112,500	22.3
Total	296,600	5,439,500	18.3

Source: 2017 CLUE – City of Melbourne

Review of City of Melbourne Capacity analysis

63. City of Melbourne has completed internal capacity modelling to understand how many dwellings, residents and workers can be accommodated under the proposed controls. A document prepared by City of Melbourne detailing this work is included in Attachment B (Capacity Modelling). I have reviewed the analysis approach and assumptions and believe it provides a reasonable estimate of the potential capacity under the proposed controls.
64. The Capacity Modelling splits all sites within West Melbourne into three categories (see Figure 4) and estimates a capacity for dwellings, residents and workers on each as follows:
- **Sites unlikely to develop** – remain unchanged based on current 2016 CLUE
 - **Site subject to development activity** (October 2017) – includes sites under construction or where planning permits have been approved. Dwelling and employment on these sites are based on the City of Melbourne Development Activity Monitor data.
 - **Sites likely to develop** – uses a series of built form and floorspace assumptions to reflect the proposed development controls of the particular site. For employment, the minimum Floor Area Ratio control within the Special Use Zone has been applied. A small level of employment has been estimated in other zones to reflect their respective provisions.

FIGURE 4 CITY OF MELBOURNE CAPACITY, SITES LIKELY TO DEVELOP, OCTOBER 2017



Source: City of Melbourne, October 2017

65. The analysis includes some general assumptions to convert development controls to residents and workers. I have commented on these assumptions as follows:
- **80% building circulation.** This is generally consistent with other development in the area.
 - **70 sqm per dwelling.** This reflects a typical two bedroom apartment. With some development likely to be smaller and larger than this. It is an appropriate average.
 - **1.98 (2016) to 2.23 (2036) household size ratio.** I believe this higher household size (relative to the Structure Plan) better reflects future trends. This ratio aligns with SGS recommendations in the SGS Stage 1 report and addresses concerns with the 1.5 household size ratio forecast in the original population forecasts.
 - **24 square metres per job.** This aligns with the additional job and floorspace requirements identified in the SGS Stage 1 report and the points discussed in my evidence statement paragraph 56-62. The workspace ratio is half the current workspace ratio for West Melbourne, but consistent with the average for the City of Melbourne. It is above the average office workspace ratio of 18.3 square metres which is appropriate as it should reflect a broader range of employment uses (i.e. retail). While there will be some site variation, I believe 24 square metres per worker as an average for new developments in West Melbourne is reasonable.

66. Table 8 presents the results of the capacity analysis alongside: the current stock; forecasts from the original SGS Stage 1 Report and SGS Employment Forecasts; the Structure Plan; and recently released City of Melbourne population forecasts.

TABLE 8 WEST MELBOURNE EXISTING, FORECAST AND CAPACITY SUMMARY

	Dwellings	Residents	Workers
Current (2016) ¹	2,592	5,132	5,553
Unlikely to change	2,344	4,641	2,257
Subject to DA	3,900	8,697	839
Likely to change	4,599	10,255	3,410
Total C309²	10,843	23,593	6,506
SGS Stage 1 Report ³	7,000	14,000	10,000
	15,000	21,000	12,500 ⁴
Structure Plan ⁵		8,000	10,000
		9,000	12,500
2036 population forecast ⁶	8,150	18,687	

Source: 1: 2016 CLUE City of Melbourne, 2016

2: Analysis by City of Melbourne, 2019

3: SGS Stage 1 Report, SGS Economics and Planning, 2016

4: Scenario 2, SGS Employment Forecast, SGS Economics and Planning, 2016

5: West Melbourne Structure Plan, City of Melbourne, 2018

6: id. Consulting, April 2019

67. This indicates if all 'likely to change' sites are built out to the proposed controls there will be more than enough capacity to accommodate both the proposed population in the Structure Plan and revised population projection. However, applying the minimum controls for non-accommodation uses only achieves 65 per cent of the baseline employment forecasts and only a small increase (953 additional jobs) on current employment levels. This is partly because the sites 'likely to change' often have existing employment uses, rather than dwellings. This highlights the minimum non-accommodation control largely only protects from a net loss of employment when these, often employment based, sites are intensified. It's also worth noting this would vary significantly on individual sites with some resulting in a net gain in employment from the controls, while others resulting in a net loss.
68. However, this represents only one hypothetical development scenario based on the proposed controls. I believe that there is potential for additional employment above that estimated in the Capacity Modelling for two main reasons:
- There is potential for intensification of employment within the existing floorspaces that are 'unlikely to change'. This could be achieved through refurbishment of internal spaces or simply (new) businesses with more workers utilising the same space. If the average workspace ratio on sites 'unlikely to change' decreased from the average of 53 to 30 this could provide for an additional 1,700 workers.
 - There is also the potential for sites to develop with more retail/commercial space above the minimum non-accommodation controls, but below the overall maximum Floor Area

Ratio (FAR). This could take the form of a small increase (above the minimum control) across a number of sites or a few entirely commercial office building. If, hypothetically, employment uses were to capture an additional 20 per cent of the total FAR across all areas (i.e. within Flagstaff, employment uses captured 2.0 rather than 1.0 of the 6.0 FAR) then there could be an additional 3,000 workers. This would also have an impact on the dwelling capacity which under this hypothetical scenario would be reduced by 1,000 dwellings or 2,300 people.

69. Based on these hypothetical adjustments, West Melbourne would accommodate 11,300 total jobs, 9,800 total dwellings and 21,260 total people. This highlights that the proposed controls could technically achieve both the employment target (10,000 to 12,500 total jobs by 2036) and the latest population projection (18,687 total people by 2036). However, to achieve the employment target, additional supportive policies, investment and market demand would be needed to see the minimum non-accommodation controls exceeded. I have further commented on these other supportive controls in relation to employment in Section 2.6 of this statement.

Potential for growth beyond 2036

70. West Melbourne will need to continue to provide for population and employment growth beyond 2036. I have not analysed this in detail, however, I raise the following points:
- The latest (April 2019) population projections forecast 21,498 residents by 2041. This is still under the total population capacity noted above (23,593). If accounting for my hypothetical higher employment scenario (resulting in capacity for 2,300 less people) there would be a slight shortfall by 2041. The capacity modelling indicates there is not significant growth potential above the 2036 employment and population projections.
 - However, the 'likely to change' sites included in the capacity analysis represent only 20 per cent of sites (or 29% per cent of site area). As the area develops over the next 15 years, sites currently 'unlikely to change' may become more viable. This could be due to: consolidation of ownership on fragmented lots; changing development feasibility; and aging/deterioration of existing developments which are currently relatively new.
 - The average workspace ratio could also potentially continue to fall on both existing and new development sites as the structure of employment continues to evolve.
71. These factors mean West Melbourne would likely continue to experience incremental levels of both employment and population growth post 2036.

2.6 Review of policy implementation from an economic basis

72. The draft Amendment seeks to implement the Structure Plan through a suite of related planning controls in the City of Melbourne Planning Schemes. The controls and policy should align and support the mixed use employment outcome and 10,000 jobs by 2036.
73. I am not a qualified planner and, therefore, cannot comment on the drafting and implementation of the draft policy and controls. However, I have experience working with state and local government on a range of urban economic policy and planning related studies. As such, I believe I can comment on the proposed amendment from an economic basis.

Clause 21.16-6

74. The proposed Clauses 21.16-6 in the City of Melbourne Planning Scheme sets out the overall local policy that will be used to implement the Structure Plan.
- The local policy identifies that West Melbourne *'will retain its unique identity, varied areas of character and mix of uses as it evolves into one of Melbourne's distinct inner urban neighbourhoods and a counterpoint to the central city'*. The local policy also identifies a need for 4,500 to 7,000 new jobs, requiring approximately 100,000 sqm to 200,000 sqm of employment floorspace. I have discussed these targets previously in my statement and believe they are appropriate for the area.
 - The dot points under 'Economic Development' further touch on the policies which will support the employment target. They include a variety of policies to support employment uses throughout West Melbourne, the creation of a local activity centre, targeted retention of employment within the Special Use Zone, and better leveraging the North Melbourne (future West Melbourne) station.
 - Other policies also indirectly support employment creation, including design controls which support increased amenity/activation and transport policies and investment which provide greater options, frequency and volume for local firms and residents.

Clause 37.01 - Special Use Zone 6

75. The proposed SUZ6 will be applied to approximately 45 per cent of West Melbourne. Its purpose is to support a vibrant, mixed use inner city neighbourhood with a genuine mix of retail, commercial and residential uses and affordable housing.
76. From an economic perspective, I believe it will help achieve the employment objectives of the amendment for the following reasons:
- By excluding Dwellings as a Section 1 use, but still retaining similar employment uses (as in the Mixed Use Zone as Section 1 uses), I believe the schedule helps to create a more employment focused mixed use zone required for the area. This will protect the area

from cyclical property cycles where feasibility for residential development can challenge the viability of commercial development as discussed in paragraph 37 dot point 2 of this statement. If the area is rapidly built out during these cycles in the short term, it can limit the areas future potential for employment in the long run. Limiting Dwellings as a Section 2 use provides a trigger for the minimum non-accommodation FAR, which ensures existing employment is retained and new opportunities are created across West Melbourne.

- The minimum percentage for non accommodation uses are a result of different minimum FARs and their relationship with the maximum FAR control. These vary by precinct:

Precinct	A) Minimum non accommodation FAR	B) Overall maximum FAR	(A/B) Minimum percentage for non accommodation
Flagstaff	1.0	6.0	16.6 per cent
Spencer	1.0	4.0	25 per cent
Adderley	0.5	3.0	16.6 per cent
Station	1.0	5.0	20 per cent

The variation in these ratios essentially results in the same minimum non accommodation provision (1.0 Floor Area Ratio) for Spencer, Flagstaff and Adderley, with half that for Adderley (0.5 Floor Area Ratio). Adderley is relatively less accessible compared to the other precincts so I believe a reduced ratio would be appropriate. The variation also reflects the current variation in development feasibility which my colleague Andrew Spencer will discuss in his evidence statement.

- The schedule also requires active ground floor frontage to Spencer Street between Hawke Street and Dudley Street. I believe this will help support the creation of a local centre which will in turn support greater amenity and broader knowledge based commercial employment demand in the area.

Other supporting policy

77. Employment is also indirectly supported through a number of other aspects of the Amendment. These include:

- Provisions within the Design and Development Overlay which seeks to create a high amenity, diverse and active environment. As discussed during paragraph 29 to 32 of this statement, knowledge services based employment is attracted to diverse, high amenity and well connected locations. Provisions which help to enhance these aspects of the area will help to encourage local employment demand.
- Transport provisions and investments which improve connectivity within and to/from the precinct will also support employment growth.

3. RESPONSE TO SUBMISSIONS

3.1 Review of submissions

78. I have reviewed all submissions to the Amendment and in this section of my evidence statement, I provide comment on those submissions which I judge to be within the scope of my expertise. Overall, two broad themes related to employment have been raised:

- Application of the Special Use Zone instead of an existing zone (i.e. Mixed Use Zone).
- Appropriateness of the mandatory minimum proportion of non-accommodation uses.

Application of the Special Use Zone

79. Submissions 15, 19 and 23 raised concerns with the application of the Special Use Zone instead of an existing zones:

-
80. **Submitter 15:** 'It is unclear why the outcomes sought by Amendment C309 could not be achieved through the Mixed Use Zone (or alternatively the Commercial 1 Zone) and a revised Design and Development Overlay (Schedule33) (DDO33), and this should be reconsidered.'
81. **Submitter 23:** 'The broad application of the Special Use Zone (Schedule 6) is inappropriate having regard to Planning Practice Note 3: Applying the Special Use Zone and it is recommended that a new schedule to the Capital City Zone (CCZ), which has been tailored for use in other urban renewal areas, should be used instead.'
82. As discussed at paragraph 74 of my statement I believe the proposed SUZ6 will support a more mixed use employment outcome for the precinct which is not possible with other existing zones such as the Mixed Use Zone which is largely delivering residential developments. The SUZ6 provisions generally align with the existing Mix Use Zone with the addition of provision around minimum non-accommodation uses, triggered through Dwellings being a Section 2 use, and affordable housing requirements. The SUZ6 also supports the creation of an activity core on Spencer Street through provisions which encourage active ground floor uses and reduced permit triggers for office/retail uses.

Minimum proportion comprised of non-accommodation uses

83. Submissions 1, 15, 19, 20, 23, 29, 37, 38, 45, 48, 49, 51 and 52 raised concerns around the minimum non-accommodation requirements in the SUZ6.
-
84. **Submitter 1:** Mandating ground floor employment and floor to ceiling heights to accommodate office on all floors is unnecessary, counter-productive and will reduce housing affordability and choice. If there is sufficient demand for ground floor services they will appear.'
85. **Submitter 49:** 'The submitter objects to the mandatory requirement for a minimum 25 per cent of the gross floor area (GFA) of a development to be allocated to a use other than accommodation as the quantum and type of land uses should not be dictated in a way that does not allow flexibility in the land use mix.'
86. Recent development activity indicates that the vast majority of new development in West Melbourne has been residential. If this continues there will likely be minimal additional, or even a net loss, of employment in the area. Given its proximity to the CBD and other major institutional assets this could represent a potential lost economic opportunity to the local area and broader economy.
-
87. **Submitter 19:** In reference to Flagstaff Precinct the submitter considers that the non-accommodation requirement (minimum of 16.6 per cent of gross floor area), may result in a raft of unoccupied retail / office tenancies scattered throughout West Melbourne.
88. Analysis (See paragraph 34) indicates there is, and will continue to be, significant employment demand across inner city Melbourne. Further the previous 2016 CLUE data found that premium and A grade office floor space has grown by 43,200 square metres in the last two years. At the same time the vacancy rate for Premium and A grade office floor space has declined from 8.0 per cent to 7.6 per cent. This suggests there is continued strong demand for newly developed office floor space across the central city area.
89. The amount of employment planned in West Melbourne under the proposed controls (10,000 total jobs by 2036) represents a very small share of the overall amount of employment projected across the City of Melbourne (696,126 total jobs by 2036 or 248,575 additional jobs by 2036). For these reasons, I believe it is unlikely the controls will result in a raft of unoccupied employment tenancies.

-
90. **Submitter 15:** In reference to Flagstaff Precinct 'In so far as uses other than accommodation are concerned, the mandatory requirement to allocate 16.6 per cent of the gross floor area (GFA) of a development to a use other than Accommodation is onerous and fails to have regard to the various other mechanisms in which a development can contribute to employment generation.'
91. **Submitter 20:** 'Delete the mandatory minimum floor areas for non-residential uses which are broad brush and disregard the commercial reality of preferred tenancy locations for various commercial uses in favour of clear local policy guidance for employment uses.'
92. **Submitter 23:** 'The maximum number of dwellings provision, the requirement for affordable housing and mandatory 16.6 per cent of gross floor area (GFA) for uses other than accommodation in the schedule for a Section 1 Use are not appropriately justified, unnecessarily restrictive and should be removed.'
93. **Submitter 29:** In relation to a site in Spencer Precinct 'The mandatory floor area ratio for the site is too prohibitive and will result in the underutilisation of land and should be discretionary' and 'Incentives in the form of floor area ratio uplifts and greater building heights should be offered for providing commercial and employment generating uses above the minimum requirements.'
94. **Submitter 38:** In relation to a site in Spencer Precinct 'The requirement for more than one sixth of the development area to be non-residential is unreasonable and arbitrary. Not all sites are suitable for a mix of commercial and residential development. The objective of achieving a land use mix throughout the precinct does not have to be achieved on each individual site.'
95. **Submitter 48:** 'The submitter believes an incentive, rather than a mandatory control, would better encourage mixed use development such as a floor area uplift should employment generating uses be proposed.'
96. Analysis (see paragraph 63 to 69) suggests the minimum non-accommodation controls are relatively conservative, achieving 65 per cent of the overall employment target for West Melbourne (10,000 total jobs by 2036). As mandatory controls, rather than a floor area uplift or discretionary control, they provide certainty regarding both the minimum expected amount of employment and overall scale of development. The mandatory controls are also combined with a range of other supportive policies and investment to encourage employment generation above this minimum level.

3.2 Council post-amendment changes

97. I have also reviewed the officers' report to the FMC meeting of 7 May following Councils review of submissions to the exhibited Amendment. Many recommended changes relate to planning or editorial matters. I provided the following comments with regard to recommended changes relevant to my area of expertise:
- I support inclusion of *Education Uses* within the SUZ6 purpose. Education is a key employment generator for West Melbourne given its proximity to other major education institutions and other employment sectors links with research and training.

ATTACHMENT A

Separately attached - West Melbourne Residential Population Forecast Memo (31/5/2019)

ATTACHMENT B

Separately attached – Amendment C309 West Melbourne Structure Plan Capacity Modelling
Outline (June 2019)

ATTACHMENT C



JULIAN SZAFRANIEC

Principal, Partner and Director

National Leader: Data and Spatial Analytics

Bachelor of Economics (Econometrics) (Honours) (Monash University)

Julian is an urban economist who has over 11 years' experience in applying economic theories and models to urban and regional issues across Australia and internationally. Julian has provided advice to all tiers of government and the private sector, related to the dynamics of housing, transport, community infrastructure, retail, and the economy generally.

Julian is an excellent communicator and able to translate often complex ideas into *plain English*. He regularly presents to councilors, the community, at conferences, seminars, panels hearings and has been reported in the media around key economic and housing issues.

I have previously presented expert evidence at Planning Panels Victoria, including:

- (Am C126) Bayside Small Activity Centre Strategy – City of Bayside (2018)
- (VCAT) Officer Hotel EGM application – City of Cardinia (2018)
- (Am C150) Bayside RCE Strategy – City of Bayside (2018)
- (Am GC81) Fishermans Bend Planning Review Panel – Economic and Employment Expert Evidence (2018)
- (VCGLR hearing) Officer Hotel EGM application – City of Cardinia (2018)
- (VCAT) Commercial Hotel EGM application – City of Whittlesea (2017)
- (Am C76) Moorabool Industrial Land Supply Expert Evidence – City of Moorabool (2017)
- (VCGLR hearing) Commercial Hotel EGM application – City of Whittlesea (2016)
- (Am C182) Dandenong Housing Strategy - City of Greater Dandenong (2016)
- Ministerial Advisory Committee - Housing Capacity - City of Boroondara (2016)
- (Am C198) Craigieburn North PSP - Metropolitan Planning Authority, City of Hume (2015)
- (Am C108) VicTrack Rezoning to Retail Uses – VicTrack, Shire of Yarra Ranges (2012)
- (Am C21) Council Gambling Policy - Benalla Rural City Council (2012)

A selection of other relevant experience includes:

- West Melbourne Employment and Economic Study Stage 1 and Stage 2 – City of Melbourne (2017)
- Melbourne Employment Projections - City of Melbourne (2013, 2017)

- Southland-Pennydale and Highett Structure Plan Economic Advice - Bayside City Council (2018)
- Small Activity Centre Strategy - Bayside City Council (2017)
- Cranbourne Town Centre Economic and Housing Assessments – City of Casey (2017)
- Small Area Land Use Projections – Transport for Victoria (2008-2017)
- Fishermans Bend Economic and Employment Study - Fishermans Bend Taskforce (2016)
- Retail Hospitality and Expenditure Study (2016 Update) - City of Melbourne (2016)
- Clyde Town Centre Urban Design Framework Review - City of Casey (2016)
- Retail, Commercial and Industrial Strategy - Bayside City Council (2016)
- Employment and Visitation Forecasts - City of Port Phillip (2016)
- Spatial Economic and Employment Strategy - City of Yarra (2015)
- Peer Review of Amcor Site Redevelopment Plan - City of Yarra (2015)
- Review of Green Square and Southern Areas Retail Study - City of Sydney (2015)
- Restricted Retail Study - Hume-Whittlesea Corridor - MPA (2014)
- Greater Geelong Retail Strategy - City of Greater Geelong (2014)
- Darebin Retail Strategy - City of Darebin (2014)
- Retail and Hospitality Expenditure Study - City of Melbourne (2013)
- Value of Hospitality Sector - City of Melbourne (2013)
- Chapel Re-vision housing and employment analysis - City of Stonnington (2014)
- Role of activity centres in Melbourne - Central Activities Areas Councils (2013)



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
sgsns@sgsep.com.au

Attachment A

West Melbourne Residential Population Forecast Memo (31/5/2019)

WEST MELBOURNE RESIDENTIAL POPULATION FORECAST

Date: 31/05/2019

Branch: Smart City Office

Team: Research and Insights

Contacts: Christabel McCarthy and Will McIntosh (Acting Team Leaders); Danielle Jenner (Research Advisor)

COM's POPULATION FORECASTS

Forecasts are a reliable prediction of the future population and are imperative to allocating sufficient resources and services so we can keep up with our fast growing municipality. It is essential that CoM has access to accurate and reliable forecasts and hence we commission subject matter experts to prepare population forecasts on our behalf.

The Estimated Resident Population (ERP) is an estimate of the population at 30 June each year. It is published by the Australian Bureau of Statistics (ABS) and is used as a basis or starting point for our population forecasts along with the number of current dwellings.

Additional data is then considered such as births, deaths, in-migration and out-migration, as well as development activity, built form capacity estimates, vacancy rates and various policy and planning documents. Some of this data is provided by CoM to the forecast provider. The forecast provider uses the data to develop assumptions and inputs into their forecast model.

The outputs from the forecast model will therefore depend on two things:

- The assumptions and inputs (which depends on the current data available at that point in time).
- The forecast model (which differs across providers due to proprietary methods but are typically underpinned by the same principles).

This means forecasts are subject to change as new information comes to light, as well as variations in modelling approaches.

Additionally, it is important to note that the further in the future a forecast looks, the less confidence can be held in the numbers presented. This is due to greater uncertainty around the assumptions and inputs for the longer term.

WEST MELBOURNE RESIDENTIAL AREA

New population forecasts were produced for the municipality and our small areas in November 2018 by the current forecast provider (appointed in August 2018). These provided an update to those produced by the previous forecast provider, including a specially commissioned forecast for West Melbourne Residential area (WMR) in November 2017.

The new WMR forecast is shown in Figure 1 including a comparison with results from the 2016 Census. The new forecast predicted an increase of around 850 households from 2016 to 2018 resulting in an increase of just over 2,000 residents.

Figure 1: WMR Forecasts – Census vs. New Forecast

WMR	Census (Year = 2016)	New Forecast (Year = 2018)	Difference
Total private dwellings	2,660	3,551	+ 891
Occupied private dwellings (households)	2,394	3,252	+ 858
Average household size	2.2	2.2	-
Total population	5,511	7,686	+ 2,175

Compared with the previous forecasts, the new WMR forecast was based on:

- A higher assumed base population due to the latest ERP available.
- A higher number of assumed dwellings due to the latest development activity data available.
- A higher assumed average household size.
- Current planning controls for the area.

As the proposed WMR planning controls were not yet finalised at the time the new forecast was prepared and may be further amended, these were not taken into consideration. They will be taken into account when the planning scheme amendment has been finalised and approved by the Planning Minister.

Figure 2 shows there was some difference in population between the new and previous WMR forecasts. This was less noticeable in the shorter term (2026) due to a similar number of dwellings assumed and more noticeable in the longer term (2036) due to a higher number of dwellings assumed. In both instances, the difference in population is also attributable to variations in household size. The new forecast assumed a higher household size, which is consistent with the most recent Censuses in 2011 and 2016. The WMR household size was recorded at 2.2 in 2011 and again in 2016. The new forecast assumes that this trend will continue over the coming years.

Notably, differences between the previous and special forecasts both prepared by CoM's former forecast provider showed little difference. This seems to suggest that the proposed planning controls have minimal effect on the forecast population, and in turn that the differences between the previous forecasts and new forecast come largely down to assumptions around the number of dwellings and household size.

The new forecast is clearly more bullish in both respects however this should not be a concern. Given the small variation in population forecast in the shorter term, immediate planning should be unaffected.

Figure 2: WMR Forecasts – Shorter Term vs. Longer Term

Year	WMR	New forecast (Nov'18)	Previous forecast (Oct'17)	Special forecast (Nov'17)*
2026	Total private dwellings	5,721	5,282	5,419
	Occupied private dwellings	5,164	5,081	4,768
	Average household size	2.2	1.3	1.3
	Total population	11,955	6,455	6,176
2036	Total private dwellings	9,293	5,338	5,914
	Occupied private dwellings	8,156	5,204	5,211
	Average household size	2.2	1.5	1.5
	Total population	18,662	8,009	7,817
	Planning controls based on	Existing	Existing	Proposed

*Some assumptions made for numbers occupied dwellings and average household size as exact numbers unclear

The following provides further detail around the assumptions used in the new WMR forecast:

- The area has been in transition for several decades from an industrial and warehousing area to one with a greater residential component. The affordability of land and the larger land holdings have been an attractive option for developers seeking to exploit the location of the area on the city fringe. This area has become more appealing to developers as other city fringe areas like Carlton have seen many of the 'easier' development areas already converted to residential and student housing.
- The basis for substantial population change in the West Melbourne Residential area from 2016-2041 is due to the large number of constructed, current and proposed residential developments. These include:
 - 2016-2019: 1,200 dwellings built or being completed
 - 2019-2022: 1,425 dwellings under construction or doing groundworks
 - 2022-2033: 1,967 dwellings from projects dwellings approved or currently under consideration by Council
 - 2030-2041: 3,586 dwellings from future potential in sites where development approvals have lapsed etc.
- The bulk of the population is expected to be young adults, although the number of mature and older adults, as well as children will increase over time. This is driven by the migration patterns where the in-migration of youth is not matched by the out-migration of young couples and families. This leads to an increased number (not necessarily share) of people as 0-14 year olds and 50+ population.
- As this area does not boast a university, the migration to the area is expected to be 'older' (less 18 and 19 year olds) than other parts of the City, such as Melbourne CBD and Carlton. The migration profile is similar to Southbank.
- Population trends are similar to most areas in the inner city of Melbourne and other major cities in Australia.

The ABS released a new ERP in March 2019 and hence the WMR forecast was updated in April 2019 along with the rest of the municipality. However as there was minimal change to the ERP (~1K in population across the municipality), the WMR forecast has remained largely unchanged.

Current forecasts can be found on the City of Melbourne [population forecast website](#) along with information on the [modelling process](#) and [assumptions](#) used as a basis for the forecasts.

References:

- Australian Bureau of Statistics, Census TableBuilder: 2011 & 2016 Census Datasets (Counting Persons, Place of Usual Residence; Counting Dwellings, Place of Enumeration)
- .id consultants, City of Melbourne Population and Household Forecasts, November 2018
- Geografia, City of Melbourne Population and Household Forecasts, October 2017
- Geografia, West Melbourne Residential Area Forecast (special commission), November 2017

Attachment B
Amendment C309 West Melbourne Structure Plan Capacity Modelling
Outline (June 2019)

**AMENDMENT C309
WEST MELBOURNE STRUCTURE PLAN
CAPACITY MODELLING OUTLINE
JUNE 2019**



WEST MELBOURNE CAPACITY MODELLING

Purpose of capacity modelling

The purpose of capacity modelling is to understand how many dwellings, residents and workers can be accommodated under the proposed density controls. The capacity modelling and built form testing for West Melbourne were undertaken at the same time to understand the impact of the desired built form outcome on the future capacity of West Melbourne.

Population forecasts

In the City of Melbourne Municipal Strategic Statement, West Melbourne is not identified as an urban renewal area and does not have specific population targets to meet. Proposed density controls for West Melbourne considered a range of factors including desired built form outcomes and population forecasts.

The key baseline to City of Melbourne's current population forecast undertaken by .id consultants is the **cohort component method**, which takes the latest known population, and projects forward based on historic growth trends, birth, death and net migration rates. This is combined with **housing unit analysis** to adjust the forecast population. Recent dwelling construction (City of Melbourne's **Development Activity Monitor**) informs short to medium term forecasts, and a **trend-based estimate** is used to forecast dwellings in the longer term. Finally, the forecast population is allocated to households using a **household propensity method**.

The first stage capacity modelling was undertaken by the City of Melbourne in March to October 2017 and referenced the population forecast developed by Geografia in November 2017. These forecasts were updated a year later in November 2018 by .id consultants as part of City of Melbourne's commitment to provide current forecasts that respond to the city's changing context. It should be noted that both forecasts used the latest available information at the time.

The key differences between these two forecasts are:

- Forecasts were conducted approximately one year apart using the latest available information at the time.
- Suppliers used different modelling approaches and different assumptions for factors like household size to construct their forecasts.
- The November 2017 Geografia forecast incorporated the proposed planning controls for West Melbourne, whilst the April 2019 .id forecast were based on existing planning controls.

Capacity modelling for West Melbourne

Capacity modelling looks in detail at the total built floor space that could be theoretically built in a given area, based on built form controls. The development context in West Melbourne varies from site to site due to factors like size, heritage, planning controls, location and strategic context.

As stated above, West Melbourne is not defined as an urban renewal area. As a result, the nature of growth in West Melbourne will differ to surrounding urban renewal areas. Therefore, a more nuanced approach to capacity modelling is required to account for the different types of development pressure across the area.

The capacity modelling methodology for West Melbourne began by assigning each site a different 'status' for development, depending on the site's characteristics:

- Sites unlikely to develop
- Sites already being developed, or likely to develop in accordance with current controls
- Sites likely to develop in accordance with Amendment C309

The status of each site was identified through an understanding of the West Melbourne context and local development activity trends. Further detail on the methodology used to assign each site its status is provided in the following pages. The status assigned to each site as part of this capacity modelling exercise does not guarantee the site's actual future development outlook.

Once a status was assigned to each site, a series of assumptions were applied to generate an estimate of its capacity. Capacity modelling of the existing planning controls for West Melbourne was also developed to provide a comparison to the proposed planning controls.

Stages of capacity modelling

The **first stage** of capacity modelling and built form testing was undertaken between March 2017 and October 2017. This informed the development of built form controls (including Floor Area Ratios) for the Spencer, Station Precinct, Adderley and Flagstaff areas that could support additional development and deliver the emerging design objectives for each place in West Melbourne.

The Floor Area Ratios that were developed underwent feasibility testing by SGS Economics & Planning to understand how the new controls would impact development feasibility in West Melbourne. This work informed SGS Economics & Planning's "West Melbourne Structure Plan - Stage 2 Report" and the finalisation of the West Melbourne Structure Plan.

The **second stage** of capacity modelling was undertaken in June 2019 to inform City of Melbourne's preparation for Amendment C309 West Melbourne Structure Plan Planning Panel.

The key catalyst for the second stage of capacity modelling was the introduction of new population forecasts for the City of Melbourne in April 2019 by .id consultants.

The data, assumptions and methodology used for the second stage of capacity modelling are consistent with what was used in the first stage of modelling, except for the following changes:

- An increase in the household size for all sites likely to develop in West Melbourne from 1.5 (Geografia, November 2017) to 2.23 (.id consultants, April 2019) people per household.
- Incorporation of Census Land Use and Employment (CLUE) jobs data for 2016 at a property level, compared to its original format at a CLUE Block level. This ensured that the capacity of each site reflected either the existing number of jobs according to CLUE data or the proposed number of jobs according to Amendment C309 (not both).

The change in household size allows for a better comparison between the capacity of West Melbourne and the population forecast by .id consultants. The introduction of CLUE jobs data by property ensures that each site has the correct jobs capacity according to its status for development.



Figure 1.1: Map of some site characteristics in West Melbourne that were considered as part of determining a site's 'status' for capacity modelling. Other characteristics for consideration are detailed in page 6 and 7 of this report.

Assigning each site a status

The capacity modelling methodology for West Melbourne began by assigning each site with a different 'status' for development, depending on the site's characteristics:

- Sites unlikely to develop
- Sites already being developed, or likely to develop in accordance with current controls
- Sites likely to develop in accordance with Amendment C309

The status of a site was assigned depending on the site's ability to fulfil the criteria of each status, and its future role in the West Melbourne Structure Plan. The status assigned to each site as part of this capacity modelling exercise does not guarantee the site will or will not develop in the future.

Sites unlikely to develop

Sites were considered 'unlikely to develop' if they were subject to any one of the following criteria:

- Sites subject to the Victorian Heritage Register
- Sites holding more than 10 separate strata titles
- Sites that had redeveloped (prior to 2016) according to the City of Melbourne's Development Activity Monitor
- Sites under 500 m² that are subject to the General Residential Zone, Design and Development Overlays 31, 32 or 34.

The capacity of sites identified as unlikely to develop used CLUE data from 2016 to extract the number dwellings and jobs per property, as well as an average household size of 1.98 in 2016 for West Melbourne. An average dwelling size was not needed, because the amount of dwellings was already captured in the data.

The use of a household size of 1.98 from CLUE 2016 data as opposed to a 'future household size' of 2.23 was informed by the criteria of sites unlikely to develop. By using data and assumptions from the same CLUE dataset (2016), a more accurate snapshot of existing capacity was able to be calculated.

Sites developing or likely to develop in accordance with the current planning controls

Sites were considered as 'developing or likely to develop in accordance with the current planning controls' if they were subject to any of the following criteria:

- Strategic sites within the General Residential Zone, Design and Development Overlays 31, 32 or 34 (DDO31, DDO32, DDO34).
- Sites with a planning permit or developments under construction in October 2017
- Sites with developments that had been completed between January 2016 and October 2017

The strategic sites identified as likely to develop in accordance with the General Residential Zone or DDO31, DDO32 or DDO34 were selected on a site by site basis. Factors considered include:

- The number of street interfaces (e.g. corner sites with two or three street interfaces, versus mid-n
- Site size (corner sites greater than 750m² and other sites greater than 1000m² were considered)
- If the site was under public ownership or vacant
- If the site was vacant during the time of modelling
- Proximity to public transport or public open space

As these strategic sites are subject to planning controls with mandatory maximum height limits, these controls were translated into a FAR to calculate capacity:

- Strategic sites in the General Residential Zone or Design and Development Overlay 31 or 34 would have a total FAR of 3:1, with 10% for employment uses (0.3:1 FAR).
- Strategic sites in the Design and Development Overlay 32 would have a total FAR of 4:1, with 10% for employment uses (0.4:1 FAR).

For sites with planning permits, under construction or recently completed, the data was sourced from the City of Melbourne's Development Activity Monitor in October 2017, and reviewed by City of Melbourne officers. The following information was extracted from each site:

- Total Gross Floor Area (GFA) and GFA above-ground
- Net Lettable Area (NLA)
- Number of dwellings
- Floorspace devoted to non-residential land uses (e.g. retail, commercial, office)
- Floor Area Ratio (FAR) calculated using the total GFA above ground, divided by the site area.

For all sites developing or likely to develop in accordance with the current planning controls, a future average household size of 2.23 was applied to the number of dwellings to calculate an estimated number of residents. An average space per job of 24m² was applied to the non-residential floorspace of each development to calculate an estimated number of jobs.

Sites likely to develop in accordance with Amendment C309

Sites considered 'likely to develop in accordance with Amendment C309' were selected according to the criteria below as well as through an understanding of the site's context within the West Melbourne Structure Plan area.

- Sites with less than 10 strata titles

- Sites with no recent approved development applications
- Sites with live development applications (October 2017)
- Minimal heritage restrictions
- Large site area, with the potential for multiple developments
- Adjacent sites in the same ownership

If a site was identified as 'likely to develop' under the current or proposed controls, the capacity of the site's existing development was not counted.

A Floor Area Ratio (FAR) was used to generate the capacity of sites likely to develop in West Melbourne. Sites subject to a proposed FAR would be used to model the capacity of sites likely to develop in accordance with Amendment C309. Depending on the place, the FAR would include a proportion for non-residential land use. The capacity of a site was calculated using a series of assumptions derived from industry standards and City Research statistics (see Figure 1.3).



Figure 1.2: Map of sites in West Melbourne identified as likely to develop, unlikely to develop and subject to recent development activity for capacity modelling undertaken in October 2017.

CALCULATING CAPACITY

Calculating capacity according to site 'status'

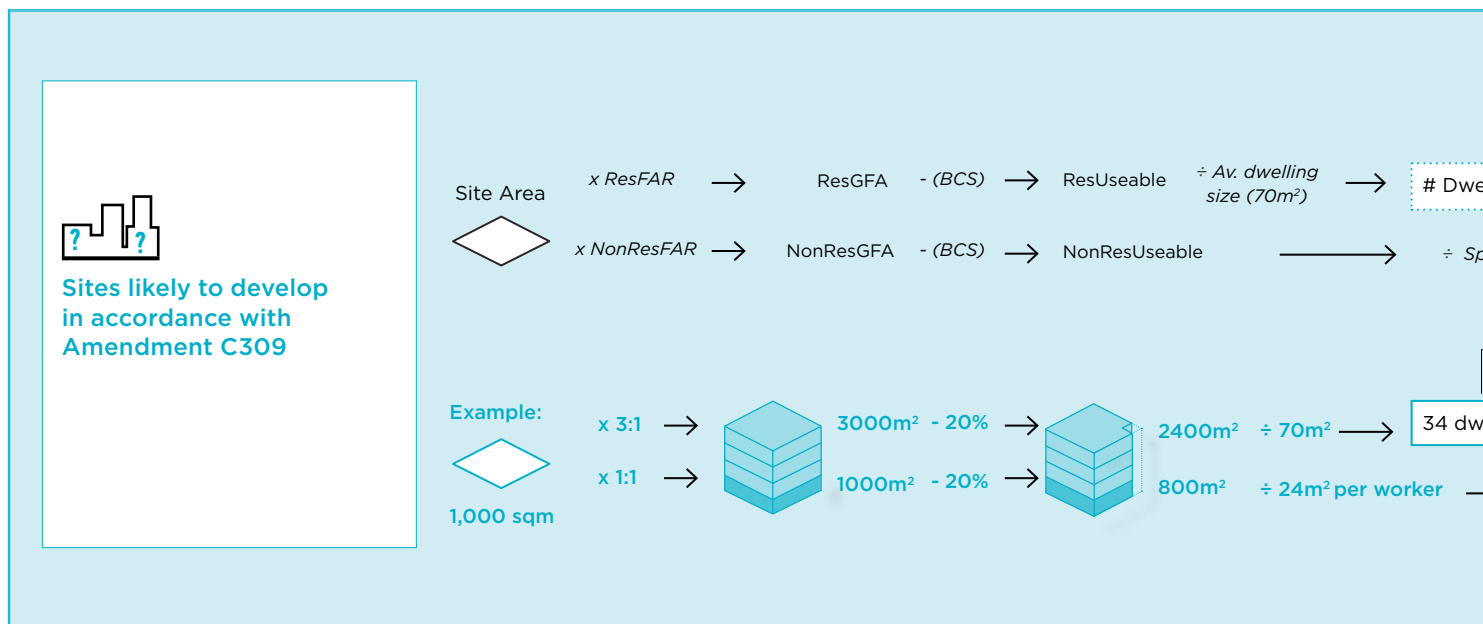
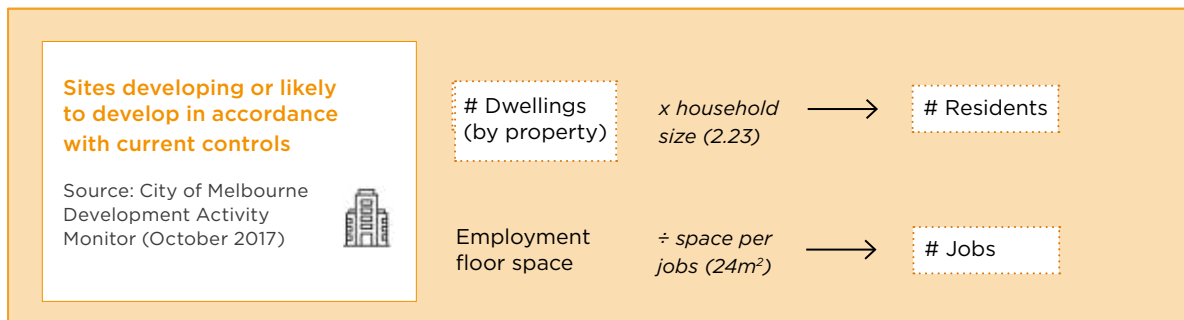
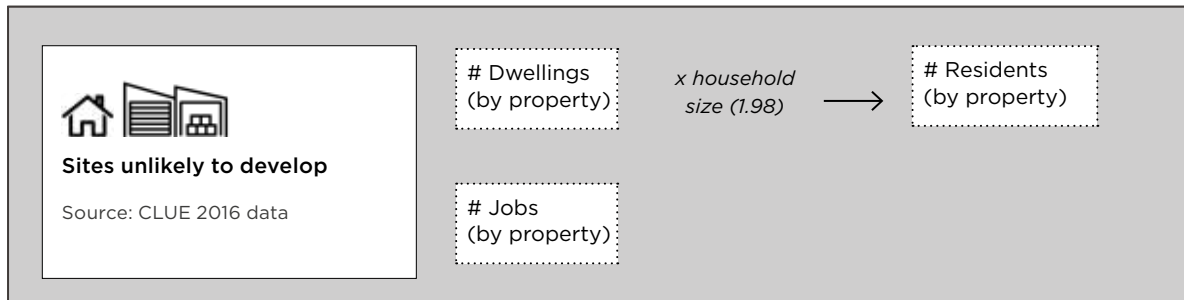






Figure 1.3: Outline of the capacity modelling process used for the West Melbourne Structure Plan 2018. The graphic provides detailed how capacity outputs were calculated for sites unlikely to develop, likely to develop and sites subject to recent development activity.

Existing dwellings		Existing residents	Existing jobs
+		+	+
New dwellings from existing controls		New residents from existing controls	New jobs from existing controls
+		+	+
New dwellings from Amendment C309 controls	New affordable dwellings from Amendment C309 controls	New residents from Amendment C309 controls	New jobs from Amendment C309 controls
			
TOTAL DWELLINGS	AFFORDABLE DWELLINGS	TOTAL RESIDENTS	TOTAL JOBS

Key Assumptions:

Household size used for sites unlikely to develop: **1.98**

Previous household size used for all sites likely to develop: **1.5** (Geographia November 2017)

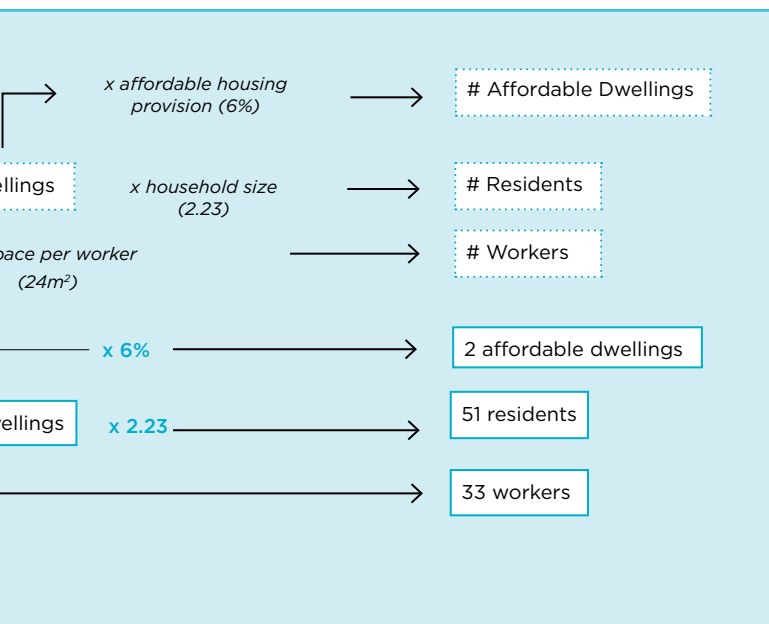
Current household size used for all sites likely to develop : **2.23** (id consultants April 2019)

Average dwelling size: **70 m²**

Affordable housing provision: **6%**

Average space per job: **24 m²**

Building Circulation & services: **20% of GFA**



Key Terms:

Res/NonResFAR: FAR for residential/non-residential land use

Res/NonResGFA: Gross Floor Area (sqm) for residential/non-residential land use

Res/NonResUseable: Floor area (sqm) for residential/non-residential land use, with a 20% deduction for building circulation and services

BCS: Floor area deduction for building circulation & services

CLUE: Census of Land Use and Employment

CONCLUSION

What are the results?

The first stage of capacity modelling for West Melbourne was undertaken between March and October 2017. This modelling supported the development of the proposed built form controls of the West Melbourne Structure Plan, and resulted in a total capacity of 11,696 dwellings, 18,789 residents and 10,231 jobs.

Following the introduction of new population forecast in November 2018 and subsequently updated in April 2019 by .id consultants, a second stage of capacity modelling was undertaken in June 2019 with the following modifications:

- An increase in the household size for all sites likely to develop in West Melbourne from 1.5 to 2.23 people per household in reference to the .id consultant April 2019 population forecast.
- Incorporation of Census Land Use and Employment (CLUE) jobs data for 2016 at a property level, compared to its original format at a CLUE Block level. This ensured that the capacity of each site reflected either the existing number of jobs according to CLUE data or the proposed number of jobs according to Amendment C309 (not both).

It is important to note that there were no other changes to any of the other assumptions (average space per job, average dwelling size or space for building circulation and services) or the status of any of the sites. While the status of some of the sites may have changed between the first and second stage of modelling (for example, a site marked

as likely to develop with Amendment C309 may have developed with the current controls), the impact on the total capacity numbers is likely to be negligible and not change the overall conclusion.

Under the proposed built form controls of Amendment C309, the results of the June 2019 capacity modelling show a total capacity of 6,506 jobs and 10,843 dwellings, of which 241 dwellings would be allocated for affordable housing, in accordance with the 6% affordable housing provision in the Flagstaff, Station and Spencer precincts. Using an average household size of 1.98 for sites unlikely to develop and 2.23 for all sites likely to develop, this would generate a population of 23,593 residents.

The reduction in the total number of jobs from 10,231 (First Stage modelling, October 2017) to 6,506 (Second Stage modelling, June 2019) was primarily the result of (incorrect) double counting in the 2017 capacity work (i.e. counting existing jobs plus new jobs for the same site).

The .id consultant's April 2019 population forecast for West Melbourne projects a population of 18,687 residents by 2036 and 21,498 residents by 2041. Under the current parameters of the City of Melbourne's capacity modelling, the projected population would be accommodated.

Furthermore, it is likely the status of some of the sites currently identified as unlikely to develop during the capacity modelling will, in the future, change to become sites that are likely to develop. This will result in greater capacity for dwellings and jobs in West Melbourne.

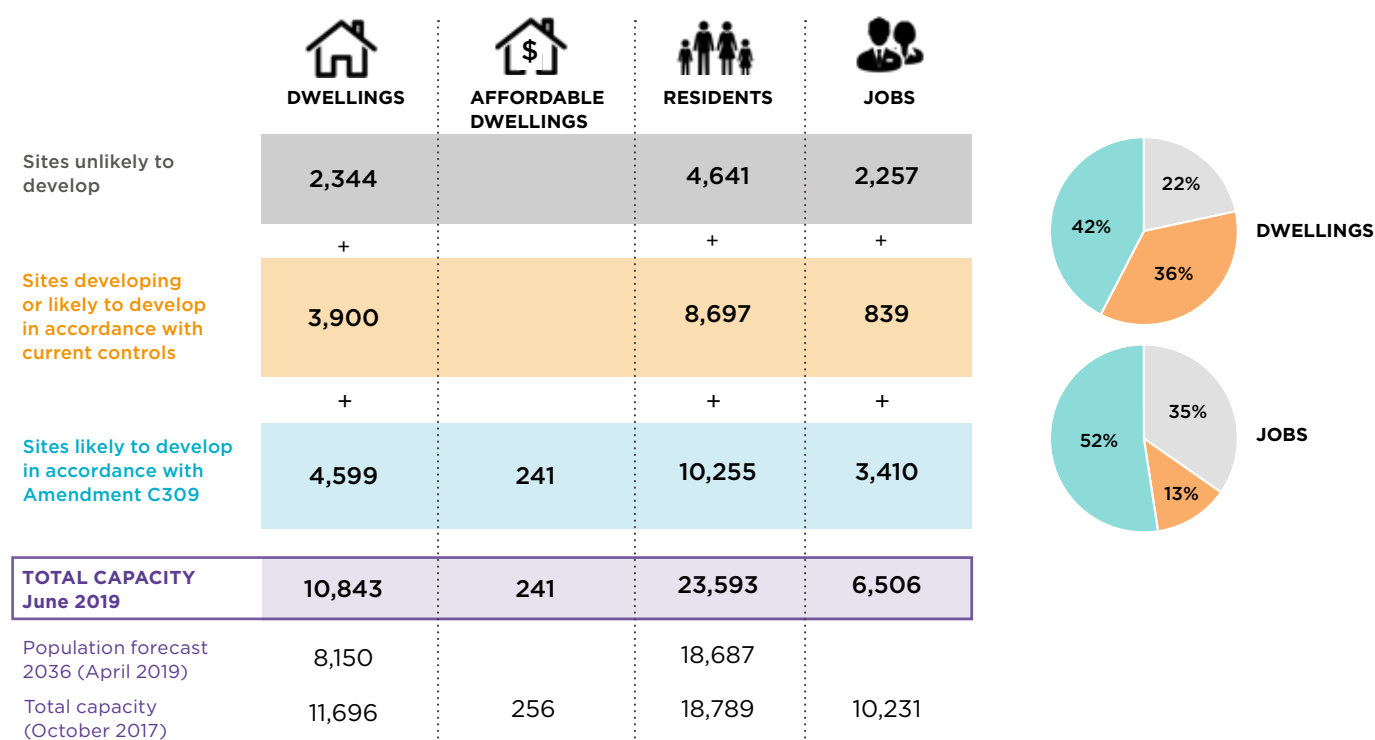


Figure 1.4: Outline of West Melbourne capacity results from June 2019. These figures detail the total number of dwellings, affordable housing units, residents and jobs across West Melbourne. Refer to Figure 1.5 for capacity modelling breakdown by place in West Melbourne.

ASSUMPTIONS FOR SECOND STAGE (JUNE 2019) MODELLING

Proposed FARs for all sites likely to develop (under existing or proposed controls)	Res FAR	Non Res FAR	Key Assumptions
Spencer High Street	3	1	Building Circulation & services 80%
Flagstaff	5	1	Household Size (sites unlikely to develop) 1.98
Adderley Neighbourhood	3	0.5	Household Size (likely to develop) *.id consultants 2.23
Station Precinct	4	1	Average Dwelling size (sqm) 70
Historic Hilltop (refer to DDO31,32,34 GRZ)	n/a	n/a	Affordable Housing provision 6%
DDO32 (14m max height)	3.6	0.4	Space per worker (sqm) 24
DDO31/34 (10.5m height)	2.7	0.3	
GRZ (11m height)	2.7	0.3	

Modified household size from 1.5 (first stage) to 2.23 (second stage)

CAPACITY RESULTS FOR SECOND STAGE (JUNE 2019) MODELLING

Sites unlikely to develop (CLUE 2016 data)	GFA	Dwellings	Affordable dwellings	Residents (Household size 1.98)	Jobs
Spencer High Street		284		562	31
Flagstaff		805		1,594	859
Adderley Neighbourhood		521		1,032	163
Station Precinct		154		305	270
Historic Hilltop		580		1,148	934
Total		2,344		4,641	2,257

Number of dwellings, residents and jobs for all sites unlikely to develop. This data reflects the updated CLUE jobs data at the property level (see page 8)

Sites developing or likely to develop under existing controls	GFA	Dwellings	Affordable Housing dwellings	Residents (Household size 2.23)	Jobs
Spencer St Village	131,031	1,012		2,257	271
Flagstaff	175,161	1,660		3,702	300
Adderley Neighbourhood	15,487	15		33	11
Station Precinct	63,684	582		1,298	80
Historic Hilltop	55,595	631		1,407	177
Total	440,958	3,900		8,697	839
For reference: CoM Official (Nov '18) id. Consulting (includes planning permits)		4,592		10,240	n/a

Number of dwellings, residents and jobs for all sites developing or likely to develop in accordance with current controls (sites with approved development activity or subject to DDO31, 32, 34 or GRZ). Capacity broken down by place

Sites likely to develop in accordance with Amendment C309	GFA	Dwellings	Affordable Housing dwellings	Resident Household Size 1.5	Jobs
Spencer High Street	204,456	1,752	105	3,908	1,704
FAR = 4:1, DDO29-1 with 1.0 FAR for non-residential uses + 6% affordable housing					
Flagstaff	196,752	1,874	112	4,179	1,093
FAR = 6:1, DDO33 with 1.0 FAR for non-residential uses + 6% affordable housing					
Adderley Neighbourhood	59,922	574	0	1,281	322
FAR = 3:1 (DDO29 with 0.5 FAR for non-residential uses)					
Station Precinct	43,585	398	29	888	291
FAR = 5:1 (DDO28 with 1.0 FAR for non-residential uses)+ 6% affordable housing					
Total	504,715	4,599	247	10,255	3,410

Number of dwellings, residents and jobs for all sites likely to develop in accordance with Amendment C309. Capacity is broken down by each place where different controls are proposed.

Total Capacity with Proposed Controls	GFA	Dwellings	Affordable Housing dwellings	Residents	Jobs
Spencer High Street	335,487	3,048	105	6,727	2,006
Flagstaff	371,913	4,339	112	9,474	2,252
Adderley Neighbourhood	75,409	1,110	0	2,346	496
Station Precinct	107,269	1,134	29	2,490	641
Historic Hilltop	55,595	1,211	0	2,556	1,111
Total (June 2019 modelling)	945,673	10,843	247	23,593	6,506
Total (October 2017 modelling)	1,013,780	11,696	256	25,433	10,231

Total number of dwellings, residents and jobs for all sites in West Melbourne. Capacity broken down by place, and compared to the previous modelling

Reference: West Melbourne forecast for 2036 based on existing planning controls. (.id consultants, April 2019)		8,150		18,687	
Reference: West Melbourne forecast for 2041 based on existing planning controls. (.id consultants, April 2019)		9,469		21,498	

Figure 1.5: Detailed summary of West Melbourne capacity results from June 2019 that breaks down the capacity by place and by site 'status' (e.g. sites unlikely to develop, likely to develop or developing under current controls and likely to develop in accordance with Amendment C309.

ASSUMPTIONS FOR FIRST STAGE (OCTOBER 2017) MODELLING

Proposed FARs for all sites likely to develop (under existing or proposed controls)	Res FAR	Non Res FAR	Key Assumptions
Spencer High Street	3	1	Building Circulation & services 80%
Flagstaff	5	1	Household Size (sites unlikely to develop) 1.98
Adderley Neighbourhood	3	0.5	Household Size (likely to develop) *Geografia 2017 1.5
Station Precinct	4	1	Average Dwelling size (sqm) 70
Historic Hilltop (refer to DDO31,32,34 GRZ)	n/a	n/a	Affordable Housing provision 6%
DDO32 (14m max height)	3.6	0.4	Space per worker (sqm) 24
DDO31/34 (10.5m height)	2.7	0.3	
GRZ (11m height)	2.7	0.3	

Household size of 1.5 used in the first stage of modelling (October 2017)

CAPACITY RESULTS FOR FIRST STAGE (OCTOBER 2017) MODELLING

Sites unlikely to develop (CLUE 2016 data)	GFA	Dwellings	Affordable dwellings	Residents (Household size 1.98)	Jobs
Spencer High Street		328		649	728
Flagstaff		905		1,792	2,427
Adderley Neighbourhood		524		1,038	652
Station Precinct		194		384	173
Historic Hilltop		643		1,273	1,539
Total		2,594		5,136	5,519

Number of dwellings, residents and jobs for all sites unlikely to develop. This data reflects the original CLUE jobs data at the CLUE Block level (see page 8 for further information)

Sites with development activity (approved, under construction or recently completed) in October 2017	GFA	Dwellings	Affordable Housing dwellings	Residents (Household size 1.5)	Jobs
Spencer St Village	131,031	1,012		1,518	271
Flagstaff	176,247	1,653		2,480	300
Adderley Neighbourhood	2,406	15		23	0
Station Precinct	54,776	493		740	50
Historic Hilltop	15,487	84		126	11
Total	379,947	3,257		4,886	632

Number of dwellings, residents and jobs for all sites with approved, under construction or recently completed development activity as of October 2017. Capacity broken down by place

Sites likely to develop in accordance with Amendment C309 or existing planning controls	GFA	Dwellings	Affordable Housing dwellings	Resident Household Size 1.5	Jobs
Spencer High Street	228,085	1,955	118	2,933	1,901
FAR = 4:1, DDO29-1 with 1.0 FAR for non-residential uses + 6% affordable housing					
Flagstaff	202,307	1,927	115	2,891	1,124
FAR = 6:1, DDO33 with 1.0 FAR for non-residential uses + 6% affordable housing					
Adderley Neighbourhood	73,328	702	0	1,053	396
FAR = 3:1 (DDO29 with 0.5 FAR for non-residential uses)					
Station Precinct	76,505	710	23	1,065	480
FAR = 5:1 (DDO28 with 1.0 FAR for non-residential uses)+ 6% affordable housing					
Historic Hilltop	53,608	551	0	827	179
Sites likely to develop under existing controls (DDO31, DDO32, DDO34 or GRZ)					
Total	633,833	5,845	256	8,768	4,080

Number of dwellings, residents and jobs for all sites identified likely to develop in accordance with Amendment C309 or under the existing planning controls (DDO31, DDO32, DDO34 or GRZ).

Capacity is broken down by each place where different controls are proposed.

Total Capacity with Proposed Controls	GFA	Dwellings	Affordable Housing dwellings	Residents	Jobs
Spencer High Street	359,116	3,295	118	5,100	2,900
Flagstaff	378,554	4,485	115	7,162	3,851
Adderley Neighbourhood	75,734	1,241	0	2,113	1,048
Station Precinct	131,281	1,397	23	2,189	703
Historic Hilltop	69,095	1,278	0	2,226	1,729
Total (October 2017 modelling)	1,013,780	11,696	256	18,789	10,231
Reference: West Melbourne forecast for 2036 based on existing planning controls. (.id consultants, April 2019)		8,150		18,687	
Reference: West Melbourne forecast for 2041 based on existing planning controls. (.id consultants, April 2019)		9,469		21,498	

Total number of dwellings, residents and jobs for all sites in West Melbourne. Capacity broken down by place, and compared to the previous modelling

Figure 1.6: Detailed summary of West Melbourne capacity results from the first stage of modelling in October 2017 that breaks down the capacity by place and by site 'status'.

How to contact us

Online:

melbourne.vic.gov.au

In person:

Melbourne Town Hall - Administration Building
120 Swanston Street, Melbourne
7.30am to 5pm, Monday to Friday
(Public holidays excluded)

Telephone:

03 9658 9658
7.30am to 6pm, Monday to Friday
(Public holidays excluded)

Fax:

03 9654 4854

In writing:

City of Melbourne
GPO Box 1603
Melbourne VIC 3001
Australia



Interpreter services

We cater for people of all backgrounds
Please call 03 9280 0726

03 9280 0717	廣東話
03 9280 0719	Bahasa Indonesia
03 9280 0720	Italiano
03 9280 0721	普通話
03 9280 0722	Soomaali
03 9280 0723	Español
03 9280 0725	Việt Ngữ
03 9280 0726	عربي
03 9280 0726	한국어
03 9280 0726	हिंदी
03 9280 0726	All other languages

National Relay Service:

If you are deaf, hearing impaired or speech-impaired,
call us via the National Relay Service: Teletypewriter (TTY)
users phone 1300 555 727 then ask for 03 9658 9658
9am to 5pm, Monday to Friday (Public holidays excluded)

melbourne.vic.gov.au



CITY OF MELBOURNE