CITY OF MELBOURNE

City of Melbourne Population and Jobs Forecasts 2021-2041

Summary report 2022

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Introduction

Forecasts provide an informed guide to what may occur in the future. They help us answer questions such as how many people may live within the city or how many jobs may be within the city, and where these may be located. Having a reasonably confident understanding of the expected level of growth is essential to allocating sufficient resources and services to support our fast-growing city.

The City of Melbourne commissions population and jobs forecasts from an independent, specialist agency and are periodically revised when new information is released. In March 2022, SGS Economics and Planning were engaged to provide Council with updated forecasts that consider the impacts of COVID-19, and the short-term and long-term recovery pathways for the City of Melbourne.

This summary report highlights forecasts prepared between March 2022 and October 2022 relating to the population, jobs and floor space demand (required to accommodate population and jobs) within the City of Melbourne municipality from 2021 to 2041. These are the second set of longer term forecasts published by the City of Melbourne that consider impacts stemming from COVID-19, an updated version to forecasts prepared in 2021.

Summary

The City of Melbourne municipality is forecast to reach around 308,000 people and 659,000 jobs by 2041, accommodating an additional 155,000 residents and 228,000 jobs between 2021 and 2041.

By 2041, the City of Melbourne is forecast to reach 136,000 households, accommodating an additional 50,000 households between 2021 and 2041.

Floor space demand is expected to grow by over 6.3 million square metres between 2021 and 2041, of which 2.7 million square metres is residential.

Melbourne municipality: Forecasts 2021, 2031 and 2041

Summary	2021	2031	2041	Change 2021-2041	Avg. Annual Growth Rate 2021-2041
Population	153,674	241,391	308,190	154,516	3.5%
Households	85,824	112,135	135,618	49,794	2.3%
Jobs	466,004	574,576	659,244	193,240	1.7%
Floor space ('000 sqm)	26,935	30,026	33,246	6,311	1.1%

Source: SGS Economics and Planning, 2022

Accessible data tables can be viewed at Appendix 1 at the end of this document.

Population and jobs growth by area

- The Melbourne (CBD) will continue to be the most attractive location for residential and employment growth, adding 45,000 residents and 76,000 jobs by 2041. This will see it capture 39 per cent of 193,000 additional jobs across the municipality over the next 20 years.

- Docklands and Southbank, which are highly accessible locations, will also experience rapid residential and employment growth out to 2041. Docklands will add 17,000 residents and 21,000 jobs, while Southbank is anticipated to increase with 22,000 residents and 15,000 jobs.
- North Melbourne and West Melbourne (residential) will also see significant population and employment growth, largely driven by major urban renewal areas. Port Melbourne will largely be commercial in nature, with strong growth in institutional jobs associated with anchors such as the University of Melbourne engineering and design campus.

Jobs by service

- Jobs in business services, health care and social assistance, and education and training will contribute 25, 17 and 11 per cent respectively, representing 53 per cent of all employment growth between 2021 and 2041.
- Food and beverage services will also grow strongly, reflecting a recovery from the impacts of COVID-19.

Floor space (employment)

Notably employment floor space demand will grow at a slower rate than jobs. This is the result of declining floor space ratios which are driven by two factors:

- A changing industry composition towards sectors which have lower space requirements.
- More intensive existing space use stemming from trends such as increasing remote work, utilisation over longer hours of the day, and more efficient processes (e.g., cloud vs paper storage).

A list of industries and space use categories is provided in Appendices 2 & 3 at the end of this document.

Method

Forecasts were prepared by SGS Economics and Planning (SGS) during March 2022 to October 2022. A combined top-down (i.e., macroeconomic trends and drivers) and bottom-up (i.e., development supply and local attractiveness factors) approach was used to forecast all variables in an integrated environment.

Below summarises the overall forecasting approach:

- The City of Melbourne Census of Land Use and Employment (CLUE) data, along with Australian Bureau of Statistics Census and regional Estimated Resident Population (ERP) data, are used to determine a base year estimate for all variables and to model trends in floor space type preferences and usage. Specifically, CLUE 2020 and ERP at 30 June 2021 (with a status of preliminary rebased, released on 26 July 2022) were used for the base year (2021) estimates. Note these may be superseded by updated data after the release of this publication.
- Macroeconomic forecasts of population demographics and employment by industry, are forecast through a population cohort-component model and SGS' State-wide employment model.
- Development capacity and known redevelopment, at a building level, is estimated using data from the City of Melbourne's Development Activity Model (DAM) and Development Capacity Model (DCM). For renewal areas, this is supplemented with structure plan guidance on future development controls and timing.
- Area development attractiveness is estimated through a range of datasets to proxy various factors that drive growth for different land use types. Base development trends are calibrated to historical attractiveness. This means if attractiveness did not change land use would continue to be distributed

in line with past trends. However, as attractiveness changes (e.g., a new train station), so too do development patterns.

- A two-step allocation model distributes the LGA-level forecasts to areas. This process is driven by the estimated attractiveness of each area (to individual types of land use) and simultaneously considers both residential and employment floor space. Capacity constraints also ensure that total development does not exceed plausible bounds.
- Floor space forecasts are translated to estimates of dwellings, population, and jobs which align with the LGA-wide estimates calculated previously, while also reflecting the expected industry composition of local areas, which is particularly relevant for renewal areas undergoing transformation.

COVID-19 context

During 2020 and 2021, population and employment levels, and trends, in the City of Melbourne were heavily impacted by the effects of COVID-19 and the associated restrictions introduced to stop the spread of the virus. These restrictions stopped overseas migration (a key driver of population growth) and resulted in many people either working from home, working reduced hours, or losing employment. Universities and other tertiary institutions were also heavily impacted, with international students not allowed to enter Australia and courses largely moving to online delivery. International tourism also ceased during the pandemic, and many major events were cancelled or heavily restricted. These direct impacts have had flow on impacts across the economy, particularly for the services sectors.

The direct impact (in 2020 and 2021) of the pandemic on the City of Melbourne is largely known now. However, the short-term and long-term recovery pathway is still very uncertain. This pathway depends on a range of external factors, such national/global economic trends and migration policy. It is also uncertain to what degree the pandemic will create fundamental behavioural changes in where people live and how they work (e.g. for how many workers will working from home become a permanent outcome?).

Given the ongoing uncertainty associated with the COVID-19 pandemic, there is a high degree of uncertainty when forecasting population and jobs within this context, and this should be considered when interpreting the forecast results and assumptions.

Forecast assumptions

Victoria and Greater Melbourne context

The resident population and employment within the City of Melbourne are both strongly linked to the outcomes in Victoria and, more importantly, Greater Melbourne. The City of Melbourne forecasts assume a macro economic recovery pathway that largely aligns with current plans and expectations. At the macro level this is assumed to align with the 'central case' of population projections adopted by the Centre for Population (published in the 2021 population statement [1]). Key assumptions underlying this include:

- A national vaccination program is fully in place by late 2021.
- Net overseas migration will remain negative for financial year 2021-2022 (FY22), and then gradually recover to pre-pandemic levels by FY24.
- Net internal migration to Greater Melbourne will be strongly negative until FY23, and weakly negative thereafter (note, net interstate migration to Victoria is forecast to be weakly positive).

[1] https://population.gov.au/sites/population.gov.au/files/2021-12/population_statement_2021.pdf

Despite being slower in the immediate future, the population growth rate of Victoria is expected to recover strongly following the reopening of international borders, with Greater Melbourne still anticipated to surpass the population of Sydney by mid-2030.

The recovery pathway of employment follows a similar trajectory, albeit with variation by industry. Occupations and sectors which are dependent upon international travel and public gatherings will remain low until 2024. This will be followed by an accelerated recovery until 2026, at which point employment is expected to reach pre-pandemic rates (note that lower population and associated workforce means that employment will still be lower than if COVID-19 did not occur).

The structure of the economy is forecast to alter over time, with a move towards the knowledge economy. Past trends and forecast changes in the industrial composition of Greater Melbourne sets the broader context for the City of Melbourne:

- Over the past decade, the provision of professional services in Greater Melbourne has provided the metropolis with a clear competitive advantage. This trend will continue, with professional services increasing total share of employment.
- Conversely, the past decades have seen an ongoing decline in the share of manufacturing employment as it becomes more capital intensive and advanced/automated. Employment in this industry will continue to contract.
- With an ageing population and increased research, expectations and awareness of health and wellbeing more broadly, the provision of health services will continue to grow and see a significant increase in the share of employment in the health care and social assistance sector over the 2021 to 2041 period.
- Despite strong population growth, the share of retail employment is expected to decline (while the number of jobs still increases), as the industry continues to be disrupted and transitions to more online and automated (e.g., self-check-out) retail models. Conversely employment in the accommodation and food services sector will return to its pre-pandemic share.
- The education and training sector will continue to grow in significance following the reopening of international borders (also driven by higher demand for knowledge intensive occupations).

City of Melbourne specific assumptions

While the risk of COVID-19 outbreaks remains, the forecasts assume that there will not be any more significant restrictions/direct impacts related to COVID-19. It is assumed that the vaccine rollout, both in Australia and overseas, continues to be effective in its management of the COVID-19 virus, and that international travel/migration returns to pre-COVID-19 levels from 2022-2024.

One of the greatest uncertainties of the recovery pathway will be the lasting effect that COVID-19 has had upon the preferences of households and firms, and the implications for the spatial development across the state and within the City of Melbourne. The forecasts assume incremental shifts in preferences, but no fundamental changes in firm or resident behavioural and locational decisions.

Key assumptions that underpin the City of Melbourne forecasts are as follows:

Macro assumptions

- International migration recovers by 2024 and City of Melbourne captures pre-COVID shares of growth.
- No structural changes to the Greater Melbourne economy, except short term shocks of COVID.
- City of Melbourne economy broadly recovers to pre-COVID trends by 2026 in terms of the share of Greater Melbourne employment (with some variation, e.g. lower retail).

Shifts in spatial drivers

- Preference towards inner city and apartment living remains stable but does not accelerate (subject to changing age structure and household formation).
- Unchanged relative attractiveness of precincts for both residential and employment.

Capacity assumptions

- Unchanged floor space ratios.
- Unchanged major infrastructure commitments.
- Unchanged structure plan timing/capacity.

More information

More detailed forecasts results by single year and CLUE small areas[2] within the municipality are available on City of Melbourne's Open Data Platform[3].

Acknowledgements

The content in this document was taken from reports provided by SGS Economics and Planning to the City of Melbourne.

Disclaimer

[2] https://www.melbourne.vic.gov.au/about-melbourne/research-and-statistics/city-economy/census-land-use-employment/Pages/clue-small-area-and-block-maps.aspx
[3] https://data.melbourne.vic.gov.au/explore/?q=forecasts&sort=modified

Appendix 1: Accessible data tables

Population by small area 2021, 2031 and 2041

CLUE small area	2021	2031	2041	Change 2021-2041	Avg. Annual Growth Rate 2020-2040
Carlton	17,185	26,375	35,877	18,692	3.7%
Docklands	15,926	25,292	32,431	16,505	3.6%
East Melbourne	4,968	7,444	8,032	3,064	2.4%
Kensington	10,933	15,847	17,654	6,721	2.4%
Melbourne (CBD)	43,825	70,552	89,239	45,414	3.6%
Melbourne (Remainder)	3,121	4,429	4,765	1,644	2.1%
North Melbourne	15,653	25,304	38,469	22,816	4.6%
Parkville	7,813	11,223	12,905	5,092	2.5%
Port Melbourne	10	1,190	3,619	3,609	34.3%
South Yarra	3,716	5,467	5,780	2,064	2.2%
Southbank	22,589	35,553	44,605	22,016	3.5%
West Melbourne (Industrial)	-	-	-	-	0.0%
West Melbourne (Residential)	7,935	12,716	14,814	6,879	3.2%
Total (City of Melbourne)	**153,674**	**241,391**	**308,190**	**154,516**	**3.5%**

Source: SGS Economics and Planning, 2022. Table shows rounded figures.

Households by small area 2021, 2031 and 2041

CLUE small area	2021	2031	2041	Change 2021-2041	Avg. Annual Growth Rate 2021-2041
Carlton	11,358	14,974	20,805	9,447	3.1%
Docklands	8,581	11,107	13,175	4,594	2.2%
East Melbourne	2,894	3,665	3,638	744	1.2%
Kensington	5,067	6,137	6,935	1,868	1.6%
Melbourne (CBD)	26,766	35,785	42,219	15,453	2.3%
Melbourne (Remainder)	1,317	1,541	1,528	211	0.7%
North Melbourne	8,121	11,004	15,446	7,325	3.3%
Parkville	2,604	2,922	2,914	310	0.6%
Port Melbourne	2	410	1,339	1,337	38.4%
South Yarra	2,339	2,831	2,812	473	0.9%
Southbank	12,050	15,702	18,193	6,143	2.1%
West Melbourne (Industrial)	-	-	-	-	0.0%
West Melbourne (Residential)	4,727	6,060	6,612	1,885	1.7%
Total (City of Melbourne)	**85,826**	**112,135**	**135,618**	**49,792**	**2.3%**

Source: SGS Economics and Planning, 2022. Table shows rounded figures.

Jobs by small area 2021, 2031 and 2041

CLUE small area	2021	2031	2041	Change 2021-2041	Avg. Annual Growth Rate 2021-2041
Carlton	15,139	22,878	27,584	12,445	3.0%
Docklands	73,021	85,041	93,783	20,762	1.3%
East Melbourne	20,682	25,596	28,053	7,371	1.5%
Kensington	7,814	10,023	13,732	5,918	2.9%
Melbourne (CBD)	217,913	264,676	294,155	76,242	1.5%
Melbourne (Remainder)	23,088	28,498	29,406	6,318	1.2%
North Melbourne	9,983	18,648	26,160	16,177	4.9%
Parkville	30,445	35,492	38,758	8,313	1.2%
Port Melbourne	13,274	17,191	32,176	18,902	4.5%
South Yarra	1,031	1,713	1,772	741	2.7%
Southbank	44,776	53,199	59,954	15,178	1.5%
West Melbourne (Industrial)	3,875	5,120	6,384	2,509	2.5%
West Melbourne (Residential)	4,963	6,501	7,328	2,365	2.0%
Total (City of Melbourne)	**466,004**	**574,576**	**659,244**	**193,240**	**1.7%**

Source: SGS Economics and Planning, 2022. Table shows rounded figures.

Floor space ('000 sqm) by small area 2021, 2031 and 2041

CLUE small area	2021	2031	2041	Change 2021-2041	Avg. Annual Growth Rate 2021-2041
Carlton	1,841	2,203	2,466	625	1.5%
Docklands	2,568	2,910	3,315	747	1.3%
East Melbourne	1,042	1,147	1,213	171	0.8%
Kensington	1,458	1,567	1,721	263	0.8%
Melbourne (CBD)	7,495	8,491	9,484	1,989	1.2%
Melbourne (Remainder)	741	805	820	79	0.5%
North Melbourne	1,371	1,776	2,377	1,006	2.8%
Parkville	2,111	2,270	2,430	319	0.7%
Port Melbourne	2,064	2,128	2,328	264	0.6%
South Yarra	446	475	475	29	0.3%
Southbank	2,605	3,038	3,444	839	1.4%
West Melbourne (Industrial)	2,551	2,460	2,334	-217	-0.4%
West Melbourne (Residential)	642	758	840	198	1.4%
Total (City of Melbourne)	**26,935**	**30,026**	**33,246**	**6,311**	**1.1%**

Source: SGS Economics and Planning, 2022. Table shows rounded figures.

Jobs by industry 2021, 2031 and 2041

Industry	2021	2031	2041	Change 2021-2041	Contribution to Growth 2021-2041
Business services	80,614	102,042	128,834	48,219	25.0%
Health care and social assistance	44,324	63,973	76,440	32,116	16.6%
Education and training	25,314	36,348	45,905	20,591	10.7%
Food and beverage services	33,327	47,662	51,582	18,255	9.4%
Finance and insurance	63,964	73,609	80,029	16,065	8.3%
Retail trade	17,200	22,674	29,782	12,582	6.5%
Public administration and safety	46,971	53,956	56,714	9,743	5.0%
Arts and recreation services	25,840	29,507	34,740	8,900	4.6%
Admin and support services	15,813	19,698	22,837	7,024	3.6%
Other services	12,198	15,007	16,555	4,358	2.3%
Accommodation	9,928	13,086	14,162	4,234	2.2%
Information media and telecommunications	26,240	27,434	30,232	3,992	2.1%
Real estate services	9,302	11,588	12,641	3,340	1.7%
Construction	6,731	8,439	9,243	2,512	1.3%
Transport, postal and storage	14,296	16,637	16,488	2,193	1.1%
Agriculture and mining	2,881	2,990	3,386	504	0.3%
Rental and hiring services	363	520	567	204	0.1%
Electricity, gas, water and waste services	12,152	11,641	12,299	147	0.1%
Wholesale trade	5,839	5,747	5,003	-836	-0.4%
Manufacturing	12,708	12,017	11,805	-903	-0.5%
Total (City of Melbourne)	**466,004**	**574,576**	**659,244**	**193,241**	**100.0%**

Source: SGS Economics and Planning, 2022. Table shows rounded figures.

Floor space ('000 sqm) by space use 2021, 2031 and 2041

Space use	2021	2031	2041	Change 2021-2041	Contribution to Growth 2021-2041
Residential	8,569	9,653	11,287	2,717	43%
Office	5,597	5,657	5,997	400	6%
Accommodation - Commercial	1,434	1,979	2,124	691	11%
Other - Employment	1,182	1,753	2,101	919	15%
Education	1,507	2,017	2,446	939	15%
Entertainment - Other	2,311	2,440	2,805	494	8%
Health	700	969	1,137	437	7%
Entertainment - Hospitality	538	629	670	132	2%
Retail	677	799	935	258	4%
Industrial	4,420	4,130	3,744	-676	-11%
Total (City of Melbourne)	**26,935**	**30,026**	**33,246**	**6,311**	**100%**

Source: SGS Economics and Planning, 2022. Table shows rounded figures.

Appendix 2: Industry categories

The following presents the list of broad industry categories used in the forecast model which come from CLUE. These broad categories roughly map to level one of the Australian New Zealand Standard Industrial Classification (ANZSIC)[4] developed by the ABS.

More information about CLUE industries can be found in the CLUE Definitions (PDF)[5] on City of Melbourne's Open Data Platform.

ABS ANZSIC1	Forecast model industries
Accommodation and Food Services	Accommodation
Administrative and Support Services	Admin and Support Services
Agriculture, Forestry and Fishing	Agriculture and Mining
Mining	Agriculture and Mining
Arts and Recreation Services	Arts and Recreation Services
Professional, Scientific and Technical Services	Business Services
Construction	Construction
Education and Training	Education and Training
Electricity, Gas, Water and Waste Services	Electricity, Gas, Water and Waste Services
Financial and Insurance Services	Finance and Insurance
Accommodation and Food Services	Food and Beverage Services
Health Care and Social Assistance	Health Care and Social Assistance
Information Media and Telecommunications	Information Media and Telecommunications
Manufacturing	Manufacturing
Other Services	Other Services
Public Administration and Safety	Public Administration and Safety
Rental, Hiring and Real Estate Services	Real Estate Services
Rental, Hiring and Real Estate Services	Rental and Hiring Services
Retail Trade	Retail Trade
Transport, Postal and Warehousing	Transport, Postal and Storage
Wholesale Trade	Wholesale Trade

[4] https://www.abs.gov.au/AUSSTATS/abs@.nsf/mf/1292.0
[5] https://www.melbourne.vic.gov.au/SiteCollectionDocuments/clue-definitions.pdf

Appendix 3: Space use categories

The following presents the list of space use categories used in the forecast model which correspond to space use codes and industries in CLUE.

More information about CLUE industries and CLUE space use codes can be found in the CLUE Definitions (PDF)[5] on the City of Melbourne's Open Data Platform.

CLUE space use codes	Forecasts model space use
Commercial Accommodation	Accommodation - Commercial
Common Area	Other - Non Employment
Community Use	Other - Employment
Educational/Research	Education
Entertainment/Recreation - Indoor	Entertainment – Hospitality / Entertainment – Other*
Equipment Installation	Other - Employment
Hospital/Clinic	Health
House/Townhouse	Residential
Institutional Accommodation	Residential
Manufacturing	Industrial
Office	Office
Park/Reserve	Other - Non Employment
Parking - Commercial Covered	Other - Employment
Parking - Commercial Uncovered	Other - Employment
Parking - Private Covered	Other - Employment
Parking - Private Uncovered	Other - Non Employment
Performances, Conferences, Ceremonies	Entertainment – Hospitality / Entertainment – Other*
Private Outdoor Space	Other - Non Employment
Public Display Area	Other - Employment
Residential Apartment	Residential
Retail - Cars	Retail
Retail - Shop	Retail
Retail - Showroom	Retail
Retail - Stall	Retail
Sports and Recreation - Outdoor	Entertainment – Hospitality / Entertainment – Other*
Square/Promenade	Other - Non Employment
Storage	Industrial
Student Accommodation	Accommodation - Commercial
Transport	Other - Employment
Transport/Storage - Uncovered	Industrial

* Forecasts split into 'Entertainment - Hospitality' and 'Entertainment - Other' based on CLUE industry (e.g. 'Food and Beverage Services' and all other industries respectively)

CLUE space use codes (continued)	Forecasts model space use (continued)
Unoccupied - Under Construction	Vacant
Unoccupied - Under Demolition/Condemned	Vacant
Unoccupied - Under Renovation	Vacant
Unoccupied - Undeveloped Site	Vacant
Unoccupied - Unused	Vacant
Wholesale	Industrial
Workshop/Studio	Office

* Forecasts split into 'Entertainment - Hospitality' and 'Entertainment - Other' based on CLUE industry (e.g. 'Food and Beverage Services' and all other industries respectively)