

Companion Guide

Housing Capacity Assessment Platform



Department
of Transport
and Planning

Index

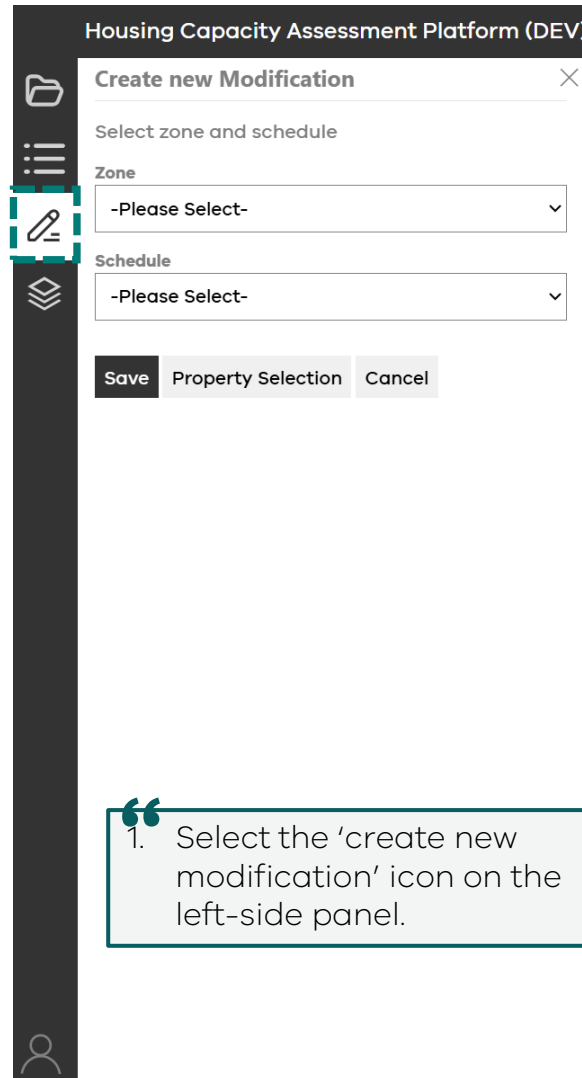
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1. Applying zones / typologies

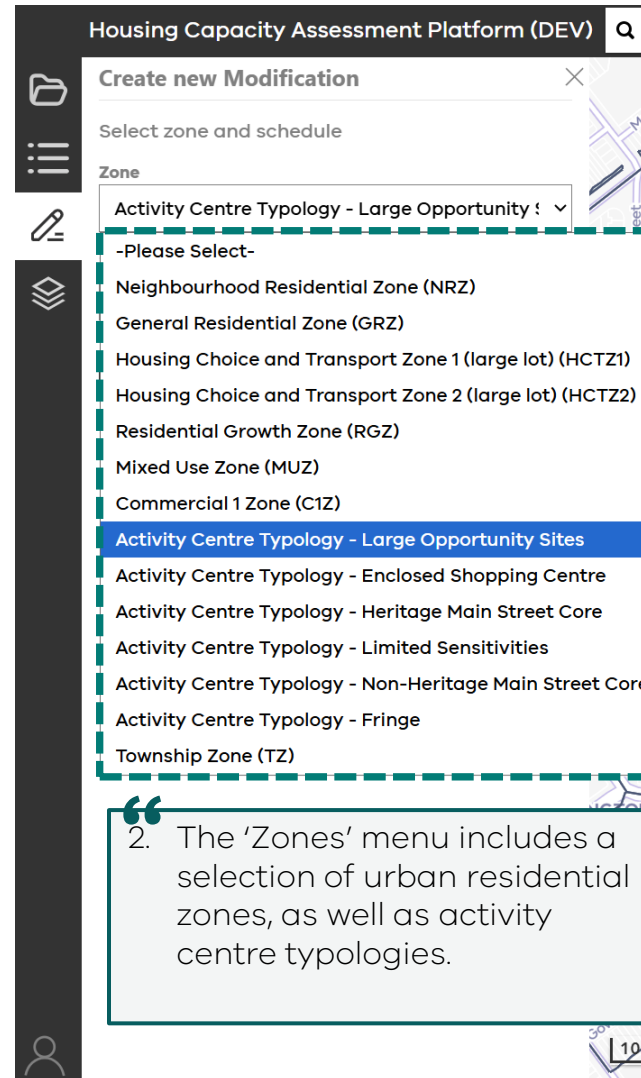


Selecting a zones / typology in HCAP

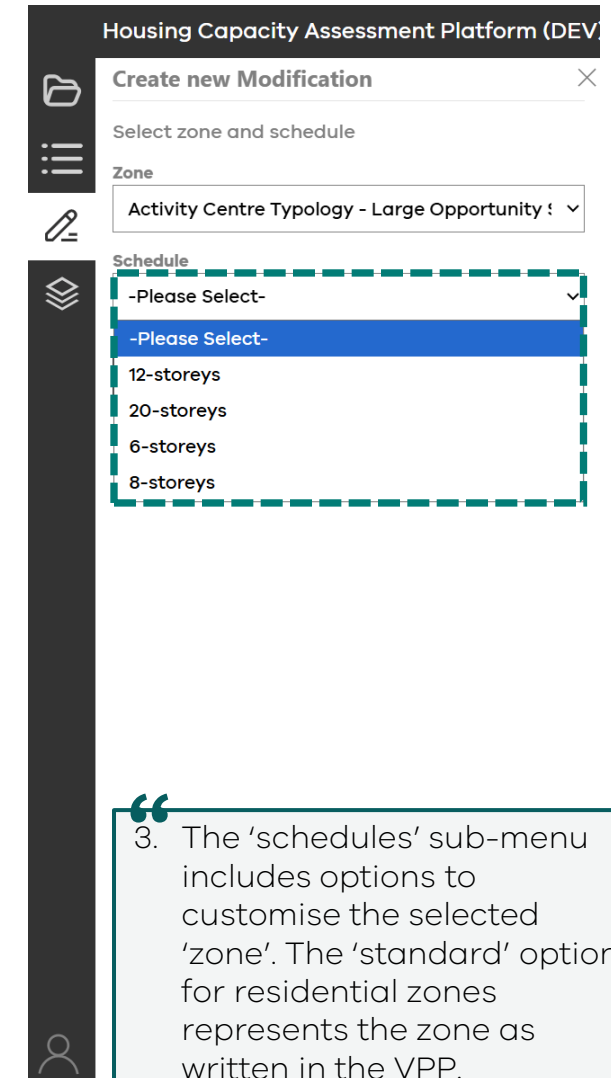
When making a modification in HCAP, you can select from a preset number of 'zones' and 'schedules'. This section includes information on the background inputs and assumptions that inform the capacity results for each 'zone' and corresponding 'schedules'.



1. Select the 'create new modification' icon on the left-side panel.



2. The 'Zones' menu includes a selection of urban residential zones, as well as activity centre typologies.



3. The 'schedules' sub-menu includes options to customise the selected 'zone'. The 'standard' option for residential zones represents the zone as written in the VPP.

Residential Zones – Pt.I

Zone:		Neighbourhood Residential Zone (NRZ)	General Residential Zone (GRZ)	Residential Growth Zone (RGZ)		Housing Choice and Transport Zone 1 (HCTZ1)	Housing Choice and Transport Zone 2 (HCTZ2)
Schedule:		Standard	Standard	Standard	Opportunity	Standard	Standard
Storeys:		2 (9m)	3 (11m)	4 (13.5m)	5 (15m)	4 (13.5m) or 6 (21.5m) on sites greater than 1000sqm	3 (11m) or 4 (13.5m) on sites greater than 1000sqm
Dwelling size (sqm):		150	150sqm where 1 or 2 storeys achieved. 75sqm for 3 storeys.	150sqm where 1 or 2 storeys achieved. 75sqm where 3 or more storeys achieved.	150sqm where 1 or 2 storeys achieved. 75sqm where 3 or more storeys achieved.	150sqm where 1 or 2 storeys achieved. 75sqm where 3 or more storeys achieved.	150sqm where 1 or 2 storeys achieved. 75sqm where 3 or more storeys achieved.
% GFA Residential:		100%	100%	100%	100%	100%	100%
Setbacks:	Front:	4m	4m	3m	3m	3m	3m
	Side and rear:	As per Clause 55.02-3, Standard B2-3.1 or B2-3.2 (whichever produces greater yield)					
Site Coverage		60%	65%	70%	70%	70%	70%

Residential Zones – Pt.II

Zone:		Mixed Use Zone (MUZ)		Township Zone (TZ)
Schedule:		4-storeys (<i>'Standard'</i>)	6-storeys	Standard
Storeys:		4 (13.5m)	6 (21.5)	2 (9m)
Dwelling size (sqm):		150sqm where 1 or 2 storeys achieved. 75sqm where 3 or more storeys achieved.	150sqm where 1 or 2 storeys achieved. 75sqm where 3 or more storeys achieved.	150sqm
% GFA Residential:		70%	70%	100%
Setbacks:	Front:	3	3	
	Side and rear:	As per Clause 55.02-3, Standard B2-3.1 or B2-3.2 (whichever produces greater yield)		No applied setbacks.
Site Coverage		70%	70%	60%

Commercial Zones

	Zone:		Commercial 1 Zone (C1Z)		
	Schedule:		2-storey	4-storey (<i>'Standard'</i>)	6-storey
	Storeys:		2 (9m)	4 (15m)	6 (18m)
	Street wall height:		2-storeys	3-storeys	4-storeys
	Dwelling size (sqm):		150	150sqm where 1 or 2 storeys achieved. 75sqm where 3 or more storeys achieved.	150sqm where 1 or 2 storeys achieved. 75sqm where 3 or more storeys achieved.
	% GFA Residential:		70%	70%	70%
	Setbacks:	Front:	0m	1m	2m
		Upper level:	3m	3m	3m
		Rear wall:	N/A	2-storeys	4-storeys
		Ground floor rear:	3m	3m	3m
		Upper level rear:	3m	6m	6m
		Side:	0m	0m	0m
	Site Coverage		95%	95%	95%

“ This can be a helpful typology to select for Neighbourhood Activity Centres.

Activity Centre Typologies

Large Opportunity Sites

Comprising landholdings in single ownership that are large enough for multiple buildings.

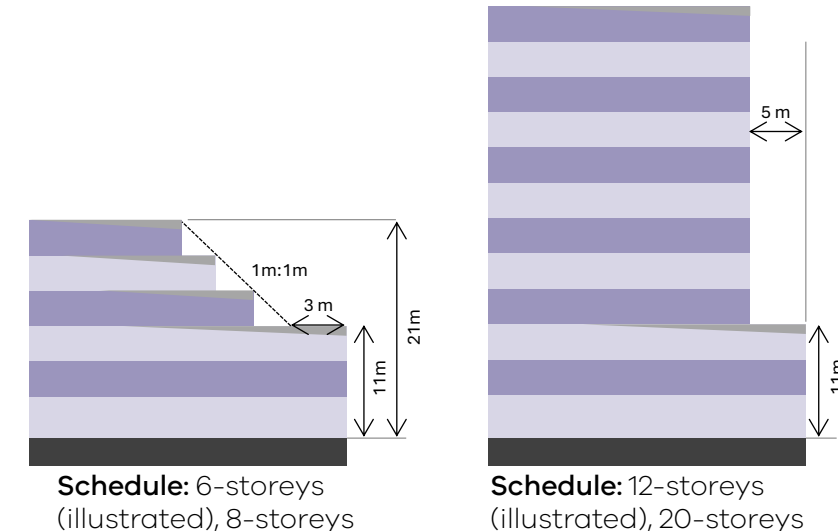
Properties within this precinct have the capacity to develop multiple buildings. These properties are often embedded within the Limited sensitivities precinct. Development is envisaged to take the form of mixed-use buildings with several configuration options depending on context. They often have rear entry for vehicles through lane way access. Setbacks are included above the street wall, with the podium built to both side boundaries, interfacing other commercial/mixed-use buildings.

 Schedule:	6-storeys	8-storeys	12-storeys	20-storeys
 Storeys:	6 (21m)	8 (27m)	12 (40m)	20 (66m)
 Maximum street wall height:	11m	11m	11m	11m
 Dwelling size (sqm):	150sqm where 1 or 2 storeys achieved. 75sqm where 3 or more storeys achieved.	150sqm where 1 or 2 storeys achieved. 75sqm where 3 or more storeys achieved.	150sqm where 1 or 2 storeys achieved. 75sqm where 3 or more storeys achieved.	150sqm where 1 or 2 storeys achieved. 75sqm where 3 or more storeys achieved.
 Non-Residential:	1 st storey	1 st storey	1 st and 2 nd storeys	1 st and 2 nd storeys
 Upper Level Front Setbacks:	3m, plus 1m for each metre of height	3m, plus 1m for each metre of height	5m	5m
 Site Coverage:	100%	100%	100%	100%

Typology example: 699 Park Street, Brunswick



Front setbacks above the street wall



Activity Centre Typologies

Enclosed Shopping Centres

Comprising landholdings in single ownership with a large-format enclosed shopping centre, typically with at grade or multi-level parking at edges.

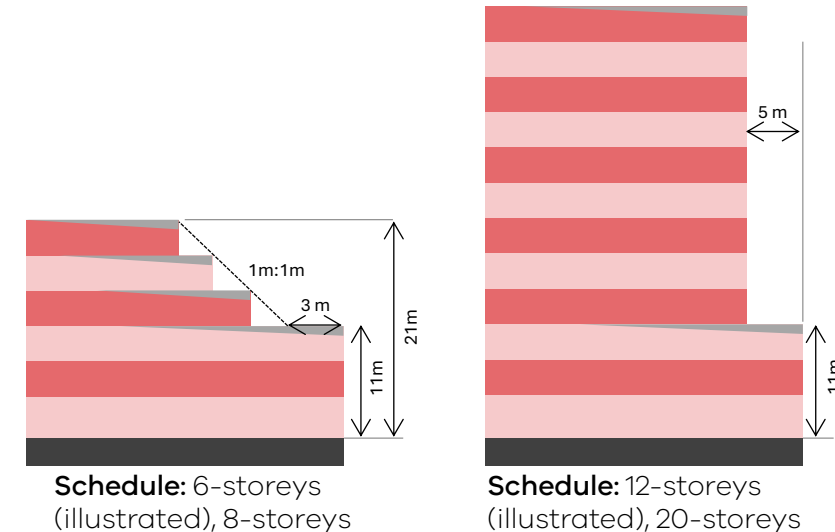
Enclosed shopping centre sites generally have underutilised land at their edges, used for car parking.

	Schedule:	6-storeys	8-storeys	12-storeys	20-storeys
	Storeys:	6 (21m)	8 (27m)	12 (40m)	20 (66m)
	Maximum street wall height:	11m	11m	11m	11m
	Dwelling size (sqm):	150sqm where 1 or 2 storeys achieved. 75sqm where 3 or more storeys achieved.	150sqm where 1 or 2 storeys achieved. 75sqm where 3 or more storeys achieved.	150sqm where 1 or 2 storeys achieved. 75sqm where 3 or more storeys achieved.	150sqm where 1 or 2 storeys achieved. 75sqm where 3 or more storeys achieved.
	Non-Residential:	1 st storey	1 st storey	1 st and 2 nd storeys	1 st and 2 nd storeys
	Upper Level Front Setbacks:	3m, plus 1m for each metre of height	3m, plus 1m for each metre of height	5m	5m
	Site Coverage:	100%	100%	100%	100%

Typology example: 181 Reynolds Road, Doncaster East



Front setbacks above the street wall



Activity Centre Typologies

Heritage Main Street Core

Typically comprising a fine-grain subdivision pattern and traditional shopfront buildings that have heritage or at least high character value, and higher expectations of public realm amenity.

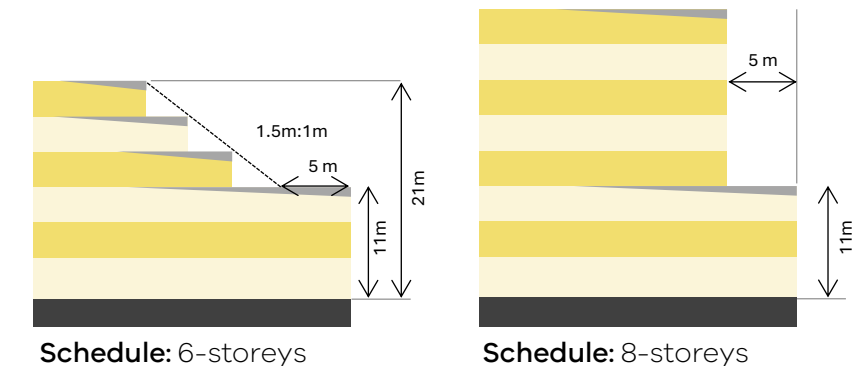
Buildings within this precinct will contain a mix of uses with retail at the Ground Floor. They will either have a retained heritage frontage or new built form that responds to the heritage precinct. These properties about a main street with several configuration options depending on context. They often have rear entry for vehicles through lane way access. They have setbacks above the street wall and are built up to both side boundaries interfacing other commercial/mixed-use buildings.

	Schedule:	6-storeys	8-storeys
	Storeys:	6 (21m)	8 (27m)
	Maximum street wall height:	11m	11m
	Dwelling size (sqm):	150sqm where 1 or 2 storeys achieved. 75sqm where 3 or more storeys achieved.	150sqm where 1 or 2 storeys achieved. 75sqm where 3 or more storeys achieved.
	Non-Residential:	1 st and 2 nd storeys	1 st and 2 nd storeys
	Upper Level Front Setbacks:	5m, plus 1.5m for each metre of height	5m
	Site Coverage:	100%	100%

Typology example: 229 Smith Street Fitzroy



Front setbacks above the street wall



Activity Centre Typologies

Non-heritage Main Street Core

Typically comprising a mixed subdivision pattern with shopfront buildings that have dwellings and/or office space in the levels above.

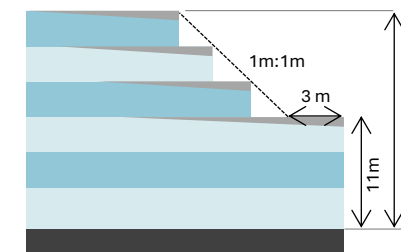
The main street core is often the retail heart of the activity centre. Sites in this precinct have limited heritage constraints. Buildings within this precinct will have a mix of uses with retail at the Ground Floor. These properties abut a main street with several configuration options depending on context. Often there is rear entry for vehicles through lane way access. Setbacks are typically incorporated above the street wall.

 Schedule:	6-storeys	8-storeys	12-storeys
 Storeys:	Max of 6 (21m)	Max of 8 (27m)	Max of 12 (40m)
 Maximum street wall height:	11m	11m	11m
 Dwelling size (sqm):	150sqm where 1 or 2 storeys achieved. 75sqm where 3 or more storeys achieved.	150sqm where 1 or 2 storeys achieved. 75sqm where 3 or more storeys achieved.	150sqm where 1 or 2 storeys achieved. 75sqm where 3 or more storeys achieved.
 Non-Residential:	1 st and 2 nd storeys	1 st and 2 nd storeys	1 st and 2 nd storeys
 Upper Level Front Setbacks:	3m, plus 1m for each metre of height	3m, plus 1m for each metre of height	5m
 Site Coverage:	100%	100%	100%

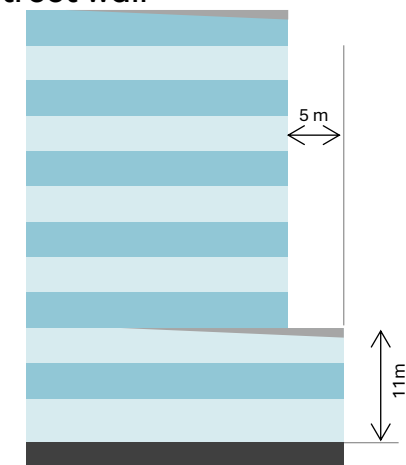
Typology example: 132 – 144 Springvale Road, Nunawading



Front setbacks above the street wall



Schedule: 6-storeys (illustrated), 8-storeys



Schedule: 12-storeys

Activity Centre Typologies

Limited Sensitivities

This precinct contains lots that are away from the main corridor,, and have fewer sensitivities than properties along the main street corridor or activity centre fringe.

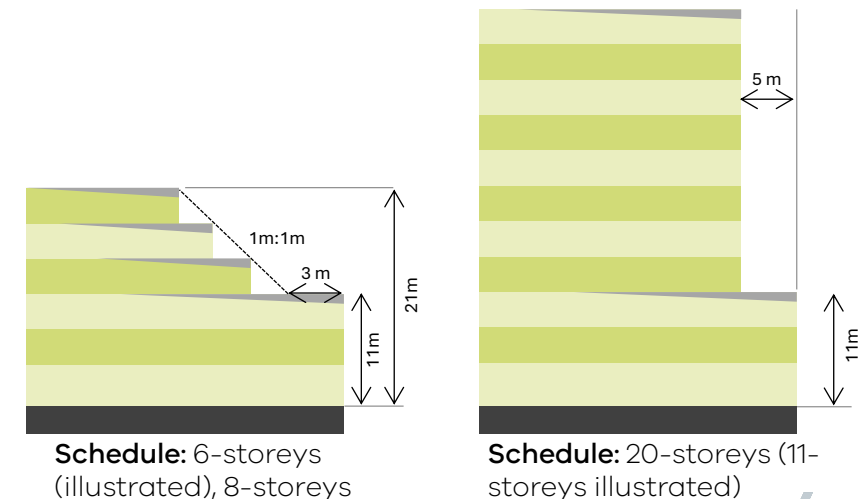
This precinct typically comprises larger lots developed for older low-rise commercial and light industrial uses, some of which have now been redeveloped into mixed-use, predominantly apartment buildings. Development will contain mixed-use buildings with several configuration options depending on context. They often have rear entry for vehicles through lane way access. Setbacks are typically incorporated above the street wall and the podium is built to both side boundaries interfacing other commercial/mixed-use buildings.

 Schedule:	6-storeys	8-storeys	20-storeys
 Storeys:	Max of 6 (21m)	Max of 8 (27m)	Max of 20 (66m)
 Maximum street wall height:	11m	11m	11m
 Dwelling size (sqm):	150sqm where 1 or 2 storeys achieved. 75sqm where 3 or more storeys achieved.	150sqm where 1 or 2 storeys achieved. 75sqm where 3 or more storeys achieved.	150sqm where 1 or 2 storeys achieved. 75sqm where 3 or more storeys achieved.
 % GFA Residential:	1 st storey	1 st storey	1 st and 2 nd storeys
 Upper Level Front Setbacks:	3m, plus 1m for each metre of height	3m, plus 1m for each metre of height	5m
 Site Coverage:	100%	100%	100%

Typology example: 16-18 Sargood Street, Altona



Front setbacks above the street wall



Activity Centre Typologies

Fringe

Typically comprising a fine-grain subdivision pattern and a mix of shopfronts and dwellings..

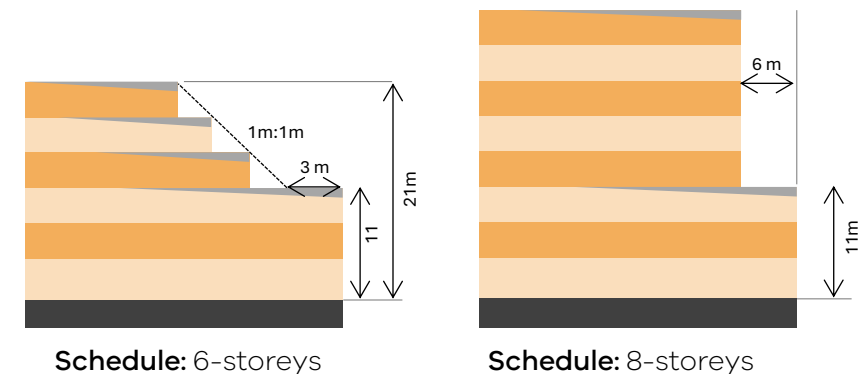
Lots within the fringe precinct sit at the edge of the activity centre and have a sensitive interface, generally with residential properties outside the activity centre. They will have a mix of uses with retail or residential lobbies at the Ground Floor. Setbacks are typically incorporated above the street wall. The podium is generally built to both side boundaries. Rear setbacks will respond to the sensitivities outside the activity centre boundary.

	Schedule:	6-storeys	8-storeys
	Storeys:	Max of 6 (21m)	Max of 8 (27m)
	Maximum street wall height:	11m	11m
	Dwelling size (sqm):	150sqm where 1 or 2 storeys achieved. 75sqm where 3 or more storeys achieved.	150sqm where 1 or 2 storeys achieved. 75sqm where 3 or more storeys achieved.
	% GFA Residential:	1 st storey	1 st storey
	Upper Level Front Setbacks:	3m, plus 1m for each metre of height	6m
	Site Coverage:	100%	100%

Typology example: 277 Centre Road, Bentleigh



Front setbacks above the street wall



Activity Centre Typologies

Side and rear setbacks (all activity centre typology groups)	
Part of the building	Metres
Up to 11m:	0
Above 11m, up to 27m:	4.5
Above 27m, up to 40m	6
Above 40m, up to 66m	7.5
Above 66m, up to 100m	10
Above 100m	12.5
*Note: • All front setbacks are 0m at ground level, with front setbacks beginning above 11m street wall.	

2. Constraints to capacity



Constraints reporting in HCAP

After making a modification and applying a new 'zone' / 'schedule', HCAP will report any constraints to capacity that were considered in the capacity calculation.

Housing Capacity Assessment Platform (DEV)

Create new Modification ✕

Select zone and schedule

Zone
Housing Choice and Transport Zone 2 (HCTZ2) ▼

Schedule
Standard ▼

Save Property Selection Cancel

Current Selection

Number of properties selected :	139
Properties modeled :	102
Properties excluded :	37
Existing zone :	GRZ
Existing number of dwellings :	131
Existing total dwelling capacity :	531
New total dwelling capacity :	596
New net dwelling capacity :	65
New net dwelling capacity ATOS	46
Discounts considered :	- Tree canopy protection - Lot size
Reason for property excluded :	Width <6m

“The 'discounts considered' row reports on any constraints to capacity that were considered on the selected properties.”

Discounts considered – Pt.I

Listed discount code	Reason	Data
Tree canopy protection:	Property contains a tree with canopy cover. The area covered by the tree canopy is removed from the lots total developable area if it is also within a SLO, VPO or ESO. Trees with canopy cover on properties not covered by the overlays listed above are removed from a lots total developable area if it is within 4m of a property's boundary.	Tree point data.
Heritage		
Heritage - Significant (HO):	Property affected by Heritage Overlay. Property identified as 'significant' level of significance.	Heritage Overlay, DTP analysis
Heritage - Contributory (HO):	Property affected by Heritage Overlay. Property identified as 'contributory' level of significance.	Heritage Overlay, DTP analysis
Heritage – Non-contributory (HO):	Property affected by Heritage Overlay. Property identified as 'non-contributory' level of significance.	Heritage Overlay, DTP analysis
Heritage (HO):	Property affected by Heritage Overlay. Level of significance data not available.	Heritage Overlay
Aboriginal Cultural Heritage Sensitivity:	Property identified within the Victorian Aboriginal Heritage Register.	Victoria Aboriginal Heritage Register (VAHR)
Victorian Heritage Inventory:	Property identified within the Victorian Heritage Inventory.	Property is listed on the Victorian Heritage Inventory (VHI)
Victorian Heritage Register:	Property is listed on the Victorian Heritage Register.	Victorian Heritage Register (VHR)
Land Management		
Salinity Management Overlay	Property affected by Salinity Management Overlay (SMO)	Salinity Management Overlay (SMO)
State Resource Overlay	Property affected by State Resource Overlay	State Resource Overlay (SRO)

Listed discount code	Reason	Data
Flood risk		
Flood risk (FO)	Property affected by the Flood Overlay	Flood Overlay (FO or RFO)
Flood risk (PPBCHA):	Property included within Port Phillip Bay Coastal Hazard Assessment 1% Annual Exceedance Probability flood risk.	Phillip Bay Coastal Hazard Assessment 1% AEP, 1.1m Sea level rise scenario
Flood risk (LSIO):	Property is affected by the Land Subject to Inundation Overlay	Land Subject to Inundation Overlay
Flood risk (1%AEP)	Property included within 1% Annual Exceedance Probability flood risk.	1% AEP flood risk
Urban drainage flood risk (SBO)	Property is affected by the Special Building Overlay (SBO)	Special Building Overlay (SBO)
Coastal hazards (Port Fairy)	Property is included within Port Fairy Coastal Hazard Assessment (PFCHA).	PFCHA
Coastal hazard (Western Port)	Property is included within Western Port Coastal Hazard Assessment (WPCHA).	WPCHA

Discounts considered – Pt.II

Listed discount code	Reason	Data	Listed discount code	Reason	Data
Airport noise controls (AEO1)	Property is affected by the Airport Environs Overlay 1	Airport Environs Overlay 1 (AEO1)	Environmental constraints (ESO)	Property is affected by the Environmental Significance Overlay that is applied for a purpose other than tree protection.	Select Environmental Significance Overlays (ESO)
Airport noise controls (AEO2)	Property is affected by the Airport Environs Overlay 2	Airport Environs Overlay 1 (AEO2)	Potential land contamination (EAO)	Property is affected by the Environmental Audit Overlay	Environmental Audit Overlay (EAO)
Melbourne Airport noise controls (MAEO1)	Property is affected by the Melbourne Airport Environs Overlay 2	Melbourne Airport Environs Overlay 1 (MAEO1)	Buffer area (BAO1)	Property affected by Buffer Area Overlay 1.	Buffer Area Overlay 1
Melbourne Airport noise controls (MAEO2)	Property is affected by the Melbourne Airport Environs Overlay 2	Melbourne Airport Environs Overlay 1 (MAEO2)	Buffer area (BAO2)	Property affected by Buffer Area Overlay 2.	Buffer Area Overlay 2
Erosion risk (EMO)	Property affected by Erosion Management Overlay.	Erosion Management Overlay (EMO)	'MHF_Inner': 'Major Hazard Facility buffer (Inner)'	Property is located within a Major Hazard Facility inner buffer area.	Major Hazard Facility inner planning advisory area
Erosion risk (PPBCHA)	Property included within Port Phillip Bay Coastal Hazard Assessment erosion risk	Phillip Bay Coastal Hazard Assessment Erosion Extent, 1.1m Sea level rise scenario	'MHF_Outer': 'Major Hazard Facility buffer (Outer)'	Property is located within a Major Hazard Facility outer buffer area.	Major Hazard Facility inner planning advisory area
Bushfire risk (BMO)	Property affected by the Bushfire Management Overlay (BMO).	Bushfire Management Overlay (BMO)	Public Acquisition Overlay (PAO)	Property affected by the Public Acquisition Overlay	Public Acquisition Overlay (PAO)
			Melbourne City Link Project (CLPO)	Property is affected by the Melbourne City Link Project Overlay	Melbourne City Link Project Overlay (CLPO)

Constraint discounting – impact on capacity modelling

Constraints	Short name	Constraint Type	Constraint Category	Constraint type
Airport Environs Overlay	AEO1	Flight	Inferred	Prohibitive
	AEO2	Flight	Inferred	Density cap (33.33 dph)
Melbourne Airport Environs Overlay	MAEO1	Flight	Explicit	Prohibitive
	MAEO2	Flight	Explicit	Density cap (33.33 dph)
Australian Noise Exposure Forecast	ANEF25	Flight	Probabilistic	Prohibitive
	ANEF20	Flight	Explicit	Density cap (33.33 dph)
Bushfire Management Overlay	BMO	Fire	Probabilistic	Prohibitive
City Link Project Overlay	CLPO	Other	Explicit	Prohibitive
Erosion Management Overlay	EMO	Environment	Probabilistic	Prohibitive
Floodway Overlay	FO	Flood	Explicit	Prohibitive
Public Acquisition Overlay	PAO	Other	Explicit	Prohibitive
Rural Floodway Overlay	RFO	Flood	Explicit	Prohibitive
Restructure Overlay	RO	Other	Explicit	Prohibitive
Road Closure Overlay	RXO	Other	Explicit	Prohibitive
Salinity Management Overlay	SMO	Environment	Probabilistic	Capacity discount - Medium
State Resource Overlay	SRO	Other	Explicit	Prohibitive
Victorian Heritage Register	VHR	Heritage & Character	Explicit	Prohibitive
Victorian Heritage Inventory	VHI	Heritage & Character	Explicit	Prohibitive
Aboriginal Cultural Heritage Sensitivity	ACHS	Cultural Heritage	Probabilistic	Capacity discount - Medium
Victorian Aboriginal Heritage Register	VAHR	Heritage & Character	Explicit	Prohibitive
Trees with >=5m canopy cover*	Canopy	Environment	Probabilistic	Prohibitive
Local Coastal Hazard Assessments	PPBCHA @ 1:1 SLR - Erosion	Hazard	Explicit	Prohibitive
	PPBCHA @ 1:1 SLR - Innundation	Flood	Explicit	Prohibitive
	PFCHA	Flood	Explicit	Prohibitive
	WPCHA	Flood	Explicit	Prohibitive
Heritage Level of Significance	HLoS - Significant	Heritage & Character	Explicit	Prohibitive
	HLoS - Contributory	Heritage & Character	Probabilistic	Capacity discount - High
	HLoS - Unknown	Heritage & Character	Probabilistic	Capacity discount - Medium
	HLoS - Non-contributory	Heritage & Character	Probabilistic	Capacity discount - Low
1% Annual Exceedance Probability	1%AEP	Flood	Probabilistic	Capacity discount - High
Heritage Overlay	HO	Heritage & Character	Probabilistic	Capacity discount - Medium
Land Subject to Inundation Overlay	LSIO	Flood	Probabilistic	Capacity discount - High
Major Hazard Facilities	MHF - Inner	Hazard	Explicit	Prohibitive
	MHF - Outer	Hazard	Explicit	Capacity discount - Medium
Environmental Audit Overlay	EAO	Hazard	Probabilistic	Capacity discount - Medium
Buffer Area Overlay	BAO1	Hazard	Explicit	Prohibitive
	BAO2	Hazard	Explicit	Prohibitive
Environmental Significance Overlay*	ESO	Environment	Probabilistic	Capacity discount - Low
Neighbourhood Character Overlay	NCO	Heritage & Character	Probabilistic	Capacity discount - Low
Special Building Overlay	SBO	Flood	Probabilistic	Capacity discount - Low
Significant Landscape Overlay*	SLO	Heritage & Character	Probabilistic	Capacity discount - Low
Vegetation Protection Overlay*	VPO	Environment	Probabilistic	Capacity discount - Low

*Constraints on VPO, SLO, ESO and Canopy cover vary depending on the overlay application.

Constraint type

Prohibitive – Land affected is removed from net developable area.

High – 80% reduction in GFA applied to net developable area affected by constraint.

Medium – 50% reduction in GFA applied to net developable area affected by constraint.

Low – 20% reduction in GFA applied to net developable area affected by constraint.

Density Cap – Minimum lot size restriction.

Constraint Category

Inferred: Assumed interpretation of constraint.

Explicit: Direct interpretation of constraint.

Probabilistic: Likely reduction in rate of supply or ultimate yield based on constraint and/or policy intent.

3. Excluded properties

A short, horizontal teal line is positioned below the section header.

Excluded properties reporting in HCAP

Create new Modification

Select zone and schedule

Zone

Housing Choice and Transport Zone 2 (HCTZ2)

Schedule

Standard

Save

Property Selection

Cancel

Current Selection

Number of properties selected :	139
Properties modeled :	102
Properties excluded :	37
Existing zone :	GRZ
Existing number of dwellings :	131
Existing total dwelling capacity :	531
New total dwelling capacity :	596
New net dwelling capacity :	65
New net dwelling capacity ATOS	46

Discounts considered :

- Tree canopy protection

Reason for property excluded :

- Lot size
- Width <6m

“In this example, of the 139 properties selected, 37 were excluded and not modelled. This is due to a combination of lot size and width size.”

- HCAP reports how many properties within a selection were not modelled and excluded from capacity results.
- The table below provides a summary of all possible exclusions that can be reported in HCAP.

Reason for property excluded code	Explanation	Reason
'Lot size'	Lot size is less than 200sqm or greater than 5,000sqm.	Hard to yield net additional dwelling capacity in sites less than 200sqm after consideration of setbacks. Similarly, HCAP approach to modelling is not suited to estimate capacity on large sites.
'Non-residential use'	Additional housing or residential uses are not compatible with the existing zoning.	Policy alignment to existing land use controls.
'Width less than 6m'	A site is excluded if, after consideration of setbacks, the floorplate width is less than 6m.	Floorplate width of less than 6m was not considered likely to accommodate net additional housing.
'Existing public facility'	Existing public facility such as library. Not considered appropriate for residential use.	Not considered appropriate for residential use.
'Parks and reserves'	Existing parks or reserves including the Public Park and Recreation Zone (PPRZ).	Not considered appropriate for residential use.
'Road property'	Existing road reserve.	Not considered appropriate for residential use.
'Invalid geometry'	Property / lot shapes that are not appropriate for residential development. Often includes common property on already subdivided lots.	Unusual property shape, unlikely to be taken up for future housing yield. Additionally, a technical limitation in determining front, side and rear setbacks on unusual property shapes.

Excluded properties – Mapping layer

Within HCAP you can toggle to view a mapping layer that visualizes all excluded properties.

The screenshot displays the Housing Capacity Assessment Platform (DEV) interface. On the left, a sidebar contains a list of layers and settings. The 'Excluded Property' layer is highlighted with a dashed green box and has a checkmark in its toggle box. Other layers include 'Modifications', 'Movement and Place', 'LGA', 'Established UDP', 'Greenfield UDP', 'State-led Planning Area', 'Property', 'ATOS', 'Planning scheme', and 'Strategic Areas'. A search bar at the top right of the sidebar is labeled 'Search for address'. The main map area shows a street grid with several properties highlighted in blue, indicating they are excluded. A legend in the bottom right corner shows a blue square for 'Excluded Property' and a light blue square for 'LGA'. A scale bar at the bottom left indicates 50 m. A callout box on the left side of the map contains the text: 'All properties within the boundaries of State-led planning areas are excluded and not available for modification in HCAP.'

Housing Capacity Assessment Platform (DEV) Search for address

Modifications ☒

► Movement and Place ☐

LGA ☒

Established UDP ☐

Greenfield UDP ☐

State-led Planning Area ☐

Excluded Property ☒

Property ☐

ATOS ☐

► Planning scheme ☐

► Strategic Areas ☐

50 m

Legend

- Excluded Property
- LGA

All properties within the boundaries of State-led planning areas are excluded and not available for modification in HCAP.

HCAP Technical Notes

October 2026

Version 1.2

The Housing Capacity Assessment Platform (HCAP) Technical Note explains the methodology and assumptions that underpin how HCAP estimates capacity for housing. HCAP is a statewide modelling platform that has been developed to support housing target implementation and assist with strategic planning for housing. DTP looks forward to building HCAP's functionality with user collaboration. This document will be periodically updated as changes to HCAP are made over time, including specific methodology adjustments made for regional Victoria.

How HCAP assists housing targets implementation

To assess a planning scheme's ability to meet housing targets, HCAP first calculates the total theoretical capacity that is facilitated by an existing planning scheme (Process 1). HCAP then assesses whether theoretical capacity is in relatively well-serviced locations within the municipality (Process 2).

Process 1: Calculating planning scheme capacity

HCAP follows a three-step process to calculate housing theoretical capacity. Below is an overview of the approach which will be expanded on in more detail in subsequent sections.

Step 1: Determine available land for housing

- Remove lots that are not suited for residential development.

Step 2: Determine capacity of available land for housing

- Calculate maximum existing theoretical built form envelope as per the current zone and local variations to height and site coverage.
- Calculate maximum theoretical built form envelope as per corresponding built form standards and chosen applied zone.

Step 3: Factor in constraining land characteristics and dwelling assumptions

- Consider constraining land characteristics.
- Apply dwelling assumptions.

Process 2: Assessing policy alignment (ATOS discount capacity)

Step 1: Group net theoretical capacity by Access to Opportunities and Services (ATOS) grade

- Apply ATOS gradings across LGA.
- Sum the net theoretical capacity by ATOS grade.

Step 2: Convert theoretical capacity to 'ATOS discount capacity'

- Multiply net theoretical capacity by corresponding ATOS grade percentage.

Process 1: Calculating planning scheme capacity

Step 1: Determine available land for housing

HCAP removes properties deemed to be potentially unsuitable for redevelopment (**Table 1**). HCAP also removes site due to modelling reasons (**Table 2**). Eligible properties are deemed to be 'in pool' while ineligible properties are excluded as 'out of pool'. HCAP assumes no conversion of non-residential land, except where there is a confirmed development pipeline.

Table 1. Removed lots that are not suited for residential development

Removed category	
- Only the listed zones are modelled: "NRZ", "GRZ", "RGZ", "HCTZ1", "HCTZ2", "C1Z", "ACZ", "TZ", "R1Z", "B1Z", "B2Z", "MUZ", "SUZ" (if a local schedule permits residential development), "DZ", "CCZ", "CDZ" (if a local schedule permits residential development). All other zoned are removed. (Note: for regional Victoria LGAs, additional zones are considered using a dwellings per hectare approach, which is detailed in Table 5). - Public uses, including on residential zoned land (Community Services; Sport, Heritage and Culture; National parks, conservation areas, forest reserves and natural reserves). Data is derived from Vicmap Features or Interest. - Open space - Common property	- Incompatible uses on residential zoned land (Primary production; Infrastructure and utilities (industrial); Industrial; Extractive industries). - Industrial land including Commercial 2 Zone - Roads - Properties on the Victorian Heritage Register - Properties that don't meet minimum subdivision requirements. - Properties with prohibitive overlays.

Table 2. Removed lots where modelling would not yield suitable results

Removed category	Rationale
Lot size less than 200sqm	Difficult to yield net additional dwelling capacity on sites less than 200sqm after consideration of setbacks.
Lot size greater than 5,000 sqm	HCAP approach to modelling is not suited to estimate capacity on large sites.
Site width less than 6m	Site width of less than 6m not considered likely to accommodate net additional housing after consideration of setbacks.
Invalid lot geometry	Often includes common property on already subdivided lots. Unusual property shape, unlikely to be taken up for future housing yield. Additionally, a technical limitation in determining front, side and rear setbacks on unusual property shapes.

Additionally, capacity results for the following areas are considered and credited against a council's LGA, however are not displayed within the user interface of HCAP:

- Areas involved in state-led planning including the Activity Centre Pilot Program, the Train and Tram Zone Activity Centre Program, Priority Precincts and Suburban Rail Loop East Precincts.
- Metropolitan, regional and rural areas covered by Urban Development Program data.

Table 3. Additional zones considered for regional Victoria.

Additional 'urban zones' are considered in capacity modelling for regional Victoria. These additional 'urban zones' are based on the guidance within *PPN99: Implementing a Strategic Settlement Boundary*:

- Low Density Residential Zone
- Township Zone
- Urban Growth Zone (only included if within an existing settlement boundary)
- Rural Living Zone (only included if within an existing settlement boundary)

Step 2: Determine capacity of available land for housing

Depending on the selected zone, HCAP converts its controls into a built form envelope with a set number of storeys and divides the floor area into an approximate number of dwellings. It is important to note this method has not accounted for all built form requirements - see **Appendix 1** for a list of planning controls that have been considered.

HCAP can assess existing planning scheme capacity and to test new zoning / built form scenarios to see the total impact on housing capacity.

Local planning controls – Height and site coverage

To assess existing planning scheme capacity, locally specific height controls have been captured and inputted into HCAP. This includes:

- **Residential Zone schedules:** Building height variations and site coverage variations.
- **Activity Centres and other strategic areas:** Building height variations and Floor Area Ratio controls. This includes Design and Development Overlays, Built Form Overlays, Activity Centre Zones, Precinct Zones and Comprehensive Development Zones.
- **Height constraints:** Helicopter flight paths height controls in Australian Height Datum (AHD) (Design and Development Overlay and Specific Controls Overlay)

Some built form requirements, such as overshadowing, are not computationally realistic to calculate at a statewide level. Instead, there are estimates which acknowledge these gaps and accept that real-world outcomes may vary.

When HCAP models built form in 3D, it reads building storeys as the primary input. For building height controls that are expressed in metres, HCAP converts these into a 'storeys' value.

Both preferred and mandatory building height controls have been captured and included in HCAP. However, any height control put into HCAP is the maximum limit that will be modelled. Because of this HCAP interprets preferred height controls and mandatory heights controls in the same manner.

If there are no local variations to height controls the 'standard' height is used **HCAP Companion guide (Section 1)**. In specific areas with no associated height controls a 'standard' assumption of 4-storeys is adopted and modelled. This includes:

- Commercial 1 zone areas that do not have an associated height control, such as through a Design and Development Overlay.

- Mixed Use Zones that do not have a schedule or overlay that specifies a building height control.

Setback, interfaces & orientation

At present, a standard approach to setbacks is used across the residential zones which is detailed in the **HCAP Companion guide (Section 1)**. Additionally:

- Both B2-3.1 and B2-3.2 (*Cl.55, Victoria Planning Provisions*) setback requirements are modelled for a majority of residential zones as separate scenarios. HCAP automatically takes the setback requirement that produces the highest yield per site.
- Standard E2-2 (*Cl.57, Victoria Planning Provisions*) setback requirements are modelled for sites within the 'MUZ', 'TZ' (within the UGB), 'RGZ' and 'HCTZ', and achieve a maximum yield between four and six storeys.
 - If any section of the floorplate width is smaller than 10m it is not modelled. For Commercial Zones and activity centre typologies any floorplate width smaller than 6m is not modelled.
- Only floorplate areas over 200sqm are modelled.

Setbacks are counted as 'private open space' for the purpose of calculating site coverage at ground floor. This means some properties will be below their site coverage requirement. For those that are still over the site coverage requirements after consideration of setbacks, the additional 'private open space' required is positioned to the 'front' and 'rear' of a site.

Each site's boundaries are categorised into three groups for setbacks:

- 'Front' is the edges closest to the road dataset. This can result in multiple frontages on corner or curved sites.
- 'Rear' is the edge that is opposite of the 'front', or as near as can be determined. On properties with multiple 'fronts' this may result in no 'rear' being determined.
- 'Side' are the edges that remain.
- If a site is surrounded by other sites and has no street frontage, one is randomly assigned as 'front', prioritising smaller edges, and its nearest opposite the 'rear'. This is a current limitation.

Regarding site orientation:

- Scenarios under Standard B2-3 (*Cl.55, Victoria Planning Provisions*) will consider the *Southern boundary* of the site for setbacks.
- *Southern boundary* is defined as any *non-front* edge that is within 30 degrees west of south and 30 degrees east of south.
- This parameter will not be reported to the user as an attribute of the site as it is operated on a per edge basis.

For C1Z and MUZ land setbacks are applied as per the **HCAP Companion Guide (Section 1)**.

The applied setback assumptions within activity centres or strategic areas adjust depending on the corresponding building height control (**Table 1**) or an associated 'density index' score. These setback assumptions apply to the Activity Centre Zone, Capital City Zone, Docklands Zone, and specific Special Use Zones that support residential development. DTP analysis attributes a 'density index' score (ranging from 1, lowest density to 8, highest density) to each activity centre to estimate the level of growth expected in an activity centre. Where no value is available setbacks default to Density Index 1.

Table 4. Applied side and rear setbacks for activity centres and other strategic areas

Height <14 storeys AND Density Index < 5:		
Front setback:	3m, plus 1 for each metre of height	
Side and rear setbacks:	Up to 11m:	0m
	Above 11m, up to 27m:	4.5m
	Above 27m, up to 40m:	6m
	Above 40m, up to 47:	7.5m
Height >= 14 Storeys OR Density Index >= 5		
Front setback:	5m	
Side and rear setbacks:	Up to 11m:	0m
	Above 11m, up to 27m:	4.5m
	Above 27m, up to 40m:	6m
	Above 40m, up to 66m:	7.5m
	Above 66m, up to 100m:	10m
	Above 100m:	12.5m

Floor Area Ratio controls

HCAP considers local floor area ratio controls where they are applied:

Table 5. How Floor Area Ratio controls are interpreted in HCAP.

Step 1.	The Floor Area Ratio Gross Floor Area (FAR GFA) is determined using the following equation: FAR GFA = FAR x Site Area
Step 2.	Modelled GFA is compared to FAR GFA, with the lower of the two selected. - If Modelled GFA is lower, apply constraints as per Step 3. - If FAR GFA is lower, then apply approximate floorplate efficiency (= $2.3406 \times \text{sitearea}^{0.8043}$, further described in Step 3) and then apply constraints (as per Step 3). - Percentage of developable area attributed to residential land (compared to commercial uses) depends on the applied zone and is consistent with the HCAP Companion Guide (Section 1). <i>Note: If no height control or zone information is available apart from a FAR control, then the site attempts to model to 56 storeys (Modelled GFA) before comparing with FAR GFA. This is to determine if significant height is possible within the dimensions of the site and its setbacks. If so, FAR will still act as the limiting factor.</i>

Table 6. Regional Victoria: Density per hectare calculations

HCAP removes sites over 5,000sqm as the modelling approach is not suited to estimate capacity on large sites. In metropolitan Melbourne, these large sites are generally strategic redevelopment sites. However, within the regional Victoria context, where larger lot sizes are more common, the approach removes a large amount of residential sites that should contribute towards housing capacity. To ensure these sites are captured from a capacity perspective, a 'density per hectare' calculation is applied to estimate the amount of dwellings that could be yielded on these sites. The list below provides a summary of the zones, circumstances and calculations for the 'density per hectare' approach. These assumptions are only applied to regional LGAs. The 'density per hectare' calculations were determined based off DTP analysis of delivered density trends in the last 5 years in similar circumstances and zones, where data is available.		
Zone:	Approach:	Density per hectare (dph):
Neighbourhood Residential Zone (NRZ)	Applied when a site is excluded from usual modelling approach due to area being over 5,000sqm. Constraint discounting is applied to the resulting yield as per Step 3 .	8 dph
General Residential Zone (GRZ)	Applied when a site is excluded from usual modelling approach due to area being over 5,000sqm. Constraint discounting is applied to the resulting yield as per Step 3 .	12 dph
Township Zone (TZ)	Applied when a site is excluded from usual modelling approach due to area being over 5,000sqm.	2.5 dph
Low Density Residential Zone (LDZ)	Applied to all LDRZ land.	2.5 dph
Urban Growth Zone (UGZ)	Applied when there is no Urban Development Program Data and if the land is within a settlement boundary.	10 dph
Rural Living Zone (RLZ)	Applied to land within a settlement boundary.	10 dph
Farming Zone (FZ)	Applied to land within a settlement boundary.	5 dph

INCORPORATING URBAN DEVELOPMENT PROGRAM DATA

HCAP also considers data from DTP's [Urban Development Program](#) (UDP). The Urban Development Program provides data on Melbourne's land supply and development pipeline. It monitors major redevelopments which are defined as residential development projects of 10 or more dwellings. Major redevelopment projects categorised as 'firm', 'likely' and 'possible' are considered by HCAP. 'Under construction' major redevelopments have already been credited against an LGA's housing target and counted as growth (2023-2025). Definitions for these categories are:

- 'Under construction': projects with building works being carried out
- 'Firm': projects with current planning approval or being marketed.

- 'Likely': projects within the planning process or with a recently lapsed permit.
- 'Possible': identified future major redevelopment projects without detailed planning.

HCAP incorporates UDP data in the following ways.

- On a given site, HCAP considers its own capacity results as well as UDP site data and reports whichever is greater as the capacity for the site.
 - E.g. For a site, HCAP generates a theoretical capacity of 12. However, UDP data on the same denotes a major redevelopment of 20 dwellings. HCAP will report 20 dwellings as the site's capacity.
- UDP data for sites that HCAP considers to be 'out of pool' (removed from the HCAP modelling process in [Step 1](#)) contribute towards an LGAs theoretical capacity.
 - E.g. A strategic redevelopment site over 5,000sqm exists within an LGA. The site was considered 'out of pool' and not modelled in HCAP due to its large size (over 5,000sqm). UDP data for the site identifies a major redevelopment for 250 dwellings. HCAP will report 250 dwellings as the site's capacity.

Table 7. Urban Development Program Data in regional Victoria.

Where available, HCAP considers regional UDP data. UDP is only applied to estimate greenfield land capacity and is only available for 12 out of 48 regional councils. [Where UDP data is available it replaces any modelled capacity on greenfield land.](#) UDP data is additionally assessed against the ATOS discounting method that is detailed in [Process 2: Assessing policy alignment \(ATOS discount capacity\).](#)

CONSIDERING EXISTING DWELLINGS

There are some circumstances where HCAP uses existing dwelling data to assist in reported capacity results:

- If HCAP does not model housing capacity on a site (e.g. lot size less than 200sqm), HCAP will report the existing number of dwellings on the site as the capacity.
- If HCAP models housing capacity on a site and the result is less than the existing number of dwellings already on the site, HCAP will report the existing number of dwellings on the site as the capacity.

UNCONSTRAINED THEORETICAL CAPACITY

The result of the steps followed to determine 'unconstrained theoretical capacity' of a planning scheme. This is the estimated total theoretical capacity if every lot was developed to its maximum potential, without consideration of potential constraints to development.

Table 8. Summary of built form parameters

Built Form Parameter:	Explanation:
Storeys & Heights:	- Local planning heights apply in the assessment of existing planning scheme capacity, including Floor Area Ratio controls. - If no locally specific controls exist, 'standard' heights are applied (detailed in HCAP Companion Guide, Section 1) - To rationalise floor heights, there may be some discrepancy in maximum heights and modelled heights. However, maximum storeys of a given scenario will always match the scenarios maximum storeys if it can be achieved. - Standard height of 4-storeys for Commercial 1 Zone and Mixed Use Zone land with no associated local building height control.
Setbacks:	- Standard approach to setbacks applies. Applied standard depends on the underlying zone or built form typology (detailed in HCAP Companion Guide, Section 1). - Standard B2-4: Walls on Boundaries & B4-1: Daylight to Existing Windows (Cl.55, Victoria Planning Provisions) simplified to a 1m setback from the Side and Rear boundaries, other Side and Rear setbacks for non-residential scenarios are detailed in HCAP Companion Guide (Section 1). - Rear setbacks are considered the same as Side setbacks, as they are adjacent to another site. - The Mid-Rise Code (Cl. 57, Victoria Planning Provisions) has been applied across regional Victoria to sites within a MUZ, RGZ, and HCTZ where the maximum yield is between 4 and 6 storeys. (detailed in HCAP Companion Guide, Section 1).
Floorplates & Minimum Width:	- Any section of a floorplate width smaller than 10m it is not modelled. For Commercial Zones and activity centre typologies any floorplate width smaller than 6m is not modelled. - Only floorplate areas over 200sqm will be modelled.
Site Coverage and Open Space:	- Local planning site coverage requirements apply in the assessment of existing planning scheme capacity. - If not locally specific controls, 'standard' site coverage requirements are applied (detailed in HCAP Companion Guide, Section 1)

Step 3: Factor in constraining land characteristics and dwelling assumptions

CONSIDERING CONSTRAINING LAND CHARACTERISTICS

The 'unconstrained theoretical capacity' (Gross Floor Area) generated in Step 2, is discounted to reflect known development constraints.

This includes factoring in consideration of planning overlays or other constraints to reflect either amount of area that is allowed to be developed or the likelihood that a constrained site will develop; further detail of this can be found in the.

The **HCAP Companion Guide (Section 2)** contains a list of known capacity constraints and how they impact the calculation of capacity in HCAP. Listed constraints either remove affected land from HCAP (not developable) or apply a discount to the amount of theoretical housing capacity the site can yield. The groupings for constraint categories include:

- Prohibitive: Land affected is removed from net developable area.
- High: 80% reduction in GFA applied to net developable area affected by constraint.
- Medium: 50% reduction in GFA applied to net developable area affected by constraint.
- Low: 20% reduction in GFA applied to net developable area affected by constraint.

Density caps are also incorporated for sites with planning controls that specify minimum lot size restrictions.

Figure 1 provides a breakdown of the constraint discounting process including a worked example.

TREE CANOPY COVERAGE

To consider existing tree canopy coverage, tree point data is used to map the location, height and extent of existing canopy cover trees. **Table 6** outlines how existing tree canopy coverage is considered.

Table 9. Incorporation of tree canopy coverage.

Context	Approach
A planning control is in place that specifically protects canopy trees: <i>Specific ESO/SLO, all VPO</i>	<u>Any</u> canopy tree extent on a site is categorised as prohibitive and reduces the net developable area of the site.
<u>No</u> existing controls in place to specifically protect canopy trees:	Canopy tree extent within 4m of a site boundary is categorised as prohibitive and reduces the net developable area of the site.

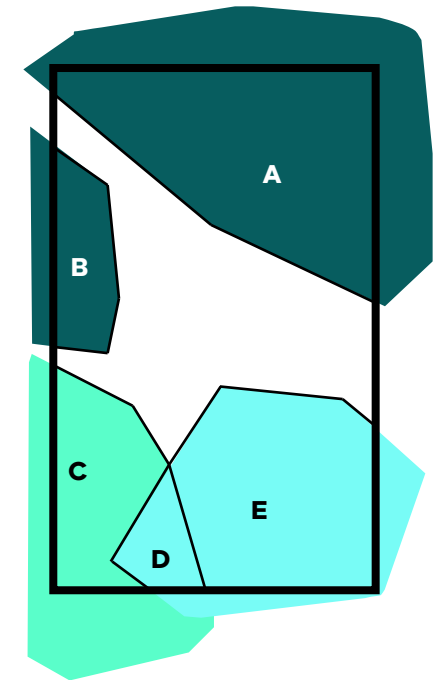
Table 10. Tree canopy coverage in regional Victoria

Due to a lack of consistent tree point data, existing tree canopy coverage is not considered in the regional Victoria HCAP results.

Figure 1. Process to factor in constraining land characteristics including a worked example.

Process		Worked example			
1.	Constraining land characteristics are identified and spatially mapped in HCAP Spatially overlapping constraints are attributed the highest constraint category.	Prohibitive (100% reduction in GFA applied)	High (80% reduction in GFA applied)	Medium (50% reduction in GFA applied)	Low restrictive (20% reduction in GFA applied)
		A + B	D + E	C	N/A
2.	The total percentage site coverage of each constraint is calculated.	30% of total site areas covered by A + B	25% of total site covered by D + E	15% of total site covered by C	N/A
3.	The total site coverage for each constraint multiplied by the constraint category percentage.	100% of 30% = 30%	80% of 25% = 20%	50% of 15% = 7.5%	N/A
4.	Individual constraint values from Step 3 are summed together.	30 + 20 + 7.5 = 57.5% of the yield for the property is constrained in some way.			
5.	The inverse of the value from Step 4 is used to discount the yield of any scenario applied to the property, both its existing unconstrained theoretical capacity and any rezoning applied by the user in HCAP.	100 - 57.5 = 42.5% capacity discount			
6.	Multiply the HCAP modelled unconstrained theoretical capacity GFA against the capacity discount from Step 5.	If Property #1 was in a General Residential Zone with a modelled capacity of 800sqm unconstrained theoretical capacity. This GFA would be reduced to 340sqm (800 * 0.425).			
7.	Result	Theoretical capacity GFA for Property #1: 340 sqm			

Property #1 boundary
(black rectangle outline)



APPLYING DWELLING ASSUMPTIONS AND OTHER ASSUMPTIONS

A calculation is applied to translate total Gross Floor Area (GFA) to a Net Saleable Area (NSA).

In simple terms, the calculation seeks to convert the 3D block built forms which are based on planning envelopes, into more realistic development outcomes.

The formula for the calculation was developed after undertaking architectural testing. Importantly, the relationship between lot size and yield is not linear – as a development gets larger (higher GFA) the attributed NSA does not increase at the same rate.

- $Y = 2.3406 * x^{0.8043}$
 - Where x = floorplate size
 - Y = discounting factor applied to the GFA of that floorplate

Dwelling numbers are rounded to the nearest whole number per site.

- The percentage of GFA predicted to be used for residential development within that scenario is then applied - as defined in the **HCAP Companion Guide, Section 1** (%GFA residential)
- For land within an Activity Centre Zone, Capital City Zone, Docklands Zone and specific Special Use Zones the following rules apply:
 - If 5 storeys or below is modelled, the bottom floor is reserved for non-residential use.
 - If 6 or more storeys are modelled, the bottom two storeys are reserved for non-residential use.

A further calculation is applied to consider dwelling sizes. Each dwelling will be:

- 150sqm for properties/scenarios with a realised height of 1 or 2 storeys.
- 75sqm for properties/scenarios with a realised height of 3 storeys or more.

The completion of these steps results in the 'Total theoretical capacity' for a site, and cumulatively for a planning scheme.

'Net theoretical capacity' removes existing dwellings to only report additional dwelling capacity.

EXISTING THEORETICAL CAPACITY

- Existing theoretical capacity is derived from the standard version of the zone, applying any local *height* or *site coverage* variations. The tool does not currently apply any other variations.
- All the same processes and discounts are applied as in *Proposed Theoretical Capacity*

ESTABLISHED AREA AND GREENFIELD AREA REPORTING FOR REGIONAL VICTORIA

Table 11. Established area and greenfield area reporting for regional Victoria.

For regional Victoria, additional assumptions are made to categorise housing capacity as either occurring in an 'established' or 'greenfield' setting. The assumptions help provide an estimate of 'established' / 'greenfield' capacity split for all regional LGAs. Capacity is only categorised if the zone is considered 'in pool' (Table 1).		
Zone	Category	Exceptions
Neighbourhood Residential Zone	Established	Where, DPH measure is applied (sites over 5,000sqm) capacity is categorised as greenfield .
General Residential Zone	Established	-
Residential Growth Zone	Established	-
Mixed Use Zone	Established	-
Low Density Residential Zone	Established	If site is greater than 4,000sqm (0.4 hectares) capacity is categorised as greenfield .
Rural Living Zone	Established	If site is with a settlement boundary.
Farming Zone	Greenfield	If site is within a settlement boundary.
Comprehensive Development Zone (only modelled if a local schedule permits residential development)	Established	If site is outside a settlement boundary or not enclosed by urban zoned land it is categorised as greenfield .
Urban Growth Zone	Greenfield	If a local schedule is applied (i.e. UGZ1, UGZ2) capacity is categorised as established .
Special Use Zone (only modelled if a local schedule permits residential development)	Established	-
Township Zone	Established	-
Activity Centre Zone	Established	-
Commercial 1 Zone	Established	-

Process 2: Assessing policy alignment (ATOS discount capacity)

The Victorian Government's long-term strategic plan, [Plan for Victoria](#), emphasises positioning Victoria as a global leader in liveability, equity and sustainability. Key tenets often include managing population growth effectively, increasing housing supply in well-located areas with good access to jobs and services, and fostering the development of neighbourhoods where residents can meet most of their daily needs locally via walking, cycling, or public transport.

Access to Opportunities and Services (ATOS) is a quantitative measure indicating levels of access to essential key services and employment locations, without using a private vehicle. It serves to identify locations across the metropolitan area that are well-served by, and provide good access to jobs, shops, and essential community facilities and services.

Unlike measures that assess general proximity to public transport infrastructure, ATOS specifically evaluates accessibility to a defined 'basket' of common destinations. ATOS scores range from A1 (best accessibility) to E (worst accessibility) based on statistical distribution.

ATOS has been integrated within both the HCAP tool and VicPlan.

To assess housing target compliance, DTP has integrated ATOS into the evaluation of local planning schemes. ATOS enables both:

- The comparison of planning capacity for housing against Plan for Victoria's policy aspirations.
- The identification of better serviced locations for housing (which are also more likely to be feasible over time).

Housing capacity in areas with higher ATOS scores will contribute a greater percentage of capacity towards a housing target compared to capacity in poor access areas.

Step 1: Group net theoretical capacity by Access To Opportunities and Services grade

APPLY ATOS GRADINGS ACROSS LGA

All areas of an LGA are assessed and attributed an ATOS grade ranging from 'A1' to 'E.' ATOS provides a single grade score considering a variety of access measures. The access measures and corresponding data sources are summarised in **Table 1** below.

Table 12. ATOS Access Measures

	Measure	Components	Data source
WALK and/or PUBLIC TRANSPORT	Work	• Travel time 10k blue collar jobs • Travel time to 10k white collar jobs	SALUP24 2026
	Education	• Travel time to 3 Primary* • Travel time to 3 Secondary* • Travel time to 3 Tertiary • Travel time to 3 Childcare/Kindergarten <i>*Note: Includes public schools only</i>	DE 2025 (Find My School) Vicmap Features of Interest ACECQA
	Health	• Travel time to 3 GPs	Healthmap
	Food	Travel time to the nearest supermarket.	Foursquare

WALKING	Open Space	Travel time to the nearest cumulative 1ha of publicly accessible open space.* *Note: Does not include open space hierarchy.	Vicmap Features of Interest
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Table 13. Regional Victoria: ATOS Access Measures

The measures and thresholds that contribute to local ATOS gradings have been tailored to reflect more appropriate levels of available public transport and services access across regional Victoria. The measures and thresholds are detailed in [Table 14](#).

The measures and thresholds applied, depend primarily on a locations corresponding hierarchy as defined in [Plan for Victoria](#).

Settlements not included within the Plan for Victoria hierarchy, are classified as 'Regional'.

'Out of pool' zones (i.e. zones which are not suitable for housing) and are not attributed to any settlement, are classified as 'Regional – Other'. These are not included in the HCAP assessment; however they help provide a complete visualisation of ATOS across regional Victoria.

Table 14. ATOS Measurement thresholds.

		Greater Melbourne	Major Regional City	Regional City	Regional Service Centre	Regional	Regional - Other
Priority 1 Measures	Primary School	3	3	1	1	1	1
	Secondary School	3	3	1	1	-	-
	White Collar Jobs	10,000	10,000	5,000	2,500	500	500
	Blue Collar Jobs	10,000	10,000	2,500	1,000	500	500
Priority 2 Measures	Child Care / Kinder	3	3	2	2	1	1
	Tertiary Education	3	3	-	-	-	-
	General Practitioner	3	3	1	1	1	1
	Grocery	1	1	1	1	1	1
	Open Space	1ha	1ha	1ha	1ha	1ha	1ha

SUM THE NET THEORETICAL CAPACITY BY ATOS GRADE

The net theoretical capacity (determined in Process 1) for all sites within a particular ATOS grade are summed together.

Step 2: Convert theoretical capacity to 'ATOS discount capacity'

MULTIPLY NET THEORETICAL CAPACITY BY CORRESPONDING ATOS GRADE PERCENTAGE

The summed net theoretical capacity is then multiplied by the corresponding ATOS grade percentage specified in **Table 6**.

Table 15. Metropolitan Melbourne: Percentage of theoretical capacity attributed towards housing target to 2051.

	ATOS Grade					
	A1	A2	B	C	D	E
Inner Melbourne LGAs	80%	70%	60%	60%	30%	10%
Middle Melbourne LGAs	80%	70%	40%	20%	10%	10%
Outer Melbourne LGAs	80%	70%	40%	20%	10%	10%
Growth LGAs	80%	70%	30%	20%	10%	0

Metropolitan LGA's have different ATOS grade percentages depending on where they are located within metropolitan Melbourne. The regional groupings and each LGAs place within the groups is specified in **Table 7**.

Table 16. Metropolitan Council region groupings.

Inner Region:		Middle Region:	
• Melbourne • Port Phillip	• Stonnington • Yarra	• Banyule • Bayside • Boroondara • Darebin • Glen Eira • Hobsons Bay • Kingston	• Manningham • Maribyrnong • Merri-bek • Monash • Moonee Valley • Whitehorse
Outer Region:		Growth Region*:	
• Brimbank • Frankston • Greater Dandenong • Knox	• Maroondah • Mornington Peninsula • Nillumbik • Yarra Ranges	• Cardinia • Casey • Hume	• Melton • Whittlesea • Wyndham
*Mitchell Shire Council included in regional housing assessment.			

DTP analysis of recent development informed this methodology. DTP analysis indicated that capacity for housing is more likely to be converted into housing supply in well serviced areas. This informed the approach to convert a greater percentage of existing capacity into dwelling supply in well serviced areas over the housing target's time horizon to 2051.

Similarly, DTP analysis indicated that conversion of capacity in well serviced areas to dwelling supply is strongest in the inner region of Melbourne and diminishes moving outwards. This

informed the approach to adjust the rate of conversion depending on the inner, middle, outer and growth regional groupings of metropolitan Melbourne.

For regional Victoria, LGAs are grouped based off the strategic settlement hierarchy for locations outlined in a *Plan for Victoria*. The groupings and corresponding ATOS percentage seek to strongly encourage capacity in higher graded locations to shift current development trends away from lesser serviced growth areas.

Table 17. Regional Victoria: Percentage of theoretical capacity attributed towards housing target to 2051.

Settlement hierarchy	ATOS Grade					
	A1	A2	B	C	D	E
Major Regional City	80%	70%	30%	30%	20%	10%
Regional City	70%	60%	20%	20%	10%	10%
Regional Service Centre	60%	40%	20%	20%	10%	10%
Regional	40%	40%	20%	20%	10%	10%

A worked example of [Step 2](#) is detailed in **Table 8** below:

Table 18. Worked example to calculate Net ATOS Discount Capacity

GUMNUT LGA (Middle Melbourne)						
Process:	Worked example:					
1. Gumnut LGA's total net theoretical capacity:	250,000 dwellings					
2. Gumnut's net theoretical capacity is spatially distributed across the ATOS grades in the following manner:	A1:	A2:	B:	C:	D:	E:
	40k	60k	100k	30k	20k	N/A
3. Gumnut is categorised as a middle Melbourne LGA, so the following ATOS Grade percentages apply.	80%	70%	40%	20%	10%	10%
4. Multiply net theoretical capacity by corresponding ATOS grade percentage	40k x 0.80	60k x 0.70	100k x 0.40	30k x 0.20	20k x 0.10	N/A
5. Total all results from Step 4.	32k	42k	40k	6k	2k	Nil
6. Result – Gumnut LGA's ATOS Discount Capacity:	122,000 dwellings					

Appendix 1 – How Planning Controls have been translated / interpreted in HCAP

Explicit = direct translation from planning scheme controls.

Implicit = interpreted translation from planning scheme controls.

It is important to note that where a ResCode or Mid Rise Code standard is not explicitly considered, the polynomial discount ($Y = 2.3406 * x^{0.8043}$, outlined in [Step 3](#)) attempts to account and estimate these standards as architectural considerations.

Planning Control	Match	Zones	Notes
Front setbacks A2-1, B2-1 and E2-1	Implicit	NRZ, GRZ, RGZ, HCTZ, MUZ	Simplified to 3, 4 or 10m, depending on the zone. Rescode asks for 6m, 9m or average of adjacent lots. Assumes consolidation 20m frontage. Front setback is applied to all street frontages, rather than only primary frontage Regional Victoria Only: Where a yield of 4-6 storeys is achieved across MUZ, RGZ or HCTZ, assumes explicit control of 4.5m from front street, or 3m from side street.
Building Height NRZ A2-2 & B2-2	Explicit	NRZ	Modelled at 2 storeys, 9m
Building Height GRZ A2-2 & B2-2	Explicit	GRZ	Modelled at 3 storeys, 11m.
Building Height RGZ A2-2 & B2-2	Explicit	RGZ	Modelled at 4 storeys, 13.5m
Building Height HCTZ A2-2 & B2-2	Explicit	HCTZ1, HCTZ2	HCTZ1: Modelled at 4 storeys (13.5m) or 6 (21.5m) on sites greater than 1000sqm HCTZ2: 3 (11m) or 4 (13.5m) on sites greater than 1000sqm
Building Height MUZ	Implicit	MUZ	Heights are not typically defined. Set at 4 storeys for 'Standard', with 6 storey option also available.

Building Height C1Z	Implicit	C1Z	Set at 4 Storeys for 'Standard', with 2 storey and 6 storey option also available.
Building Height TZ	Implicit	TZ	2 storeys, site coverage 60%
Site Coverage A2-5, B2-5 and E2-4	Explicit	NRZ, GRZ, RGZ, HCTZ, MUZ, TZ	Additional space needed after required setbacks is applied to front and rear (to recreate a front and back yard)
Permeability A5-1, B5-1 and E5-1	N/A		Too complex a requirement to be modelled at this scale
Side and Rear Setbacks A2-3, B2-3.1 or E2-2.1	Explicit	NRZ, GRZ, RGZ, HCTZ, MUZ	First floor to 3.6m, second floor an additional 3.3m, every floor after is an additional 3m to minimise required setbacks and maximise GFA Regional Victoria Only: Where yield of 4-6 storeys within MUZ, RGZ or HCTZ MUZ (if 4-storeys): 4.5m or 6m (from southern boundary) MUZ (if 6-storeys): 4.5m or 12m (from southern boundary) RGZ or HCTZ: 4.5m or 6m (from southern boundary up to 4 storeys) and 12m (from southern boundary if 5+ storeys)
Side and Rear Setbacks (South) A2-3, B2-3.2 or E2.2	Explicit	NRZ, GRZ, RGZ, HCTZ, MUZ	"South facing" defined as any non-front edge that is within 30 degrees west of south and 30 degrees east of south
Walls on Boundaries A2-4, B2-4 or E2-3	Implicit	NRZ, GRZ, RGZ, HCTZ, MUZ	Simplified to 1m side setback
Daylight to New/Existing Windows A3-4/A4-1, B3-9/B4-1 or E3-8	N/A	NRZ, GRZ, RGZ, HCTZ, MUZ	Minimal effect on GFA. Standard not incorporated due to complexity.
North facing windows A4-2 & B4-2	N/A	NRZ, GRZ, RGZ, HCTZ, MUZ	No available data on windows for this to be modelled
Overshadowing A4-3, B4-3 & E4-1	N/A	NRZ, GRZ, RGZ, HCTZ, MUZ	Too complex a requirement to be modelled at this scale
Overlooking A4-4, B4-4 & E4-2	N/A	NRZ, GRZ, RGZ, HCTZ, MUZ	Too complex a requirement to be modelled at this scale

Private Open Space A3-2, B3-5 & E3-4	N/A	NRZ, GRZ, RGZ, HCTZ, MUZ	Complex requirement to be modelled at this scale beyond what is accounted for in A5 and B8
Front Fence A2-7, B2-8 & E2-7	N/A	NRZ, GRZ, RGZ, HCTZ, MUZ	No effect on GFA
PRZ Front setbacks	Explicit	PRZ	
PRZ Side setbacks	Explicit	PRZ	Stepped setbacks applied, rather than single consolidated upper setback
PRZ Heights	Explicit	PRZ	
PRZ Street Wall Heights	Implicit	PRZ	11m street wall height for all scenarios, regardless of road widths.
Garden area requirements	N/A	NRZ, GRZ	Not modelled due to complexity of predicting driveway/parking area size.
Carparking requirements	N/A		

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Appendix 2 - Considerations that haven't been modelled

Below is a list of considerations that have not been modelled in the current version of HCAP. Some considerations are planned to be addressed in future HCAP updates.

Consideration	Type	Rationale
Lot Consolidation	Scope	Current HCAP assessment based on the current cadastre. Incorporation of lot consolidation currently in active development.
Carparking requirements are implied through average dwelling sizes	Scope	Complexity in modelling at scale.
All street frontages of a site treated as front setbacks.	Technical	Current limitations of the road dataset for local roads do not allow for determining hierarchy.
Minimum front setbacks are reduced as they do not consider adjoining setbacks.	Technical	Unable to predict development order to consider adjoining site setbacks.
A4-3, B4-3 & E4-1 Overshadowing not modelled	Scope, Technical	Complex computation to be processed at statewide scale.
A4-4, B4-4 & E4-2 Overlooking not modelled	Scope, Technical	Complex computation to be processed at statewide scale.
Spatially explicit constraints are not considered in generating the 3D planning envelope.	Scope	Generating non-standard site polygons is complex at a statewide scale.
In the mapping local controls pass, floor heights are standardised (3.5m) regardless of whether the site is in residential or commercial type zone.	Scope	
In the local controls pass, sites with maximum density are not restricted	Scope	
In the local controls pass, minimum commercial FAR is not being considered.	Scope	Not a common control and mainly located in State-led planning precincts.
Some properties are misreporting their achieved storeys. This occurs where complex site shapes separate the model into two, or more separate towers	Technical	