

PLANNING STRATEGY IMPACTS ON HOUSING OPPORTUNITY

ANALYSING HOW CURRENT STRATEGIC PLANNING STRATEGIES
AND PROJECTS WILL IMPACT THE DELIVERY OF NEW HOUSING
ACROSS THE CITY OF GLEN EIRA INTO THE FUTURE

GLEN EIRA CITY COUNCIL — MARCH 2018



GLEN EIRA
CITY COUNCIL

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1.0

EXECUTIVE SUMMARY

CONTEXT & HOUSING TARGETS

Glen Eira City Council has recently completed significant strategic planning work that will impact on the delivery of new housing in our city. This report explores expected housing targets and the foreseeable opportunity for new housing based on current and future strategic planning projects, guidelines and strategies.

Plan Melbourne's direction for housing growth indicates that the City of Glen Eira should deliver approximately:

- 9,000 additional dwellings by 2031.
- 28,000 additional dwellings by 2051 (however this target could range between 25,000 and 33,000 depending on how the distribution of housing is calculated between Councils in the 'Inner South East Region' of Melbourne).

Using conservative estimates, any strategic work should demonstrate that the city can deliver a **minimum of 28,000 additional dwellings by 2051**.

HOUSING OPPORTUNITY FINDINGS

This report finds that **Glen Eira has a foreseeable opportunity to deliver between approximately 26,000 and 28,000 additional dwellings by 2051**, depending on how alternative planning policy scenarios are implemented across the city. Three scenarios were analysed:

1. **Existing Policy:** Based on Glen Eira's existing planning policy framework, the City has development opportunities to provide 26,262 additional dwellings.
2. **Existing Policy + Adopted Structure Plans:** Implementing the adopted structure plans for Bentleigh, Carnegie and Elsternwick will increase housing opportunity by 1295 dwellings to a total of 27,557 additional dwellings.
3. **City-wide Changes to Planning Policy:** Current strategic planning strategies and projects will eventually result in planning policy changes across all activity centres. Current 'high-level' strategic direction indicates that this will increase housing opportunity by 1,229 dwellings to a total of 27,491 additional dwellings. The result will be nuanced, with some areas decreasing and others increasing in development opportunities. This forms part of Councils approach to placing 'the right buildings in the right locations', shifting growth towards the most appropriate locations.

SUMMARY OF HOUSING OPPORTUNITY (ADDITIONAL DWELLINGS) RESULTS

	ESTIMATED 2051 HOUSING TARGET	EXISTING POLICY	EXISTING POLICY + STRUCTURE PLANS		CITY-WIDE CHANGES	
HOUSING OPPORTUNITY	28,000	26,262	27,557	(+1295)	27,491	(+1229)

2.0

SCOPE & CONTEXT

2.1 SCOPE

Glen Eira City Council has recently completed significant strategic planning work that will impact on the delivery of new housing.

This report explores expected housing targets and the foreseeable opportunity for new housing based on current and future strategic planning projects, guidelines and strategies.

This report analyses:

- Expected Housing targets based on the directions of Plan Melbourne.
- Housing Opportunity based on three alternative policy scenarios:
 1. Existing Policy
No Changes to the existing planning policy framework.
 1. Existing Policy + Adopted Structure Plans:
Implementation of adopted Structure Plans for Bentleigh, Carnegie and Elsternwick.
 2. City-wide Changes to Planning Policy:
Implementation of all current strategic work (adopted Structure Plans, Quality Design Guidelines and other future work based on current 'high-level' strategic direction).
- Whether each scenario delivers on expected housing targets.

Sections 2 to 5 of this report present the overview and context for this analysis.

Sections 5 to 7 present the methodology, results and conclusions.

Disclaimer:

There are some minor discrepancies in the housing opportunity results between the October 2017 (consultation) report, February 2018 (Council Meeting) report and this March 2018 report. The discrepancies are statistically unimportant and are generally attributed to changes in base property data over that time.

2.2 FUTURE STRATEGIC POLICY CONTEXT

Glen Eira City Council is currently in the process of facilitating significant changes to the Glen Eira Planning Scheme.

Council adopted the Glen Eira Planning Scheme Review in August 2016 that included a work plan to improve planning outcomes across the municipality.

The work plan was formed based on feedback from community engagement, meetings and written submissions throughout 2016. Key strategic projects have been undertaken to meet the objectives of the work plan, with extensive consultation on-going through 2016 to 2018.

The following strategic documents have been completed and adopted in 2017-18:

- *Activity Centre, Housing and Local Economy Strategy 2017 (adopted July 2017);*
- *Bentleigh Structure Plan 2017-2031 (adopted February 2018);*
- *Carnegie Structure Plan 2017-2031 (adopted February 2018);*
- *Elsternwick Structure Plan 2017-2031 (adopted February 2018);*
- *Quality Design Guidelines – Residential Areas (adopted March 2018); and*
- *Quality Design Guidelines – Commercial & Mixed Use Areas (adopted March 2018).*

Strategic planning for the *East Village Strategic Site* is currently underway, with forecasting expecting to deliver approximately 3000 additional dwellings. The project being developed in conjunction with the Victorian Planning Authority and is scheduled to commence a Planning Scheme amendment in 2018 (this includes strategic plan completion, Council adoption, and Minister authorisation to commence a planning scheme amendment).

An *Integrated Transport Strategy* is currently being developed which will provide further direction for traffic and parking management in activity centres (community consultation is underway in February and March 2018). This will influence future traffic and parking policy associated with structure planned areas.

These projects will all impact on planning strategies, policies and controls that ultimately affect the level of development and foreseeable opportunity for housing in Glen Eira. This report seeks to quantify those impacts using a detailed assessment of housing opportunity.

HOUSING TARGETS FOR THE CITY OF GLEN EIRA

3.1 PLAN MELBOURNE DIRECTION FOR HOUSING

Plan Melbourne is the metropolitan planning strategy that defines the future shape of Melbourne over the next 35 years. The plan sets a direction for housing supply including housing distribution for regions across the broader metropolitan area.

The City of Glen Eira is located within Plan Melbourne's 'Inner South East Region', which contains Bayside, Boroondara, Glen Eira and Stonnington (see Figure 1).

The Plan identifies a 2051 housing distribution for our region of 110,000 additional dwellings, and an aspirational target of 125,000 additional dwellings (see Figure 2).

Plan Melbourne does not specify Glen Eira's share in the 'Inner South East Region' target, however it is expected that this will be determined in the near future through the development of a regional framework plan.

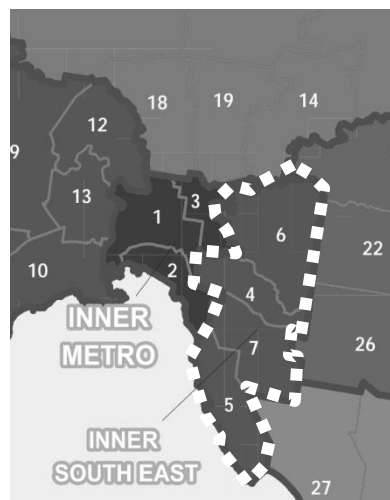


FIGURE 1: 'Inner south east region' of Plan Melbourne. No. 7 indicates Glen Eira.

Scenario 1 VIF 2016				Scenario 2 Aspirational scenario			
Region	Net dwelling additions 2015–51			Region	Net dwelling additions 2015–51		
	Total	Established	Greenfields		Total	Established	Greenfields
Inner Metro	215,000	215,000	0	Inner Metro	230,000	230,000	0
Western	385,000	150,000	235,000	Western	365,000	160,000	205,000
Northern	355,000	175,000	180,000	Northern	340,000	180,000	160,000
Inner South East	110,000	110,000	0	Inner South East	125,000	125,000	0
Eastern	175,000	175,000	0	Eastern	190,000	190,000	0
Southern	310,000	185,000	125,000	Southern	300,000	195,000	105,000
Total Melbourne	1,550,000	1,010,000	540,000	Total Melbourne	1,550,000	1,080,000	470,000
	100%	65%	35%		100%	70%	30%

FIGURE 2: Housing Distribution by Region (Extract: Plan Melbourne)

3.2 ESTIMATING GLEN EIRA'S HOUSING TARGETS

At this time, the Victorian Government has not overtly set housing targets for local Councils. To inform current strategic work, Officers have assumed that the housing distribution scenarios for Glen Eira's 'Inner South East Region', as set out in Plan Melbourne, will inform the future target for our city (refer to Plan Melbourne Policy 2.1.2 at page 47). Potential scenarios for how Council targets might be calculated are outlined in Table 2 below.

Our analysis indicates that the City of Glen Eira should deliver approximately:

- 9,000 additional dwellings by 2031.
- 28,000 additional dwellings by 2051 (however this target could range between 25,000 and 33,000 depending on how the distribution of housing is calculated between Councils in the 'Inner South East Region' of Melbourne).

Conservatively, any strategic work should demonstrate that the city can deliver a minimum of 28,000 additional dwellings by 2051.

TABLE 2: HOUSING DISTRIBUTION SCENARIOS FOR 'INNER SOUTH EAST REGION'

	Bayside	Boroondara	Glen Eira	Stonnington	Total
VIF 2016 PROJECTIONS TO 2031					
Current No. Households in 2016	40056	68541	59754	51240	219591
Projected No. Households by 2031	47892	79561	68747	63149	259349
Distribution between Councils (%)	18.47%	30.68%	26.51%	24.35%	100.00%
Increase over the 15 year period	7836	11020	8993	11909	39758
Distribution between Councils (%)	19.71%	27.72%	22.62%	29.95%	100.00%
PLAN MELBOURNE 2050 – EXPECTED HOUSING TARGETS					
<i>Note: scenarios based on housing distribution figures at page 47 of Plan Melbourne 2017-2050 strategy.</i>					
Based on distribution % of 'Projected No. Households by 2031'					
Scenario 1 (VIF 2016) target for 110,000 additional dwellings.	20313	33745	29158	26784	110000
Scenario 2 (Aspirational) target for 125,000 additional dwellings.	23083	38346	33134	30436	125000
Based on distribution % of 'Increase over the 15 year period'					
Scenario 1 (VIF 2016) target for 110,000 additional dwellings.	21680	30489	24881	32949	110000
Scenario 2 (Aspirational) target for 125,000 additional dwellings.	24637	34647	28274	37442	125000

HOUSING OPPORTUNITY & EXISTING POLICY CONTEXT

4.1 WHAT IS HOUSING OPPORTUNITY?

Council should demonstrate that any strategic planning strategies and projects will deliver adequate housing growth to meet the directions of Plan Melbourne.

It is standard practice to test strategic planning outcomes based on housing capacity impacts. However, housing capacity assessments generally present a theoretical maximum capacity that does not relate to how new housing will realistically be delivered in the foreseeable future.

Housing Opportunity assesses housing supply in a way that is linked to location attractiveness and likely development uptake. It attempts to quantify how land will be developed in a realistic way for the foreseeable medium-term (in this case, up to the year 2051).

Housing Opportunity differs from Housing Capacity in that:

- Not all land is likely to be developed (for example, existing strata titled units or land that has recently been developed are examples of land that is unlikely to be developed);
- Not all land will be developed to its maximum capacity;
- Some areas will experience higher levels of development based on their relative attractiveness, which affects market demand (development uptake is not exclusively linked to the spatial distribution of land or zoning – i.e. just because something is zoned for a specific residential purpose doesn't mean people will build/purchase new housing there: development trends respond to demand from people who would like to live in an area).

Demonstrating that strategic planning strategies and projects can provide adequate Housing Opportunity across the city will ensure that State housing targets will be met.

4.2 HOUSING OPPORTUNITY BASED ON EXISTING POLICY CONTEXT

Before considering how to reach the municipal housing targets, it is important to firstly understand what Glen Eira's current planning framework would accommodate by 2051. To do this, demographic experts, ID Consulting, were engaged to establish a robust methodology to determine Glen Eira's base case for future housing numbers. ID consulting have prepared the **City of Glen Eira – Analysis of Housing Consumption and Opportunities Report** (henceforth referred to as the 'ID Report'), which identifies a conservative assessment of housing opportunity for our city.

The ID report notes that Glen Eira has a foreseeable opportunity for 25,970 additional dwellings (see Figure 3). This is noted throughout the report as a highly conservative estimate, which indicates that Glen Eira is on track in terms of development opportunity to meet expected housing targets.

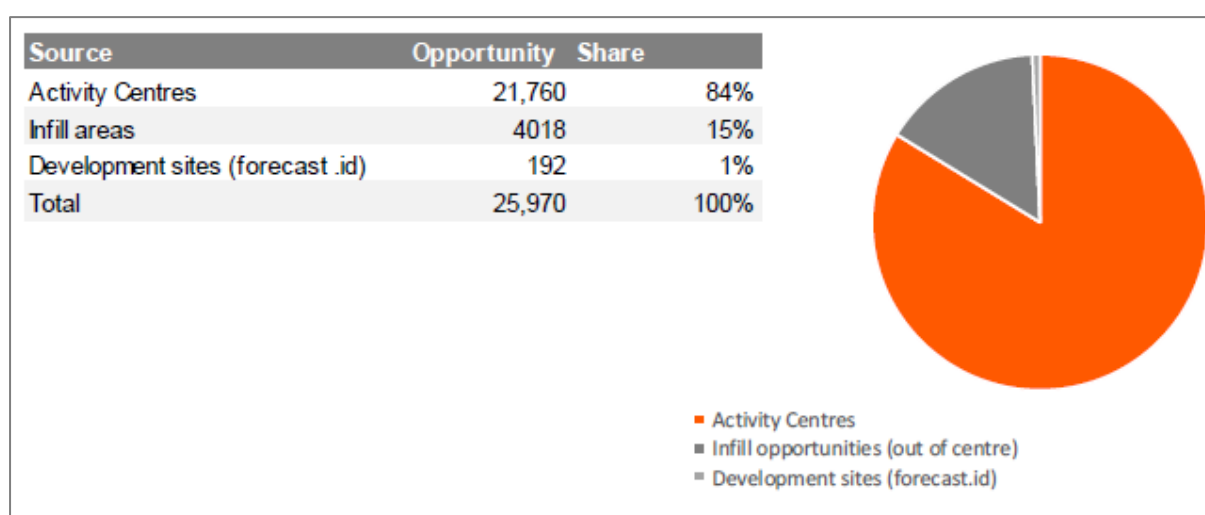


FIGURE 3: Summary of Housing Opportunity (table), extracted from Housing Opportunity Analysis for Glen Eira prepared by Housing ID

4.3 EXPLORING CHANGES TO POLICY CONTEXT

Council accepts the ID report assessment as presenting a conservative assumption for how additional housing would occur across the municipality in accordance with Council's existing policy framework.

However, as the analysis is a demographics and market-based study, the methodology is not adaptable for analyzing the impact of changes to zoning and policy.

This is clear at Figure 53 (page 77 of the report), where the applied 'development densities' are market-based assumptions that account for a range of factors including demographics, market demand, zone distributions and permitted development densities. Accordingly:

- The applied densities do not directly link to zones or other planning controls.
- The distribution of densities (%) do not accurately represent the spatial distribution of zones in each activity centre.

On this basis, a refined housing opportunity analysis methodology has been prepared to ensure that Council can analyse changes to zones and policy, as proposed by current strategic work.

Council's refined methodology is outlined in section 5.1. The process is built upon the ID report findings, but with the following key changes:

- Accurate zone distributions (refer section 5.1);
- Higher development assumptions for future urban renewal areas where transformational policy changes are proposed (refer section 5.2).
- More accurate zone and building densities (refer section 5.4)

METHODOLOGY – ANALYSING HOUSING OPPORTUNITY AND THE IMPACT OF CHANGES TO POLICY CONTEXT

5.1 METHODOLOGY

METHODOLOGY

This Housing Opportunity projection methodology builds on the process used in the *City of Glen Eira – Analysis of Housing Consumption and Opportunities Report* prepared by ID consulting (refer section 4.2).

Housing Opportunity projections have been calculated for Each Activity Centre Study Area as follows:

1. Evaluate all land within Activity Centre Study Areas to determine the **Developable land** (see Section 5.2).
2. Allocate a **Housing Density** for each current zone and preferred building type (see Section 5.4).
3. Calculate the **Theoretical Housing Capacity** (based on developable land multiplied by density of relevant zone or building type).
4. Calculate **Housing Opportunity** by applying development assumption formulas (using Housing ID method) to the Theoretical Housing Capacity. This includes:
 - Applying a **development assumption** percentage – i.e. attractiveness index (see section 5.3 of this report).
 - Subtracting the estimated number of **demolished dwellings** as part of new developments (i.e. to construct new developments, existing buildings will be removed).
 - Adding existing **forecast sites** (existing permits) with confirmed dwelling yield.

The assessment undertaken by Housing ID for land that is not within the Activity Centre Study Areas ('out of centre' land) provides an additional opportunity for 4210 new dwellings. This figure is accepted and is not changed in any scenario. Current strategic work does not affect 'Out-of-centre' development opportunities.

RESULTS

This report explores three planning policy scenarios. The scope and results for each scenario are provided in **Section 6** of this report. The detailed calculations are provided in **Appendix C**.

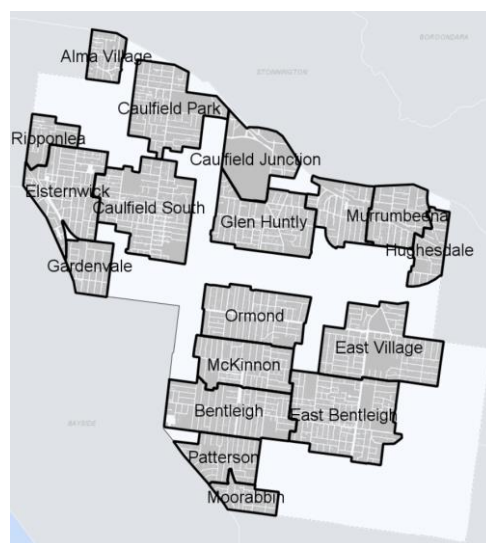
5.2 DEVELOPABLE LAND ASSESSMENT

Developable land represents land with expected potential to generate additional dwellings in Glen Eira's activity centre study areas. Developable land for this assessment includes a combination of land with expected development opportunity, and land within strategic uplift areas. Developable land is used as the base layer for spatial analysis and assessing Housing Opportunity. A detailed breakdown of developable land (including mapping) is provided in **Appendix A** and the broad methodology for ascertaining those figures is noted below.

LAND ASSESSED

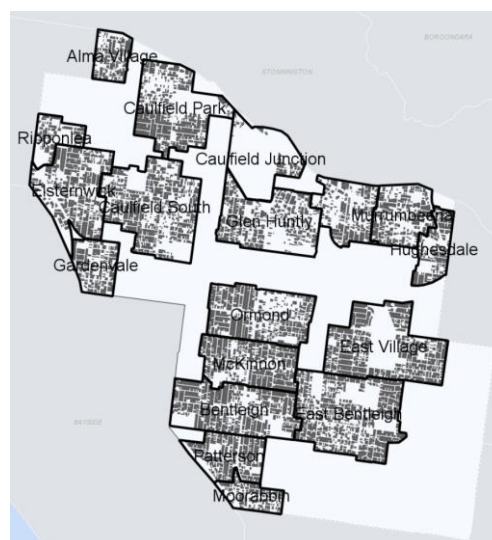
This map shows the land within each activity centre study area that has been assessed in this report. The land in the white areas is considered 'out of centre', and has not been analysed. Council relies upon the ID report projections for out of centre land, which is negligibly affected by current strategic work as it is mostly within the Neighbourhood Residential Zone (Minimal Change Areas) with low access to mass transport infrastructure.

Note: The property data used in this assessment is current at February 2018.



FIRST CUT: DEVELOPMENT OPPORTUNITY

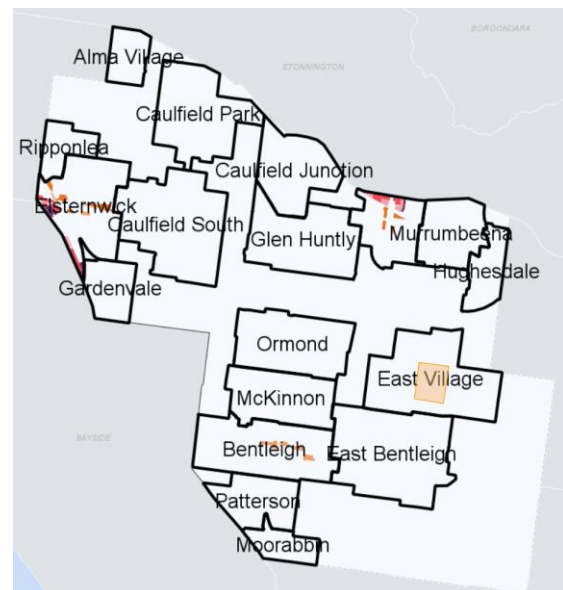
Starting with a review of all land in each catchment area, any parcels of land that are not considered available for development are removed from analysis. This includes open space, reserves and parkland, schools, churches, civic buildings, strata plan sites, roads, rail, recent permit activity, and smaller or narrow parcels generally less than 400 square metres (low yield or consolidation prospects). This process determines the total hectares available for development (the amount of expected developable land).



Some major redevelopment sites already have existing permits issued that will impact on housing delivery. These are removed from developable land and assessed separately in projection equations as 'forecast sites' with an identified development yield. One such example is the Caulfield Village development in Caulfield North. **Note:** *Housing ID prepared this spatial permit analysis with data current at December 2016 for the ID report.*

RE-INTRODUCING STRATEGIC UPLIFT AREAS

Current structure planning work indicates that Strategic Sites, Urban Renewal and Urban Apartment areas will support development more than under existing policy. Therefore a concentrated level of development is anticipated to occur in these areas (including land previously assessed as unlikely to be developed above). For example, existing 'Commercial 2 Zone' or 'Public Use Zone' areas that were previously noted as unlikely to be developed for dwellings, can be rezoned to facilitate dwellings as 'Strategic Sites' or 'Urban Renewal Areas'.



All **Strategic Sites**, **Urban Renewal** and **Urban Apartment** areas in Carnegie, Elsternwick and Bentleigh have been re-introduced as 'developable land' for assessment. The East Village Strategic Site will also deliver a measurable gain in dwellings through urban renewal. This is included in the land analysis with a preliminary projection of 3000 dwellings. **Note:** *The strategic uplift areas noted in this report are consistent with the Bentleigh, Carnegie and Elsternwick Structure Plans adopted February 2018, and the draft documentation for the 'East Village Strategic Site' released for community consultation in November-December 2017.*

5.3 DEVELOPMENT ASSUMPTIONS (ATTRACTIVENESS INDEX)

DIFFERENTIATING ACTIVITY CENTRES

A traditional approach to assessing proposed changes to planning policy and controls is to analyse the associated impact on net housing capacity (total availability). However, not all developable land will realistically be developed within the foreseeable future. The proportion of land to be developed depends on the attractiveness of the centre and resulting land values. In short:

- Development trends respond to market demand from people who would like to live in an area. Market demand increases development pressure and uptake in certain areas.
- Development trends are not exclusively linked to the spatial distribution of land or zoning – i.e. just because land is zoned for a specific purpose or density does not mean people will want to build or purchase new housing there.

A key component of this report's **Housing Opportunity** assessment is in determining where development is likely to occur and to use this as a primary assumption against existing developable land and theoretical housing capacity. Housing ID have developed a robust methodology to determine the **development potential and attractiveness** for each Activity Centre (Refer to section 3.2 of the ID report) focusing on the following 6 attributes:

- Access to public transport
- Level of services and retailing
- Access to health and education facilities
- Urban integration (eg. walkability/permeability)
- Proximity to the CBD (Melbourne).

Based on this analysis, the ID report identifies a development attractiveness assumption (%) for each Activity Centre as detailed in Table 3 below. A useful part of this index, is that it clearly identifies which centres should experience more development based on relative attractiveness. For example, commercial areas in Carnegie (with a 36% development assumption) should experience more demand for development than in other centres like Bentleigh East (16%).

The land development assumptions in Table 3 have been used to assess Housing Opportunity based on existing planning policy. Increased uptake in urban renewal areas has also been explored in Carnegie, Elsternwick and East Village as identified in section 5.4 of this report.

TABLE 3: LAND DEVELOPMENT ASSUMPTIONS BY ACTIVITY CENTRE

Activity Centre	Applicable Land	Land Development Assumption
Alma Village	Entire Activity Centre Study Area	20%
Bentleigh	Entire Activity Centre Study Area	28%
Carnegie	Entire Activity Centre Study Area	36% **
Caulfield Station	Entire Activity Centre Study Area	36%
Caulfield Park	Entire Activity Centre Study Area	28%
Caulfield South	Entire Activity Centre Study Area	28%
East Bentleigh	Entire Activity Centre Study Area	16%
East Village	Entire Activity Centre Study Area	8% **
Elsternwick	Entire Activity Centre Study Area	36% **
Gardenvale	Entire Activity Centre Study Area	20%
Glen Huntly	Entire Activity Centre Study Area	28%
Hughesdale	Entire Activity Centre Study Area	24%
McKinnon	Entire Activity Centre Study Area	24%
Moorabbin	Entire Activity Centre Study Area	28%
Murrumbeena	Entire Activity Centre Study Area	28%
Ormond	Entire Activity Centre Study Area	24%
Patterson	Entire Activity Centre Study Area	20%
Ripponlea	Entire Activity Centre Study Area	20%

** Land development assumption modified in this report to reflect introduced Urban Renewal areas (details below). See **Table 4** for details.

INCREASED UPTAKE THROUGH URBAN RENEWAL

Significant changes to planning policy can intensify development uptake beyond what is generally anticipated under existing policy. This is the case for Urban Renewal areas identified through structure planning, where significant change is expected.

In this report, the land development assumption for Urban Renewal areas in Elsternwick, Carnegie and the proposed East Village Strategic Site have been assessed separately from the remainder of the precincts, with the land development assumptions updated accordingly.

Infill Urban Renewal

Structure planning has introduced two Urban Renewal areas around existing Commercial I Zoned areas, being Elsternwick Urban Renewal North Area; and Carnegie Urban Renewal Area. The policy framework proposed by the Structure Plans supports an intensification of development in these areas.

It is unlikely, however, that these areas will be developed systematically and to 100% capacity in the foreseeable future. Development uptake is expected to be intermittent and incremental due to constraints including:

- Existing subdivision layouts and development patterns, limiting consolidation opportunities.
- Existing land uses in operation with varying levels of success.
- Complex and fragmented land ownership arrangements with varying economic and development priorities.

These areas have been attributed with a development assumption of 50%. This accounts for higher uptake and demand than the remaining land within Elsternwick and Carnegie Activity Centres (36%, as identified in the ID report).

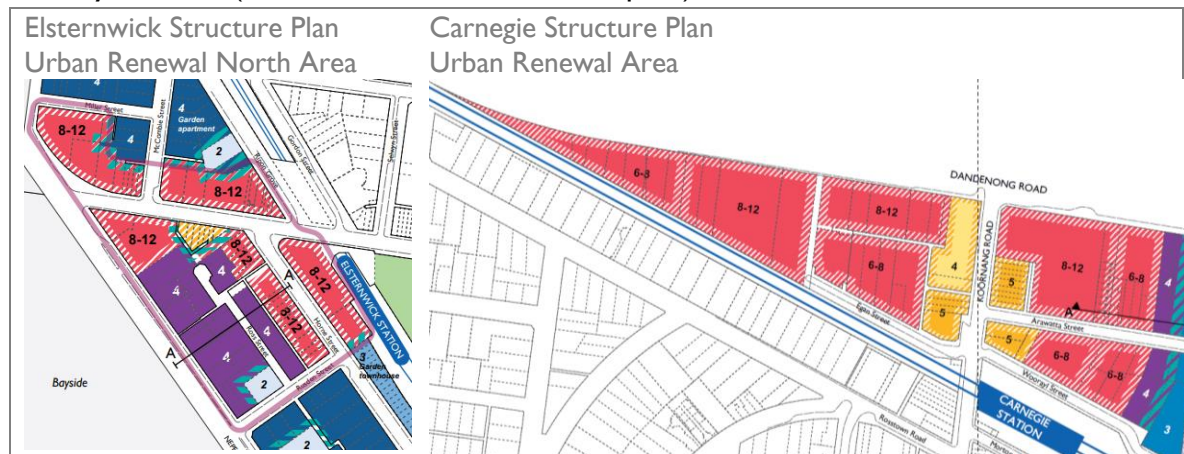


FIGURE 4: Fine Grain Urban Renewal Areas (Elsternwick & Carnegie Structure Plans)

Comprehensive Urban Renewal (Consolidated Development Sites)

Structure planning has introduced two Urban Renewal Areas that are considered comprehensive development opportunities, being the Elsternwick Urban Renewal South Area and proposed East Village Strategic Site Area. These will be standalone precincts on large consolidated land parcels, which require a rezoning to facilitate any new housing proposed. The rezoning would be a catalyst for development uptake.

The Elsternwick Urban Renewal South precinct is currently within the Commercial 2 Zone and has not experienced much development activity. The East Village Strategic Site is currently an industrial and commercial oriented precinct, which would be rezoned to facilitate significant housing opportunities in addition to commercial and retail. Development of these sites is likely to be implemented through a comprehensive staged development process.

Elsternwick Urban Renewal South and the East Village Strategic Site have been attributed with a development assumption of 100%, with an assumption that redevelopment of the entire precincts would be facilitated to capacity in a controlled format from start to completion (similar to the large format 'Caulfield Village' development near Caulfield Station).

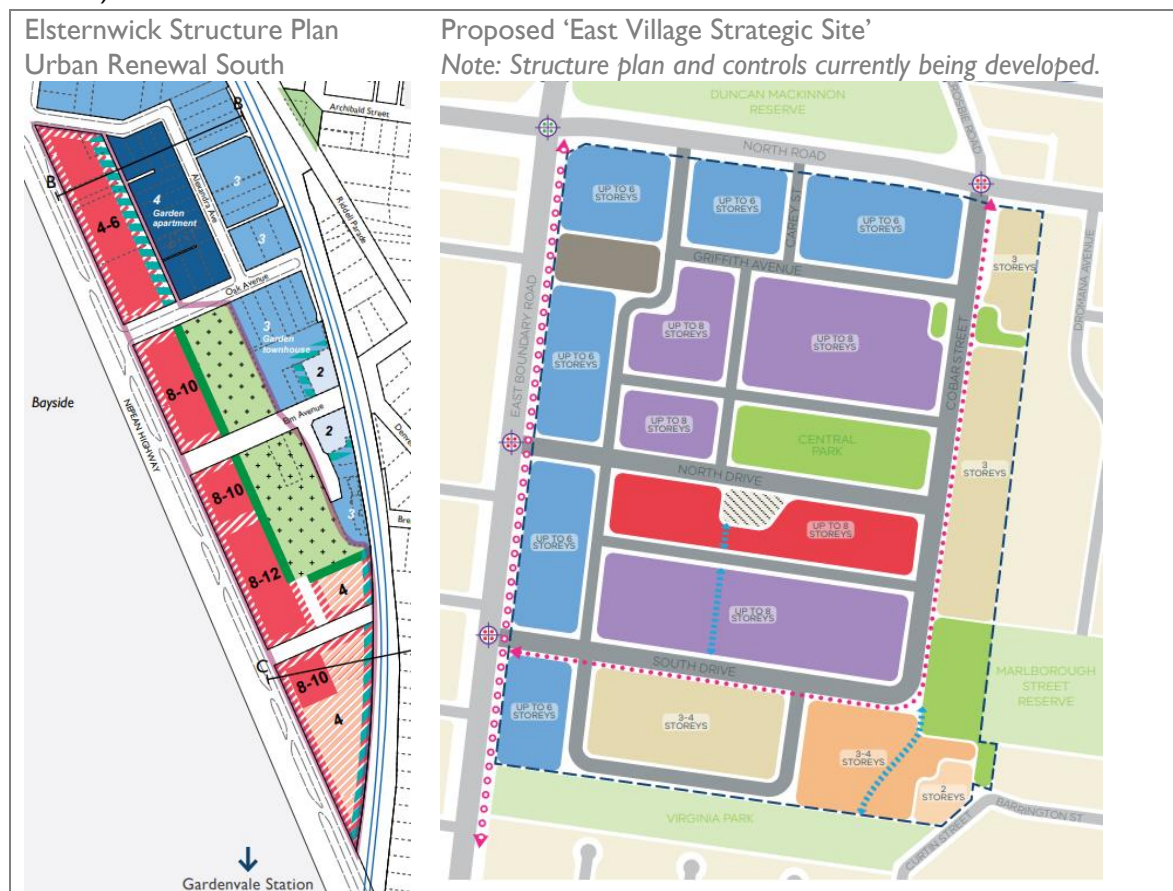


FIGURE 5: Large Scale Urban Renewal Areas (Elsternwick & East Village Strategic Site plans)

Updated Development Assumptions (separating Urban Renewal)

Based on the above considerations, the following development assumptions have been applied when assessing the proposed changes to planning policy for the [structure planned areas](#).

TABLE 4: UPDATED LAND DEVELOPMENT ASSUMPTIONS BY ACTIVITY CENTRE

Activity Centre	Applicable land	Land Development Assumption
Alma Village	Entire Activity Centre Study Area	20%
Bentleigh	Entire Activity Centre Study Area	28%
Carnegie	Urban Renewal Area	50%
	Remainder of Activity Centre Study Area	36%
Caulfield Station	Entire Activity Centre Study Area	36%
Caulfield Park	Entire Activity Centre Study Area	28%
Caulfield South	Entire Activity Centre Study Area	28%
East Bentleigh	Entire Activity Centre Study Area	16%
East Village	Urban Renewal Precinct	100%
	Remainder of Activity Centre Study Area	8%
Elsternwick	Urban Renewal South	100%
	Urban Renewal North	50%
	Remainder of Activity Centre Study Area	36%
Gardenvale	Entire Activity Centre Study Area	20%
Glen Huntly	Entire Activity Centre Study Area	28%
Hughesdale	Entire Activity Centre Study Area	24%
McKinnon	Entire Activity Centre Study Area	24%
Moorabbin	Entire Activity Centre Study Area	28%
Murrumbeena	Entire Activity Centre Study Area	28%
Ormond	Entire Activity Centre Study Area	24%
Patterson	Entire Activity Centre Study Area	20%
Ripponlea	Entire Activity Centre Study Area	20%

5.4 HOUSING DENSITY ASSESSMENT

HOUSING DENSITIES APPLIED

Current strategic work is based on the application of building typologies, each with an identified strategic intent, which will be translated to future planning controls. The Quality Design Guidelines outline proposed Building Types and intended strategic implementation in terms of height and indicative zoning, setting the overall course for future structure planning across the city. Structure plans will place the building types in identified locations, as has been the case for Bentleigh, Carnegie and Elsternwick.

In order to compare existing policy and proposed changes, housing densities have been applied for each current zone (that permits dwellings) and each proposed building type as detailed within Table 5. Housing densities are measured in dwellings per hectare (DPH) and have been conservatively estimated. Commentary on the methodology used to apply these densities is provided below.

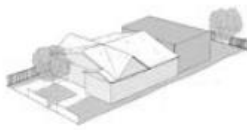
TABLE 5: DEVELOPMENT DENSITY RATES BY ZONE AND BUILDING TYPE

	Height (Storeys)	Density (DPH)	Standard Site* (Square Metres)	Dwelling Output* (Indicative)
Current Zone				
Neighbourhood Residential Zone**	2	18	600 – 750	1-2**
General Residential Zone	3	150	1100	17
Residential Growth Zone	4	250	1500	38
Mixed Use Zone	4-8 (trend)	300	600	18
Commercial 1 Zone	6-8 (trend)	400	600 – 3000	24 – 120
Preferred Building Type (Residential areas)				
Heritage and Character Housing**	2	18	600 – 750	1-2**
Minimal Change**	2	18	750	1-2**
Garden Townhouse	3	75	1100	8
Townhouse and Apartment Mix	3	150	1100	17
Garden Apartment	4	220	1500	33
Urban Apartment	4	250	1500	38
Preferred Building Type (Commercial and Mixed Use areas)				
Shoptop (Heritage/Character)	4	220	600	13
Shoptop (standard)	3-5	350	600	21
Strategic Site (transitional sites)	5	300	600-3000	18-90
Strategic Site (standard) & Urban Renewal (transitional sites)	6-8	400	600-3000	24-120
Urban Renewal	8-12	500	3000	150

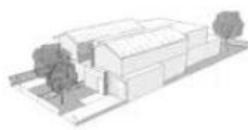
*Indicative numbers provided for comparison between zone and building type outcomes.

**Low density and dwelling output assumed due to restrictive policy framework.

RESIDENTIAL BUILDING TYPES



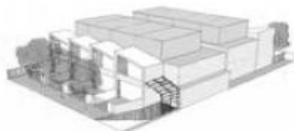
Heritage and character housing



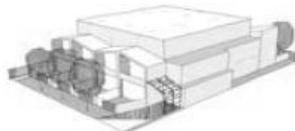
Minimal change



Garden apartment



Garden townhouse



Townhouse apartment mix



Urban apartment

COMMERCIAL & MIXED USE BUILDING TYPES



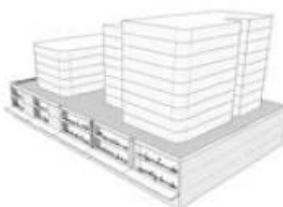
Shop-top (standard)



Shop-top (heritage/character)



Strategic site



Urban renewal

FIGURE 6: Images of Preferred Building Types (extracted from Quality Design Guidelines)

APPROACH TO DETERMINING DENSITIES

The Victorian Planning system does not specifically reference or restrict housing densities. The system adopts a performance based approach with controls that encourage or restrict built forms. Some provisions are highly restrictive, while others are more open. Therefore, applying reasonable densities is not an exact science and requires a high level of broad assumptions on a municipality wide basis.

Testing the planning provisions and reviewing development trends provides a base for how planning policies affect housing densities. The densities applied in this analysis have been informed by a range of sources:

- Consideration of common density rates and development patterns.
- An analysis of existing approvals (see Appendix B).
- Spatial modelling of building types based on the Quality Design Guideline recommendations.
- *Peer Review of Glen Eira's Draft Quality Design Guidelines and Strategic and Urban Renewal Development Plans Analysis (draft)* report by AECOM in association with HillPDA. Note: some building types have been modified and renamed since that report was completed.
- *City of Glen Eira – Analysis of housing consumption and opportunities (Dec 2017)* report by Housing ID.

Densities have also been applied relative to each other to ensure a fair and balanced equation between existing zoning and proposed building types. The following high-level commentary is provided in relation to relativity of densities applied:

- **Neighbourhood Residential Zone (1 to 2 storeys)**

The Heritage and Character Housing and Minimal Change building types are anticipated to have a similar output to that which is seen under current zoning and policy in the Neighbourhood Residential Zone, and therefore the same density has been applied.

- **General Residential Zone (3 storeys)**

The Townhouse and Apartment Mix building type presents fairly similar development scenario to current General Residential Zone requirements in terms of likely dwelling output (150 dwellings per hectare), whilst the Garden Townhouse is more restrictive and yields a lower output of dwellings (nominated at 75 dwellings per hectare).

- **Residential Growth Zone or similar precinct (4 storeys)**

The Garden Apartment building type (220 dwellings per hectare) presents a more dense form than town housing, whilst incorporating certain restrictions that temper development yield in comparison to current Residential Growth Zone requirements (250 dwellings per hectare). The 'Urban Apartment' (250 dwellings per hectare) represents a more dense urban capped at 4 storeys.

- **Lower Scale Commercial/Mixed Use areas (3 to 5 storeys)**

Strategic Site B and Shoptop building types (220–350 dwellings per hectare) represent development closer to the lower density end of development currently seen in the Commercial I zone, with the premise that these will have an improved built form and be applied in preferred lower scale and transitional contexts.

- **Taller buildings in Commercial/Mixed Use areas (6 storeys or more)**

Strategic Site A and Urban Renewal building types (400-500 dwellings per hectare) represent development at the higher end of current Commercial I Zoning trends, with the premise that these building types will be taller, but have an improved built form and will be applied in the most suitable locations for this form of development.

Densities can vary from site-to-site and area-to-area. In this analysis, with the exception of restrictive two-storey zones and building types, densities have generally been applied at the higher end of the density spectrum and will be tempered in the modelling through the 'development assumption' percentage (attractiveness index), which benchmarks different areas relative to each other. For example, increased development and density is anticipated in areas like Carnegie, which has better access to public transport, than areas like Alma Village.

RESULTS – EXPLORING ALTERNATIVE POLICY SCENARIOS

6.1 POLICY SCENARIOS INVESTIGATED

This report analyses Housing Opportunity based on three planning policy scenarios that are explored below.

TABLE 6: POLICY SCENARIOS INVESTIGATED

Scenario 1 Existing Policy	<p>This analysis identifies housing opportunity based on existing planning scheme controls (no change). This analysis seeks to generally recreate and match the ID report forecast, and is used as a base case for comparing the following 2 scenarios for implementing policy changes.</p>
Scenario 2 Adopted Structure Plans	<p>This scenario investigates implementation of:</p> <ul style="list-style-type: none"> • Bentleigh Structure Plan (adopted Feb 2018). • Carnegie Structure Plan (adopted Feb 2018). • Elsternwick Structure Plan (adopted Feb 2018). • No changes to remaining Activity Centres or Out-of-centre areas compared with existing policy.
Scenario 3 City-Wide Changes	<p>This scenario investigates the implementation of:</p> <ul style="list-style-type: none"> • Bentleigh Structure Plan. • Carnegie Structure Plan. • Elsternwick Structure Plan. • East Village Strategic Site (<i>Note: currently in draft phases – adoption planned for 2018</i>). • Changes to remaining activity centres based on current high-level strategic work in accordance with the Activity Centres, Housing and Local Economy Strategy 2017 and Quality Design Guidelines 2018 (<i>Note: currently high level strategic work complete to determine the activity centre hierarchy and overall intent for areas, however site-specific analysis has not been completed</i>). • No changes to Out-of-centre areas compared with existing policy.

6.2 SCENARIO I – EXISTING POLICY

SCOPE

This analysis identifies current housing opportunity based on existing planning scheme controls and zoning distribution. The analysis uses most aspects of the ID report methodology. The key difference is that broad density assumptions listed in *Figure 53* of the ID report have been replaced with densities reflecting accurate zone distributions.

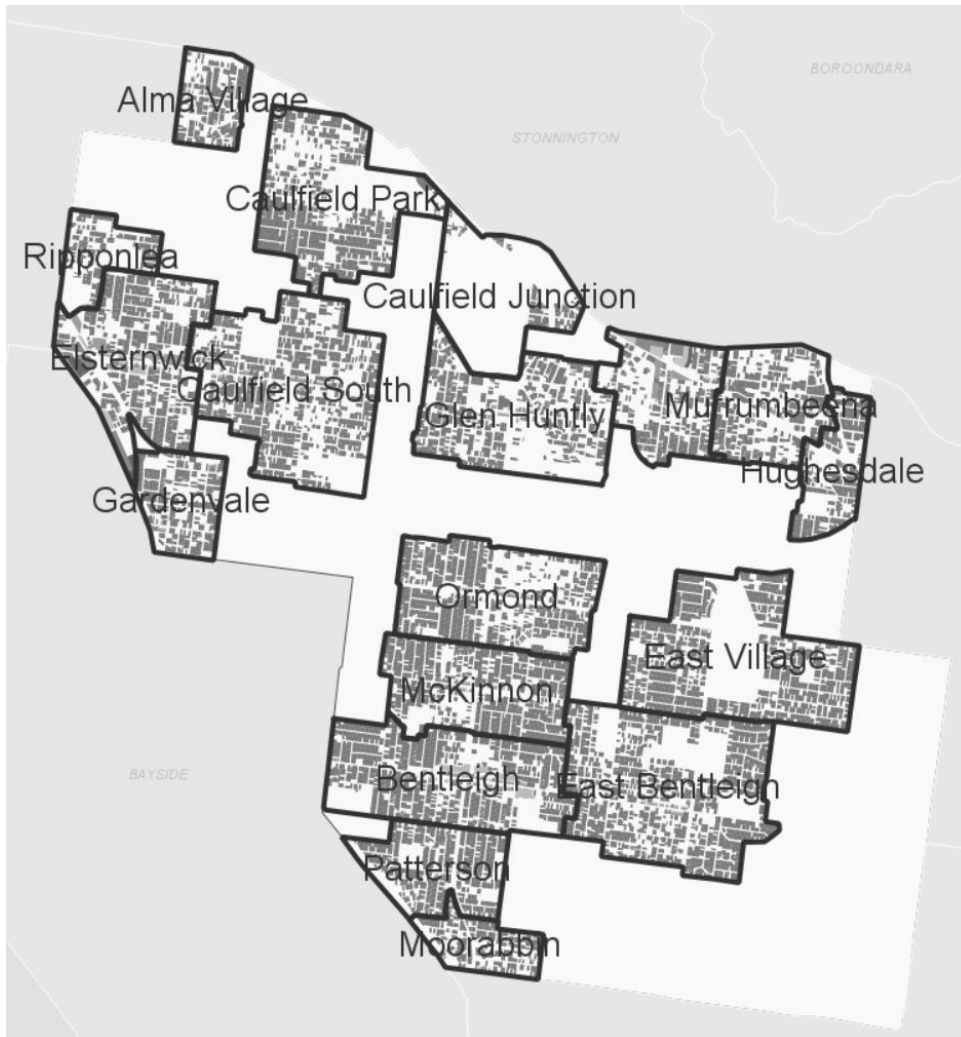


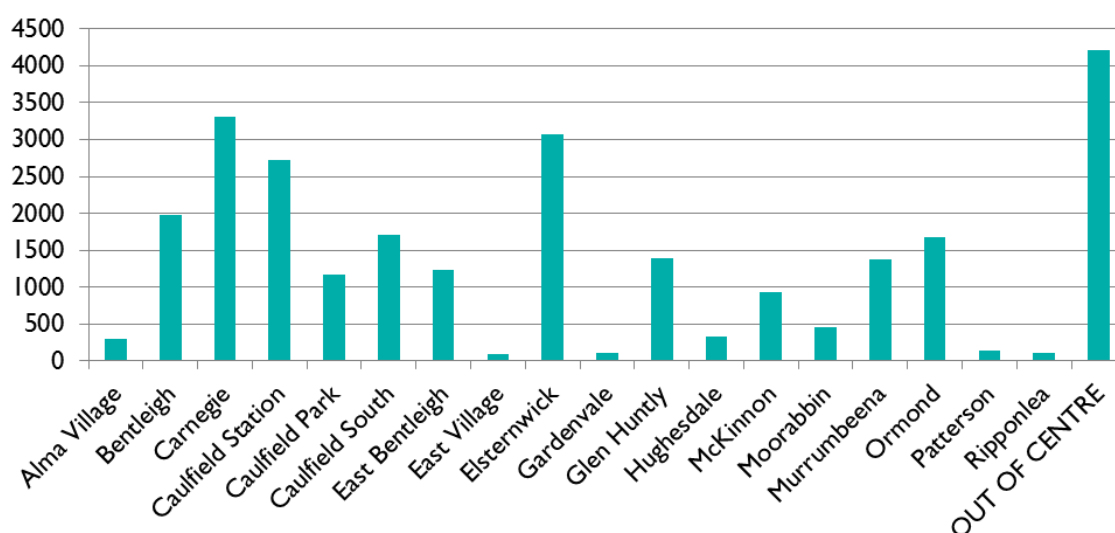
FIGURE 7: Developable Land Assessed for Scenario I

RESULTS

This analysis identifies a foreseeable opportunity for **26,262 additional dwellings** (see Table 7), which is within the low range of Council's expected housing targets. This is acceptably similar to Housing ID's existing policy forecast of 25,970 additional dwellings, representing a good base case for comparing policy changes in scenarios 2 and 3.

TABLE 7: HOUSING OPPORTUNITY (NEW DWELLINGS), BY ACTIVITY CENTRE

ACTIVITY CENTRE	HOUSING OPPORTUNITY	
	Dwellings	%
Alma Village	297	1%
Bentleigh	1976	8%
Carnegie	3315	13%
Caulfield Station	2716	10%
Caulfield Park	1161	4%
Caulfield South	1704	6%
East Bentleigh	1225	5%
East Village	95	0%
Elsternwick	3077	12%
Gardenvale	99	0%
Glen Huntly	1392	5%
Hughesdale	330	1%
McKinnon	930	4%
Moorabbin	454	2%
Murrumbeena	1370	5%
Ormond	1671	6%
Patterson	130	0%
Ripponlea	111	0%
OUT OF CENTRE	4210	16%
TOTAL	26262	100%



6.3 SCENARIO 2 – ADOPTED STRUCTURE PLANS

SCOPE

This scenario investigates implementation of:

- Bentleigh Structure Plan.
- Carnegie Structure Plan.
- Elsternwick Structure Plan.
- No changes to remaining Activity Centres or Out-of-centre areas compared with existing policy (scenario 1).

KEY VARIATIONS FROM EXISTING POLICY (SCENARIO 1)

The structure plans propose changes to planning controls to facilitate the building types listed in Council's Quality Design Guidelines. This involves changing zone boundaries as well as introducing variations such as setbacks, and building height restrictions.

The structure plans also introduce strategic uplift areas such as 'Strategic Sites' and 'Urban Renewal', where more intensive development will be concentrated (coloured areas in Figure 8 indicate strategic uplift areas).

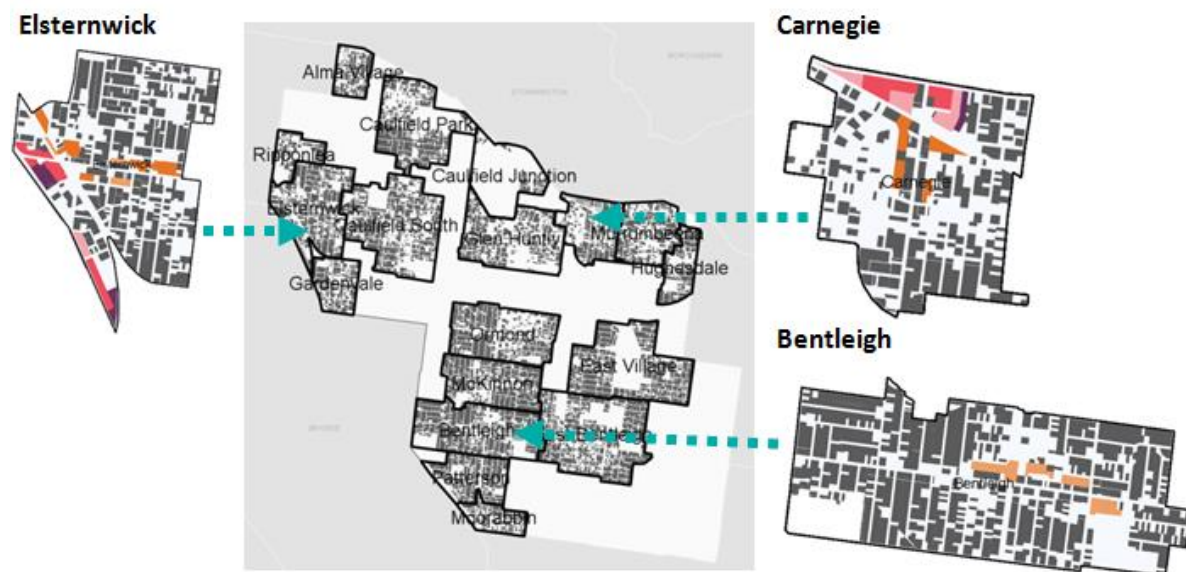


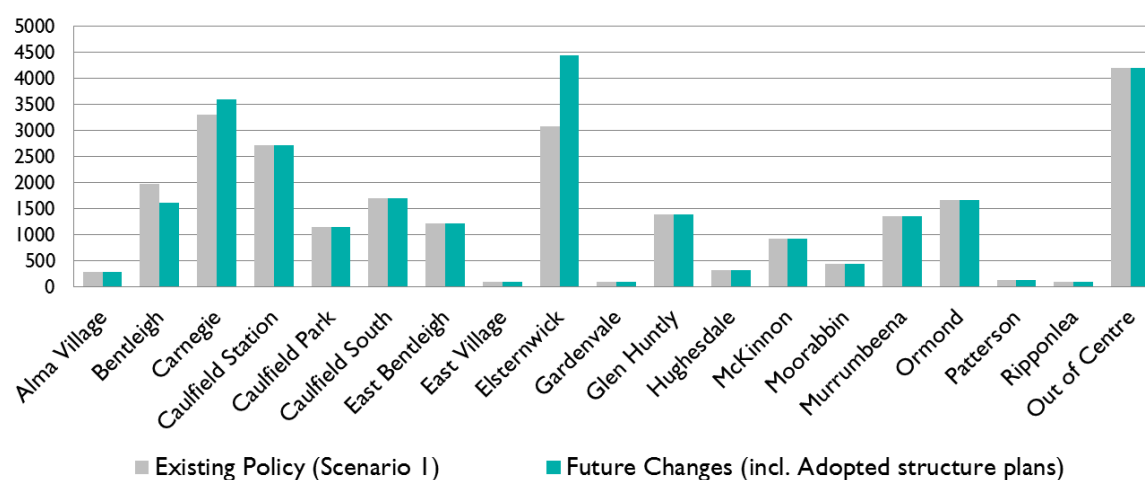
FIGURE 8: Snapshot of 'Developable Land' Assessed in the Structure Plan Areas.

RESULTS

Scenario 2 identifies a foreseeable opportunity for **27,557 additional dwellings** (see below table and graph). This output is 1,295 dwellings more than under existing policy and meets the expected housing target range. Refer to Appendix C for the detailed calculations associated with this scenario.

TABLE 8: HOUSING OPPORTUNITY (NEW DWELLINGS), BY ACTIVITY CENTRE

ACTIVITY CENTRE	HOUSING OPPORTUNITY	
	Dwellings	%
Alma Village	294	1%
Bentleigh	1622	6%
Carnegie	3599	13%
Caulfield Station	2716	10%
Caulfield Park	1161	4%
Caulfield South	1704	6%
East Bentleigh	1225	4%
East Village	95	0%
Elsternwick	4442	16%
Gardenvale	99	0%
Glen Huntly	1392	5%
Hughesdale	330	1%
McKinnon	930	3%
Moorabbin	454	2%
Murrumbeena	1370	5%
Ormond	1671	6%
Patterson	130	0%
Ripponlea	111	0%
OUT OF CENTRE	4210	15%
TOTAL	27557	100%



6.4 SCENARIO 3 – CITY-WIDE CHANGES

SCOPE

This scenario investigates the implementation of:

- Bentleigh, Carnegie and Elsternwick Structure Plans (as detailed in scenario 3).
- East Village Strategic Site (draft plan).
- Remaining activity centres – anticipated changes based on current strategic direction.
- No changes to Out-of-centre areas compared with existing policy.

KEY VARIATIONS FROM EXISTING POLICY (SCENARIO 1)

Bentleigh, Carnegie and Elsternwick Structure Plans

As detailed in scenario 2.

East Village Strategic Site (draft plan)

The East Village Strategic Site area is projected to provide 3000 additional dwellings within a single consolidated urban renewal site. Housing Opportunity for the East Village Activity Centre Study Area is 3095 dwellings, comprising 3000 dwellings for the urban renewal site and 95 dwellings for the remainder of the activity centre (see existing policy assessment).

Remaining Activity Centres (strategic direction)

Council's Activity Centres, Housing and Local Economy Strategy (adopted July 2017) and Quality Design Guidelines (adopted March 2018) provide a number of recommendations for activity centres that will inform the development of future planning scheme controls through structure planning or a similar process. The key recommendations explored in this analysis are as follows:

- All General Residential Zoned Land (150 DPH) updated to achieve a 'Garden Townhouse' on local streets (75 DPH) and 'Townhouse and Apartment Mix' (75 DPH) on main roads.
- All Residential Growth Zoned Land (250 DPH) updated to achieve a 'Garden Apartment' (220 DPH).
- All Commercial 1 Zoned land (400 DPH) updated to achieve variations of the 'Shoptop (Heritage Character)' (220 DPH) or the 'Shoptop (Standard)' (350 DPH). As area-specific strategic work has not been undertaken to determine which building types would apply in each centre, a broad average of 300 DPH has been applied across all centres, assuming a lower yield than the current average 6-8 storey apartment building trend (400DPH).

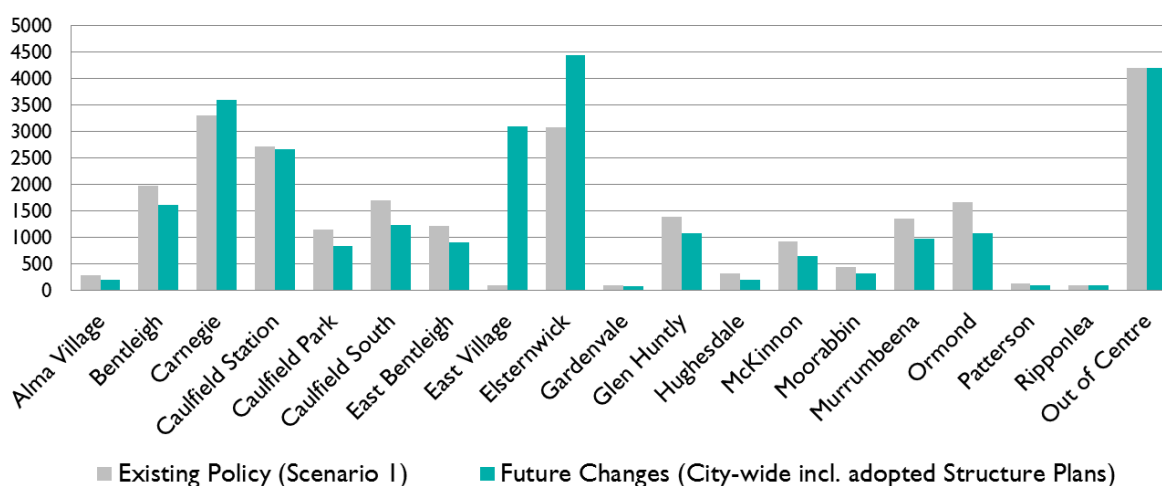
Site-specific analysis will be required to determine the exact details and process for implementation. However in the meantime, the above methodology has been applied as a preliminary assessment of the likely future impact on lower order activity centres.

RESULTS

Scenario 3 identifies a foreseeable opportunity for **27,491 additional dwellings** (see below table and graph). This output is 1,229 dwellings more than under existing policy and meets the expected housing target range. Refer to Appendix C for the detailed calculations associated with this scenario.

TABLE 9: HOUSING OPPORTUNITY (NEW DWELLINGS), BY ACTIVITY CENTRE

ACTIVITY CENTRE	HOUSING OPPORTUNITY	
	Dwellings	%
Alma Village	211	1%
Bentleigh	1622	6%
Carnegie	3599	13%
Caulfield Station	2677	10%
Caulfield Park	841	3%
Caulfield South	1247	5%
East Bentleigh	905	3%
East Village	3095	11%
Elsternwick	4442	16%
Gardenvale	84	0%
Glen Huntly	1089	4%
Hughesdale	215	1%
McKinnon	658	2%
Moorabbin	327	1%
Murrumbeena	974	4%
Ormond	1078	4%
Patterson	107	0%
Ripponlea	110	0%
OUT OF CENTRE	4210	15%
TOTAL	27491	100%



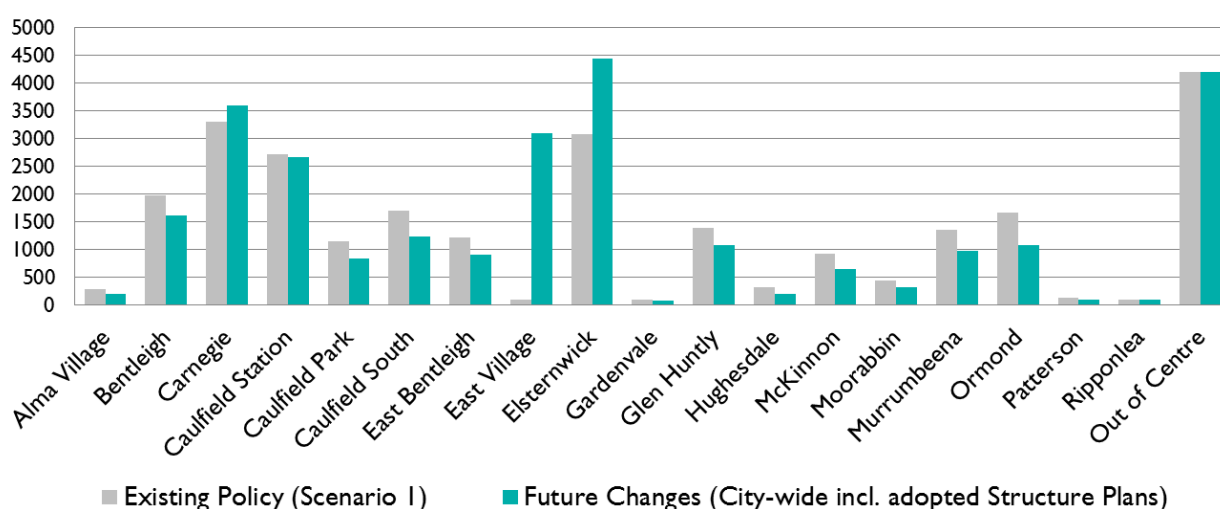
6.5 RESULTS COMPARISON

The following table and graph provides a side-by-side comparison of each scenario, noting where increases or decreases have been found.

TABLE 10: COMPARISON OF HOUSING OPPORTUNITY RESULTS FOR EACH SCENARIO

	EXISTING POLICY	ADOPTED STRUCTURE PLANS		CITY-WIDE CHANGES	
	Opportunity	Opportunity	Difference*	Opportunity	Difference*
Activity Centre					
Alma Village	294	294	0	211	-83
Bentleigh	1976	1622	-354	1622	-354
Carnegie	3315	3599	+284	3599	+284
Caulfield Station	2716	2716	0	2677	-39
Caulfield Park	1161	1161	0	841	-320
Caulfield South	1704	1704	0	1247	-457
East Bentleigh	1225	1225	0	905	-320
East Village	95	95	0	3095	+3000
Elsternwick	3077	4442	+1365	4442	+1365
Gardenvale	99	99	0	84	-15
Glen Huntly	1392	1392	0	1089	-303
Hughesdale	330	330	0	215	-115
McKinnon	930	930	0	658	-272
Moorabbin	454	454	0	327	-127
Murrumbeena	1370	1370	0	974	-396
Ormond	1671	1671	0	1078	-593
Patterson	130	130	0	107	-23
Ripponlea	111	111	0	110	-1
OUT OF CENTRE	4210	4210	0	4210	0
TOTAL	26262	27557	+1295	27491	+1229

* Difference between existing policy and the proposed scenario.



CONCLUSIONS

HOUSING TARGETS

Plan Melbourne's direction for housing growth indicates that the City of Glen Eira should deliver approximately:

- 9,000 additional dwellings by 2031.
- 28,000 additional dwellings by 2051 (however this target could range between 25,000 and 33,000 depending on how the distribution of housing is calculated between Councils in the 'Inner South East Region' of Melbourne).

Using conservative estimates, any strategic work should demonstrate that the city can deliver a **minimum of 28,000 additional dwellings by 2051**.

HOUSING OPPORTUNITY ANALYSIS

This report finds that **Glen Eira has a foreseeable opportunity to deliver between 26,000 and 28,000 additional dwellings by 2051**, depending on how alternative planning policy scenarios are implemented across the city. Three scenarios were analysed as detailed in Table 11.

TABLE 11: HOUSING OPPORTUNITY RESULTS FOR EACH POLICY SCENARIO

Policy Scenario	Description of change proposed	Housing Opportunity
1. Existing policy	No changes to existing policy.	26,262
2. Structure Plans	Implementation of Structure Plans for Bentleigh, Carnegie and Elsternwick. No other changes.	27,557
3. City-wide changes	Implementation of Structure plans for Bentleigh, Carnegie, Elsternwick and East Village. Implementation of Quality Design Guideline recommendations to remaining activity centres (amended policy restriction to General Residential Zones, Residential Growth Zones, and Commercial Areas). No other changes.	27,491

SCENARIO 1 – EXISTING POLICY

The city should meet expected housing targets with no changes to current policy and zone distributions. However, community concern around inappropriate built form outcomes is likely to continue. The base case identifies a foreseeable opportunity for **26,000 additional dwellings**, which is within the low range of Council's expected housing targets.

SCENARIO 2 – STRUCTURE PLANS

Implementing structure plans with identified urban renewal and growth areas should ensure that Council meets expected housing targets. Scenario 2 identifies a foreseeable opportunity for **27,500 additional dwellings**.

Overall, Housing Opportunity will see a minor decrease in Bentleigh, minor increase in Carnegie, and a more substantial increase in Elsternwick (attributed to Urban Renewal in the Car yards).

This overall output across the three centres is 1,295 additional dwellings more than under existing planning policy.

SCENARIO 3 – CITY-WIDE CHANGES

Scenario 3 forms part of Council's overall approach to encouraging 'the right buildings in the right locations'; purposely directing housing growth towards the most appropriate areas.

Implementing city-wide changes in accordance with Council's current strategic direction will provide a foreseeable housing opportunity of **27,500 additional dwellings**. This balanced outcome provides an increased level of housing opportunity compared with existing policy by:

- Increasing development opportunities in Elsternwick, Carnegie and the proposed East Village; and
- Decreasing development opportunities to a minor extent across remaining centres using planning restrictions aimed at managing transition, improving built form outcomes, and establishing a clear framework and hierarchy across Glen Eira's Activity Centres.

It is noted that further work is required to assess remaining larger or Major Activity Centres, such as Caulfield Station, Moorabbin and Glen Huntly. In this 'Scenario 3' projection, those centres have been attributed a minor decrease in housing opportunity based on city-wide recommendations for commercial areas and townhousing. Future strategic work will determine how their roles as major centres will be facilitated, which may require more substantial housing requirements.

Disclaimer:

All projections have been conservatively calculated. Calculations may yield higher or lower housing opportunities with changes to assumptions. For example, stronger growth in the Neighbourhood Residential Zone than anticipated, or development uptake as a whole in areas not anticipated for high growth. It is also unclear how recent changes to State planning controls, including the Better Apartments Design Standards and Minimum Garden Area requirements will shape development trends and housing opportunity.

APPENDICES

APPENDIX A – DEVELOPABLE LAND (MAPPING AND DATA)

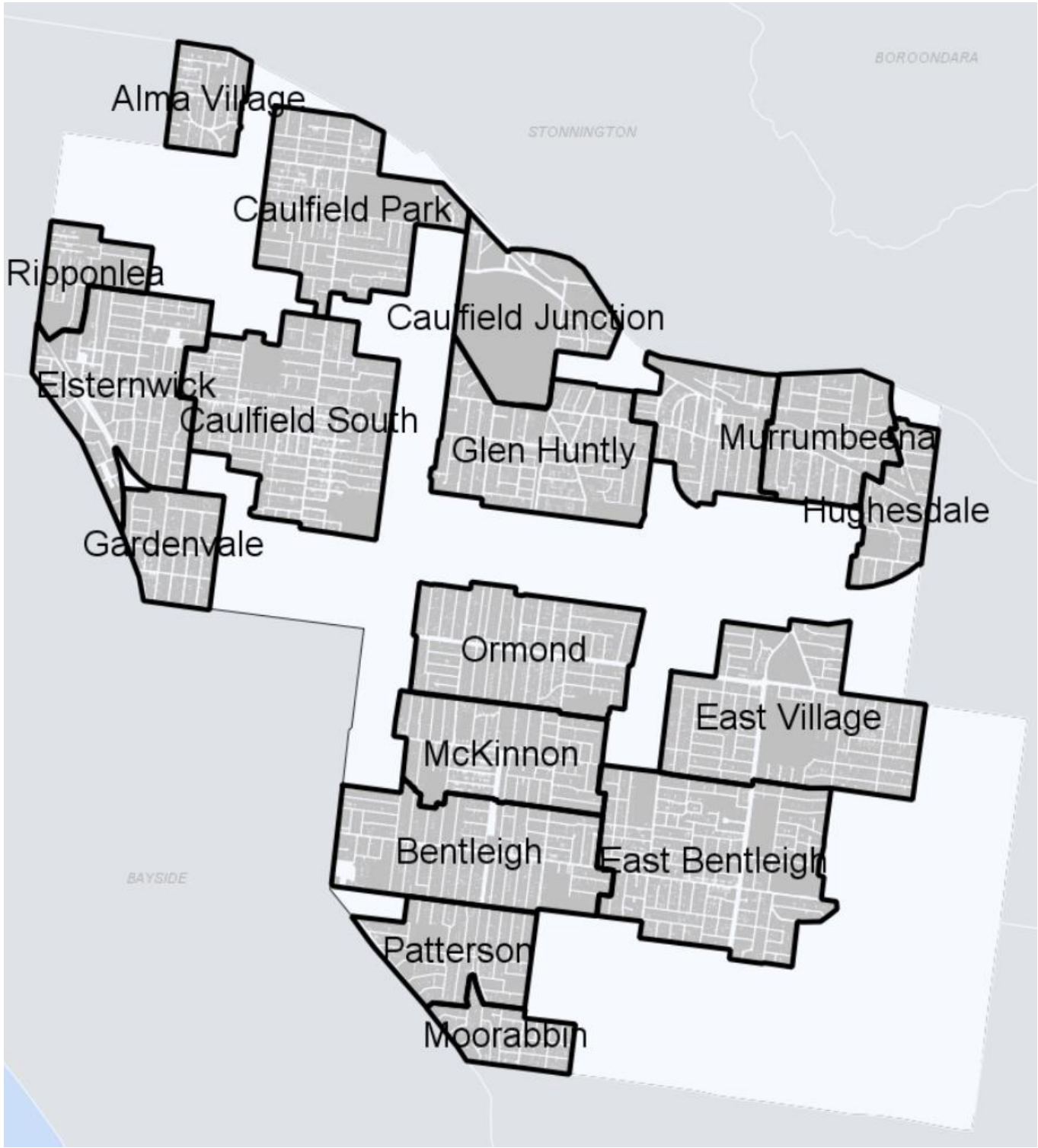
APPENDIX B – PERMIT ACTIVITY EXAMPLES

APPENDIX C – HOUSING OPPORTUNITY RESULTS (SCENARIO CALCULATIONS)

APPENDIX A – DEVELOPABLE LAND (MAPPING AND DATA)

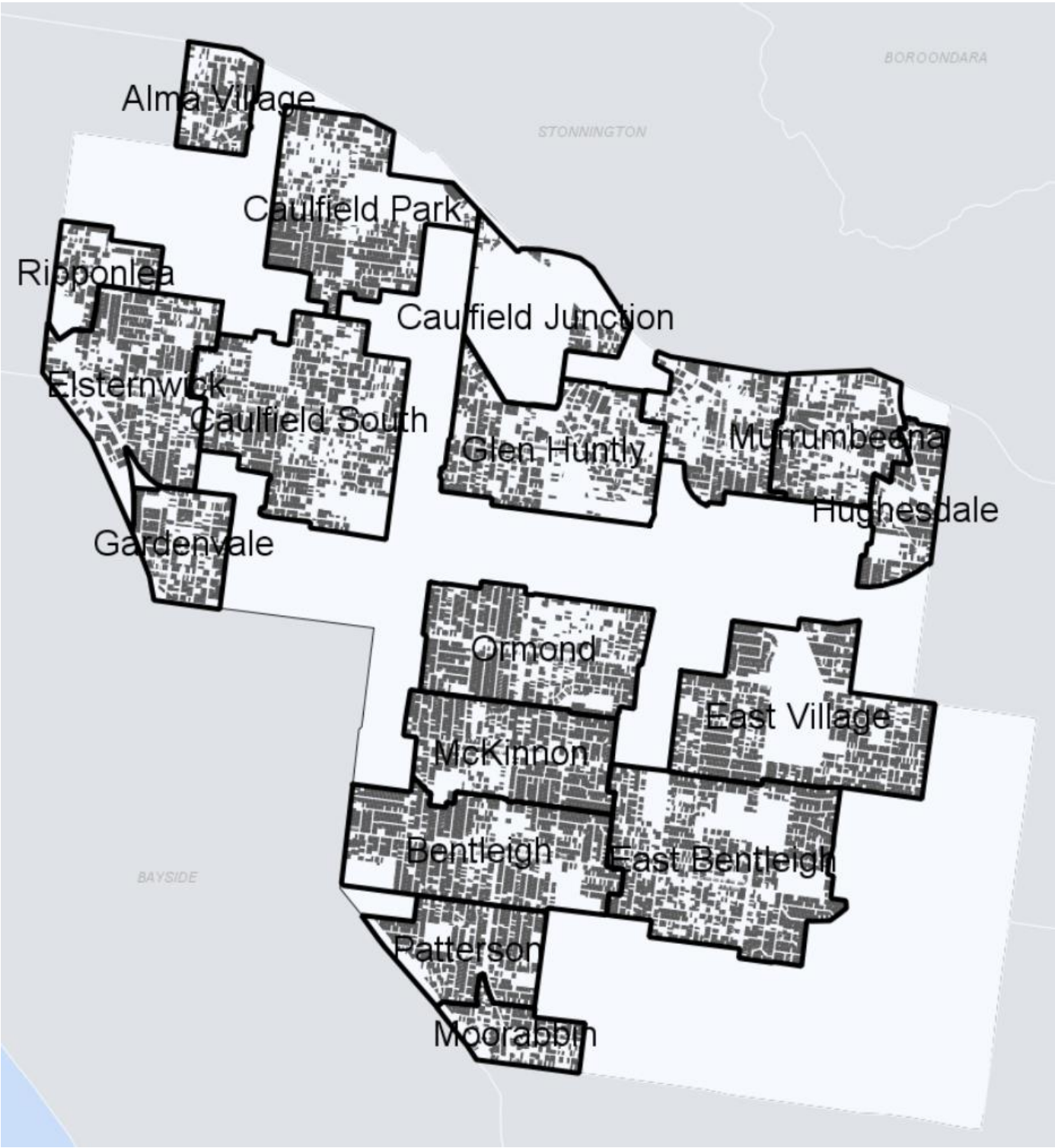
ALL LAND ASSESSED

This map shows all land within each activity centre study area that has been assessed in this report. The land in the white areas is considered ‘out of centre’, and has not been analysed. Council relies upon Housing ID’s projections for out of centre land, which will be minimally affected by the key strategic projects.



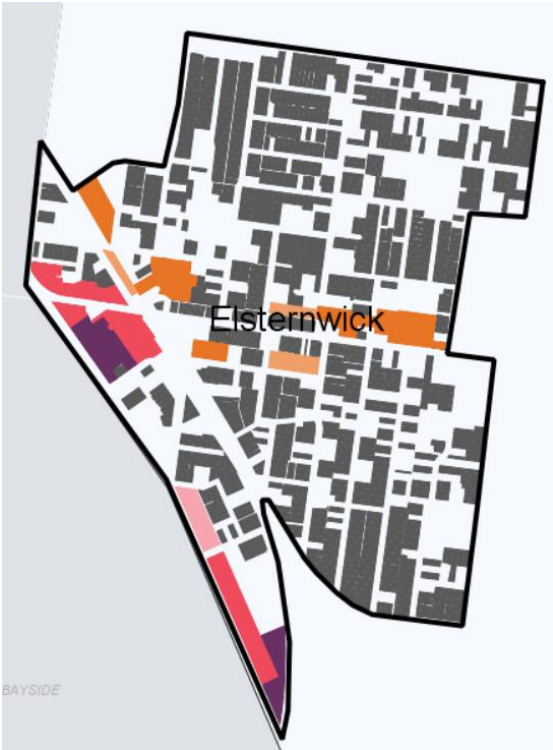
FIRST CUT: DEVELOPABLE LAND BY CURRENT ZONE

Map showing developable land identified within each activity centre. Developable land was assessed with data up to date at December 2016 (by Housing ID) and should be subject to on-going review. Note: Forecast ID development sites (permits issued) are removed and dealt with separately in equations.

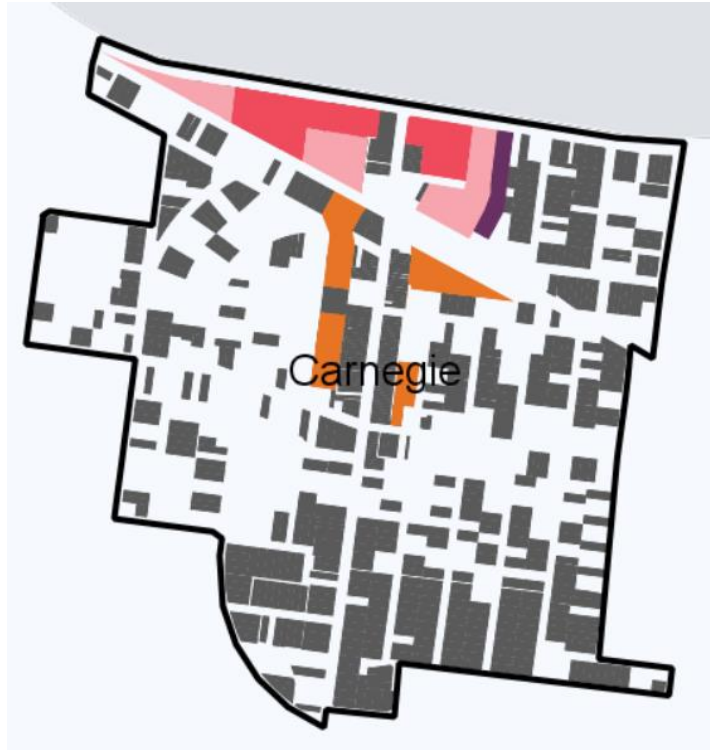


STRATEGIC UPLIFT AREAS IDENTIFIED

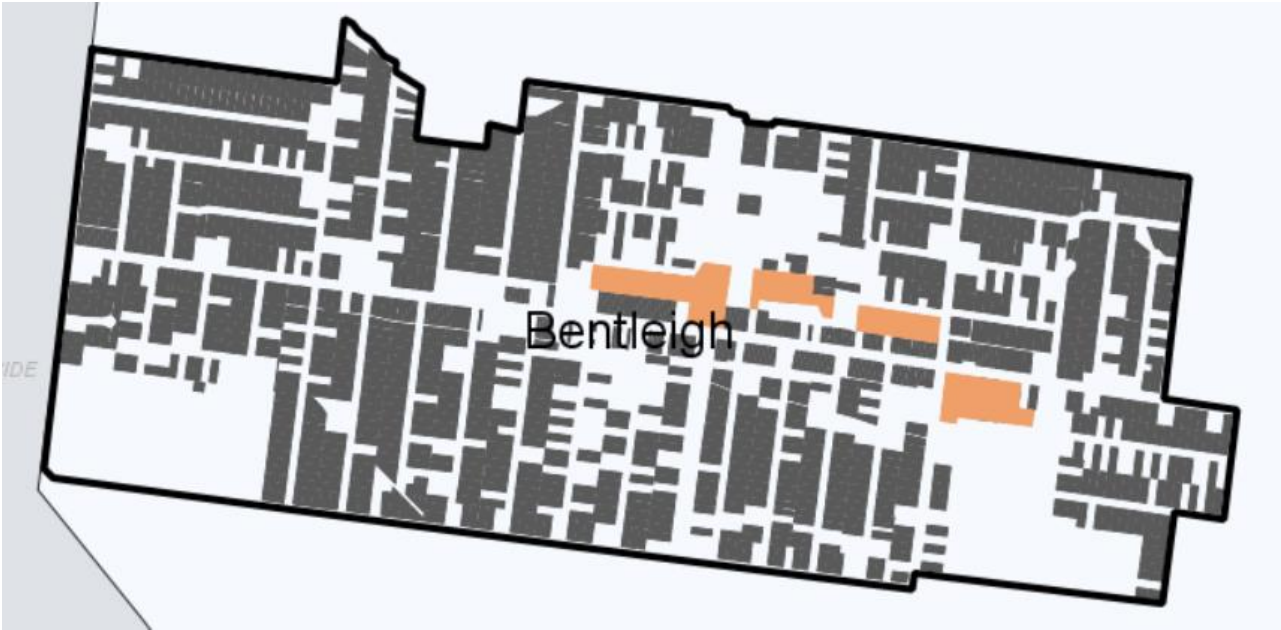
Elsternwick



Carnegie



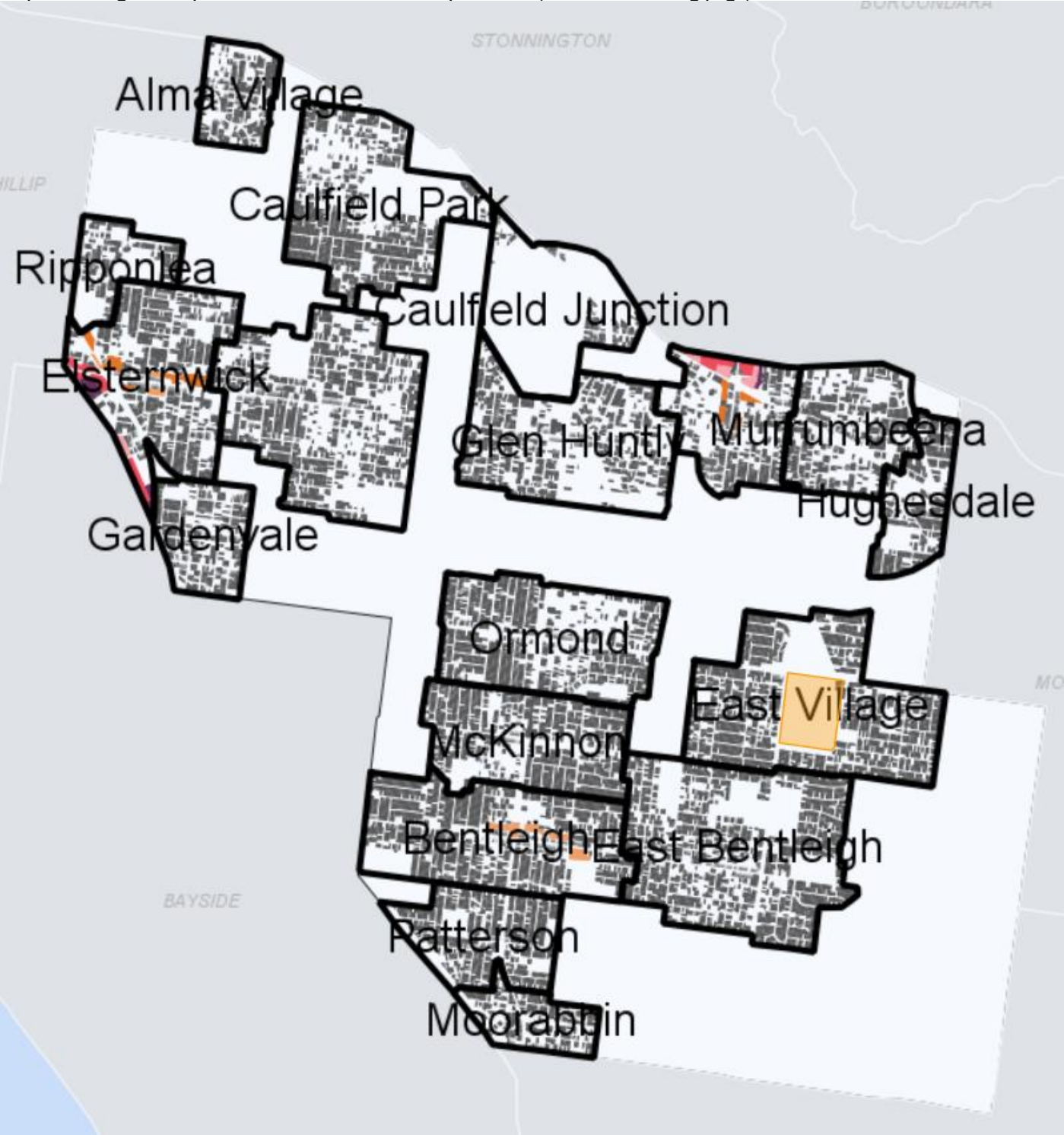
Bentleigh



Note: The entire **East Village** Urban Renewal site is considered developable (not mapped here).

FINAL ASSESSMENT LAYER:
DEVELOPABLE LAND INCLUDING STRATEGIC UPLIFT AREAS

Maps showing developable land in each structure plan area (data on following page).



ZONE DATA BREAKDOWN

Developable land (**Area in Hectares**) within each **Zone**, by Activity Centre Study Area

	Alma Village	Bentleigh	Carnegie	Caulfield Junction	Caulfield Park	Caulfield South	East Bentleigh	East Village	Elsternwick	Gardenvale	Glen Huntly	Hughesdale	McKinnon	Moorabbin	Murrumbeena	Ormond	Patterson	Ripponlea	TOTAL
NRZ*	14.73	71.33	17.71	6.14	47.45	64.13	73.79	91.61	48.10	25.93	41.36	18.55	48.73	11.65	14.01	37.10	41.42	14.60	688.33
GRZ*	5.26	2.70	4.43	0.29	17.68	15.81	27.14	0.00	1.28	0.00	12.72	5.60	14.06	6.23	22.71	32.06	0.00	0.40	168.37
RGZI	0.00	8.67	7.35	0.88	0.00	0.00	0.00	0.00	14.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.84
MUZ*	0.08	0.00	1.36	0.00	0.00	0.11	0.17	0.00	1.65	0.00	0.91	0.30	0.00	0.00	0.33	0.44	0.00	0.09	5.42
C1Z	0.62	5.84	8.62	0.81	1.78	7.76	2.84	0.60	5.49	0.77	3.26	0.58	1.71	0.80	1.37	2.93	1.12	0.07	46.96
C2Z	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.52	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.63
PUZ*	0.00	3.39	1.00	0.00	0.00	0.00	0.21	0.00	3.64	0.42	0.00	0.00	1.11	0.00	0.00	0.00	0.00	0.00	9.78
IN*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PPRZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PDZ*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUZ*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL EACH CENTRE	20.68	91.93	40.48	8.11	66.90	87.80	104.14	92.21	82.62	27.23	58.25	25.03	65.61	18.68	38.41	72.52	42.54	15.16	958.32

Alternative GRZ breakdown for Scenario 3, which splits General Residential Zoned properties on main roads (townhouse apartment mix building types) from local streets (garden townhousing)

GRZ (TOWNHOUSE APARTMENT MIX)	0.51	0.10	1.11	0.29	4.79	4.40	4.24	0.00	0.00	0.00	2.63	0.00	1.21	1.25	5.68	3.00	0.00	0.40	29.62
GRZ (GARDEN TOWNHOUSE)	4.76	2.61	3.31	0.00	12.89	11.41	22.90	0.00	1.28	0.00	10.10	5.60	12.85	4.98	17.02	29.06	0.00	0.00	138.75

Developable land (**Number of Properties**) within each **Zone**, by Activity Centre Study Area (note: this represents 'ground floor' properties more than 100sqm to remove anomalies like common driveways or multi-level buildings)

	Alma Village	Bentleigh	Carnegie	Caulfield Junction	Caulfield Park	Caulfield South	East Bentleigh	East Village	Elsternwick	Gardenvale	Glen Huntly	Hughesdale	McKinnon	Moorabbin	Murrumbeena	Ormond	Patterson	Ripponlea	TOTAL
NRZ*	211	1075	305	99	666	994	1128	1419	761	387	630	272	774	181	190	555	646	236	10529
GRZ*	81	38	65	4	267	250	400	0	9	0	204	84	205	90	304	476	0	6	2483
RGZI	0	130	136	15	0	0	0	0	181	0	0	0	0	0	0	0	0	0	462
MUZ*	1	0	24	0	0	7	2	0	32	0	2	7	0	0	4	11	0	1	91
C1Z	18	209	156	20	39	200	119	22	168	32	92	13	54	22	47	99	36	1	1347
C2Z	0	0	0	0	0	0	0	0	11	1	0	0	0	0	0	0	0	0	12
PUZ*	0	5	2	0	0	0	2	0	9	1	0	0	1	0	0	0	0	0	20
IN*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PPRZ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PDZ*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUZ*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL EACH CENTRE	311	1457	688	138	972	1451	1651	1441	1171	421	928	376	1034	293	545	1141	682	244	14944

Alternative GRZ breakdown for Scenario 3, which splits General Residential Zoned properties on main roads (townhouse apartment mix building types) from local streets (garden townhousing)

GRZ (TOWNHOUSE APARTMENT MIX)	5	1	17	4	68	58	57	0	0	0	41	0	22	18	62	48	0	6	407
GRZ (GARDEN TOWNHOUSE)	76	37	48	0	199	192	343	0	9	0	163	84	183	72	242	428	0	0	2076

STRUCTURE PLAN BUILDING TYPES - DATA BREAKDOWN

(AS NOMINATED IN ADOPTED STRUCTURE PLANS FOR BENTLEIGH, CARNEGIE AND ELSTERNWICK)

Developable land (**Area in Hectares**) within each **Building Type**, by Activity Centre Study Area

	Alma Village	Bentleigh	Carnegie	Caulfield Junction	Caulfield Park	Caulfield South	East Bentleigh	East Village	Elsternwick	Gardenvale	Glen Huntly	Hughesdale	McKinnon	Moorabbin	Murrumbeena	Ormond	Patterson	Ripponlea	TOTAL
Heritage and character housing	0.00	20.26	1.20	0.00	0.00	0.00	0.00	0.00	32.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	53.92
Minimal change	0.00	48.89	14.26	0.00	0.00	0.00	0.00	0.00	20.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	83.51
Garden townhouse	0.00	6.02	3.79	0.00	0.00	0.00	0.00	0.00	2.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.67
Townhouse and apartment mix	0.00	4.19	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.18
Garden Apartment	0.00	1.93	3.65	0.00	0.00	0.00	0.00	0.00	2.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.13
Shop top heritage character	0.00	0.28	2.61	0.00	0.00	0.00	0.00	0.00	3.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.96
Shop top standard	0.00	4.41	1.01	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.64
Strategic site A	0.00	0.00	2.09	0.00	0.00	0.00	0.00	0.00	4.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.40
Strategic site B	0.00	3.70	0.00	0.00	0.00	0.00	0.00	0.00	1.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.97
Urban renewal A	0.00	0.00	2.75	0.00	0.00	0.00	0.00	0.00	4.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.96
Urban Renewal B	0.00	0.00	2.33	0.00	0.00	0.00	0.00	0.00	0.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.27
Urban Apartment	0.00	0.00	0.51	0.00	0.00	0.00	0.00	0.00	2.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.81
TOTAL	0.00	89.67	39.20	0.00	0.00	0.00	0.00	0.00	74.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	203.43

Developable land (**Number of Properties**) within each **Building Type**, by Activity Centre Study Area (note: this represents 'ground floor' properties more than 100sqm to remove anomalies like common driveways or multi-level buildings)

	Alma Village	Bentleigh	Carnegie	Caulfield Junction	Caulfield Park	Caulfield South	East Bentleigh	East Village	Elsternwick	Gardenvale	Glen Huntly	Hughesdale	McKinnon	Moorabbin	Murrumbeena	Ormond	Patterson	Ripponlea	TOTAL
Heritage and character housing	0	309	22	0	0	0	0	0	475	0	0	0	0	0	0	0	0	0	806
Minimal change	0	740	245	0	0	0	0	0	327	0	0	0	0	0	0	0	0	0	1312
Garden townhouse	0	87	62	0	0	0	0	0	48	0	0	0	0	0	0	0	0	0	197
Townhouse and apartment mix	0	63	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	143
Garden Apartment	0	28	59	0	0	0	0	0	44	0	0	0	0	0	0	0	0	0	131
Shop top heritage character	0	13	96	0	0	0	0	0	139	0	0	0	0	0	0	0	0	0	248
Shop top standard	0	188	32	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	226
Strategic site A	0	0	23	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	53
Strategic site B	0	28	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	37
Urban renewal A	0	0	24	0	0	0	0	0	43	0	0	0	0	0	0	0	0	0	67
Urban Renewal B	0	0	28	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	34
Urban Apartment	0	0	14	0	0	0	0	0	41	0	0	0	0	0	0	0	0	0	55
NO BUILDING TYPE APPLIED	311	1	3	138	972	1451	1651	1441	3	421	928	376	1034	293	545	1141	682	244	11635
TOTAL PROPERTIES WITH A BUILDING TYPE	0	1456	685	0	0	0	0	0	1168	0	0	0	0	0	0	0	0	0	3309
TOTAL OF ALL PROPERTIES	311	1457	688	138	972	1451	1651	1441	1171	421	928	376	1034	293	545	1141	682	244	14944

APPENDIX B – PERMIT ACTIVITY EXAMPLES

PERMIT EXAMPLES IN THE GENERAL RESIDENTIAL ZONE (GRZ)

GRZ 3 STOREY APPROVALS					
Permit	Property Address	Height	Area	Dwellings	Density (Dwellings per hectare)
GE/PP-28065/2015	29-31 Prince Edward Avenue MCKINNON	3	1450	19	131
GE/PP-26721/2014/A	289 Grange Road ORMOND	3	1040	17	163
GE/PP-27994/2015	24-26 Cadby Avenue ORMOND	3	1394	12	86
GE/PP-28065/2015	29-31 Prince Edward Avenue MCKINNON	3	1450	21	145
GE/PP-30199/2016	30-32 Prince Edward Avenue MCKINNON	3	1394	17	122
GE/PP-27839/2015	10-12 Station Avenue MCKINNON	3	1449	21	145
GE/PP-27463/2014	64-66 Bent Street MCKINNON	3 to 4	1524	31	203
GE/PP-23132/2010	61 Lees Street MCKINNON	3	1461	26	178
GE/PP-28020/2015	6-10 Claire Street MCKINNON	3	1744	36	206
GE/PP-24181/2011/A	127 - 129 Murray Street CAULFIELD	3	1350	28	207
GE/PP-25837/2013/C	93-97 Truganini Road CARNEGIE	3	1890	28	148
GE/PP-24624/2012	1044-1044A Glen Huntly Road CAULFIELD SOUTH	3	779	14	180
GE/PP-29903/2016	35 Kokaribb Road CARNEGIE	3	850	5	59
GE/PP-28183/2015	14 Vickery Street BENTLEIGH	3	834	10	120
GE/PP-27173/2014	85 Robert Street BENTLEIGH	3	595	10	168
GE/PP-29325/2016	9-13 St Georges Avenue BENTLEIGH EAST VIC	2	2016	15	74
GE/PP-23160/2010	276 Hawthorn Road CAULFIELD	3	686	10	146
GE/PP-25104/2012	286 Hawthorn Road CAULFIELD	3	696	13	187
GE/PP-26664/2014	288 Hawthorn Road CAULFIELD	3	697	10	143
GE/PP-23962/2011	290 Hawthorn Road CAULFIELD	3	696	10	144
AVERAGE		1199.75	17.65	148	

Note: The General Residential Zone figures are based on existing trends that may not be reflective of future developments. The State Government has recently introduced Minimum Garden Area requirements that may reduce developable yield in the General Residential Zone. As these requirements are new, Council Officers have limited permit activity demonstrating their on-going impact on Dwelling Yield for the zone. This will be subject to further review.

PERMIT EXAMPLES IN THE RESIDENTIAL GROWTH ZONE (RGZ)

RGZ 4 STOREY APPROVALS					
Permit	Property Address	Height	Area	Dwellings	Density (Dwellings per hectare)
GE/PP-27023/2014	22-26 Bent Street BENTLEIGH	4	1876	41	219
GE/PP-27334/2014/A	14-18 Bent Street BENTLEIGH	4	1996	55	276
GE/PP-27935/2015	10-12 Bent Street BENTLEIGH	4	1345	35	260
GE/PP-26034/2013/B	15 Bent Street BENTLEIGH	4	846	19	225
GE/PP-27635/2015/A	23 Bent Street BENTLEIGH	4	1057	29	274
GE/PP-28566/2015/B	15-19 Vickery Street BENTLEIGH	4	2100	47	224
GE/PP-29007/2016	24-26 Vickery Street BENTLEIGH	4	1357	36	265
GE/PP-28916/2015	79-83 Mitchell Street BENTLEIGH	4	1785	41	230
GE/PP-27003/2014	29-33 Loranne Street BENTLEIGH	4	2088	42	201
GE/PP-27020/2014/D	24-26 Mavho Street BENTLEIGH	4	1376	28	203
GE/PP-27683/2015	40 Mavho Street BENTLEIGH	4	701	24	342
GE/PP-28182/2015	21-25 Nicholson Street BENTLEIGH	4	1871	44	235
GE/PP-29497/2016	37-39 Nicholson Street BENTLEIGH	4	1248	26	208
GE/PP-28180/2015	6-8 Blair Street BENTLEIGH	4	1492	35	235
GE/PP-27737/2015/A	110-114 Mimosa Road CARNEGIE	4	2462	50	203
GE/PP-29061/2016	90-94 Mimosa Road CARNEGIE	4	1753	41	234
GE/PP-28072/2015	9 & 9A Truganini Road CARNEGIE	4	920	20	217
GE/PP-26254/2013/A	21-25 Truganini Road CARNEGIE	4	1905	41	215
GE/PP-27552/2014	247-251 Neerim Road CARNEGIE	4	2072	48	232
GE/PP-26350/2013	259-261 Neerim Road CARNEGIE	4	1143	28	245
GE/PP-29702/2016	323 Neerim Road CARNEGIE	4	976	24	246
GE/PP-27300/2014	339-341 Neerim Road & 19-21 Belsize Avenue CARNEGIE	4	1605	35	218
GE/PP-29294/2016	322-326 Neerim Road & 17 Elliot Avenue CARNEGIE	4	1880	38	202
GE/PP-28186/2015	3-9 Elliott Avenue CARNEGIE	4	2208	41	186
AVERAGE		1586	36	233	

PERMIT EXAMPLES IN COMMERCIAL & MIXED USE AREAS (CIZ & MUZ)

CIZ & MUZ	3-6 STOREY APPROVALS				
Permit	Property Address	Height	Area	Dwellings	Density (Dwellings per hectare)
GE/PP-22614/2010/A	261 Centre Road BENTLEIGH	5	752	31	412
GE/PP-23386/2011/C	2 Morton Avenue CARNEGIE	6	757	40	528
GE/PP-26015/2013	178-180 Koornang Road CARNEGIE	6	697	26	373
GE/PP-28591/2015	315 Neerim Road CARNEGIE	6	315	9	286
GE/PP-30307/2017	Unit 1-4 1A Kokaribb Road CARNEGIE	6	397	12	302
GE/PP-25209/2012/D	Flat 101-604 483 Glen Huntly Road ELSTERNWICK	7	969	49	506
GE/PP-26136/2013/C	15 Gordon Street ELSTERNWICK	7	1166	47	403
GE/PP-27086/2014	495-501 Glen Huntly Road ELSTERNWICK	7	838	32	382
GE/PP-28786/2015	342-346 Centre Road BENTLEIGH	7	633	19	300
AVERAGE			725	29	388

CIZ & MUZ	7-8 STOREY APPROVALS				
Permit	Property Address	Height	Area	Dwellings	Density
GE/PP-27086/2014	495-501 Glen Huntly Road ELSTERNWICK	7	838	44	525
GE/PP-25209/2012/D	483-493 Glen Huntly Road ELSTERNWICK	7	969	57	588
GE/PP-26136/2013/C	15-17 Gordon Street ELSTERNWICK	7	1166	47	403
GE/PP-28189/2015	324-326, 328, 328A Centre Road BENTLEIGH	8	1235	39	316
GE/PP-28913/2015	60-64 Rosstown Road CARNEGIE	8	1183	40	338
GE/PP-29399/2016	411-415 Glen Huntly Road ELSTERNWICK	8	1016	37	364
GE/PP-25733/2013/B	28 Riddell Parade ELSTERNWICK	8	1283	54	421
GE/PP-27622/2015	(COLES) Shop 1 441, 459, 461 Glen Huntly Road & 9 Beavis Street ELSTERNWICK	8	7175	183	255
AVERAGE (Including Coles site)			1858	63	401
AVERAGE (Not including Coles site)			1099	45	422

CIZ & MUZ	11-13 STOREY APPROVALS				
Permit	Property Address	Height	Area	Dwellings	Density
GE/PP-28952/2016	22-26 Riddell Parade ELSTERNWICK	11	548	40	730
GE/PP-23483/2011	221-229 Glen Huntly Road ELSTERNWICK	11	1147	89	776
GE/PP-24930/2012/A	1056, 1058-1060 Dandenong Road CARNEGIE	12	4151	173	417
GE/PP-27197/2014/A	14-22 Woorayl Street CARNEGIE	13	2738	138	504
AVERAGE			2088	101	542

APPENDIX C – HOUSING OPPORTUNITY RESULTS (CALCULATIONS)

SCENARIO I – EXISTING POLICY

SCOPE

This analysis identifies current housing opportunity based on existing planning scheme controls and zoning distribution. The analysis uses most aspects of the ID report methodology. The key difference is that broad density assumptions listed in *Figure 53* of the ID report have been replaced with densities reflecting accurate zone distributions.

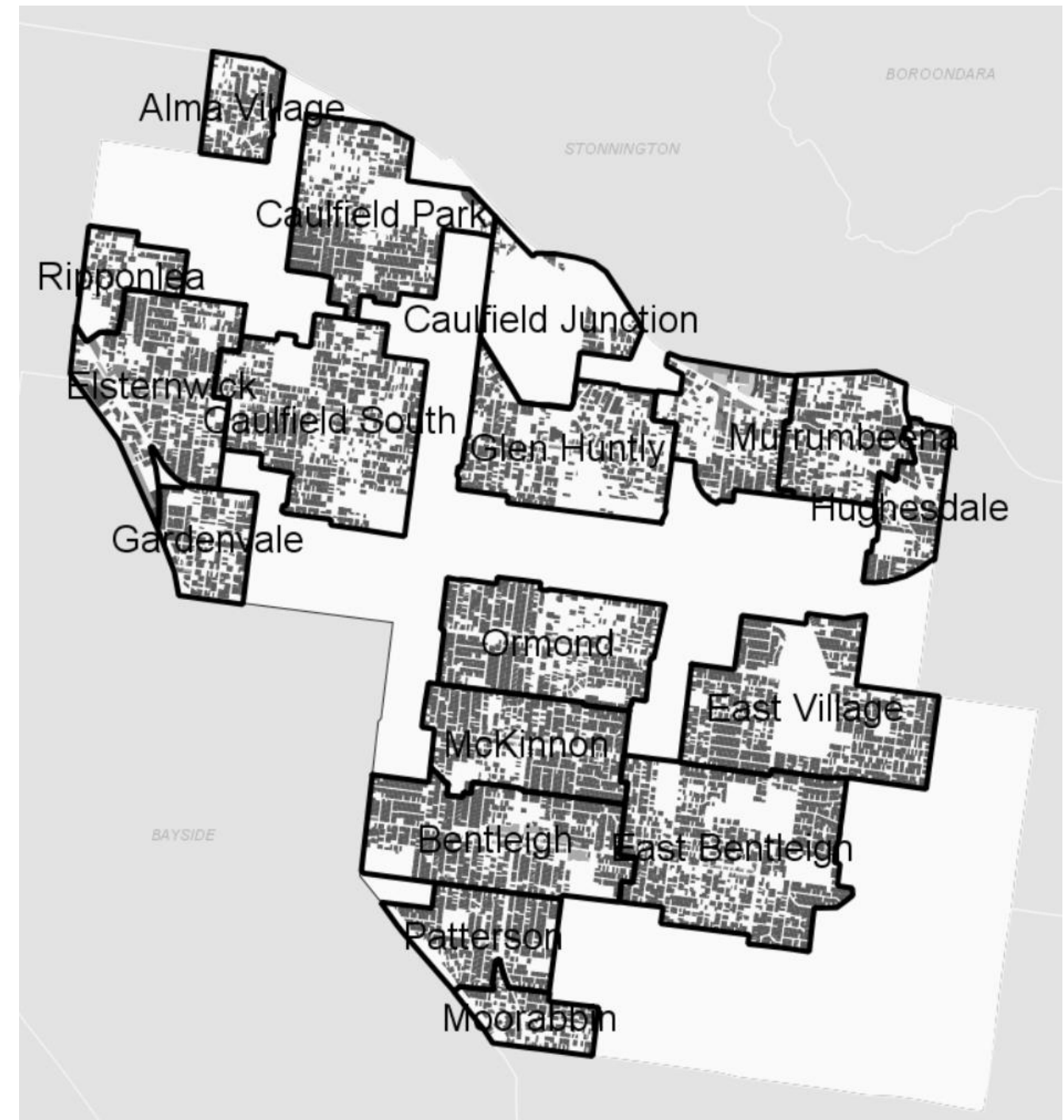
METHODOLOGY

This Housing Opportunity projection methodology builds on the process used in the *City of Glen Eira – Analysis of Housing Consumption and Opportunities Report* prepared by ID consulting.

Housing Opportunity projections have been calculated for Each Activity Centre Study Area as follows:

- Evaluate all land within Activity Centre Study Areas to determine the **Developable land** (see Section 5.2).
- Allocate a **Housing Density** for each current zone and preferred building type (see Section 5.4).
- Calculate the **Theoretical Housing Capacity** (based on developable land multiplied by density of relevant zone or building type).
- Calculate **Housing Opportunity** by applying development assumption formulas (using Housing ID method) to the Theoretical Housing Capacity. This includes:
 - Applying a **development assumption** percentage – i.e. attractiveness index (see section 5.3 of this report).
 - Subtracting the estimated number of **demolished dwellings** as part of new developments (i.e. to construct new developments, existing buildings will be removed).
 - Adding existing **forecast sites** (existing permits) with confirmed dwelling yield.

The assessment undertaken by Housing ID for land that is not within the Activity Centre Study Areas ('out of centre' land) provides an additional opportunity for 4210 new dwellings. This figure is accepted and is not changed in any scenario. Current strategic work does not affect 'Out-of-centre' development opportunities.



RESULTS - RAW DATA

ZONES	DENSITY	ACTIVITY CENTRE STUDY AREA (DWELLING YIELD FOR EACH ZONE)																		OUT OF CENTRE (ID report)	TOTAL
		Alma Village	Bentleigh	Carnegie	Caulfield Junction	Caulfield Park	Caulfield South	East Bentleigh	East Village	Elsternwick	Gardenvale	Glen Huntly	Hughesdale	McKinnon	Moorabbin	Murrumbena	Ormond	Patterson	Ripponlea		
NRZ*	18	265	1284	319	111	854	1154	1328	1649	866	467	744	334	877	210	252	668	745	263		
GRZ*	150	789	406	664	44	2652	2371	4071	0	192	0	1909	840	2108	935	3406	4809	0	60		
RGZI	250	0	2169	1837	219	0	0	0	0	3735	0	0	0	0	0	0	0	0	0		
MUZ*	300	24	0	408	0	0	32	50	0	494	0	273	90	0	0	99	131	0	26		
CIZ	400	248	2334	3449	323	712	3103	1137	240	2195	307	1303	232	685	321	547	1170	450	28		
C2Z	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
PUZ*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
IN*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
PPRZ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
PDZ*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
SUZ*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
THEORETICAL CAPACITY (DWELLINGS)		1326	6192	6678	696	4218	6660	6585	1889	7482	774	4230	1496	3671	1465	4303	6778	1195	376		
DEVELOPMENT ASSUMPTION (%)		20%	28%	36%	36%	28%	28%	16%	8%	36%	20%	28%	24%	24%	28%	28%	24%	20%	20%		
DEVELOPMENT ASSUMPTION RESULT (DWELLINGS)		265	1734	2404	251	1181	1865	1054	151	2694	155	1184	359	881	410	1205	1627	239	75	4018	
DEMOLISHED DWELLINGS		50	326	198	40	218	325	211	92	337	67	208	72	199	66	122	219	109	39		
FORECAST ID SITES (PERMITS) (DWELLINGS)		79	569	1109	2505	198	164	383	36	721	12	416	43	248	109	287	263	0	75	192	
HOUSING OPPORTUNITY (DWELLINGS)		294	1976	3315	2716	1161	1704	1225	95	3077	99	1392	330	930	454	1370	1671	130	111	4210	26262

Formulas used to create data in above table:

- **Density** for each zone= applied as detailed within section 5.5 of this report.
- **Dwelling yield** for each zone = Total Area of developable land for each zone (Appendix A), multiplied by Density
- **Development Assumption** = Extracted from Housing ID report for each centre, and detailed within section 5.4 of this report.
- **Demolished Dwellings** = Total number of properties, multiplied by Development Assumption, multiplied by 0.8.
- **Forecast sites** = Approved permit data (dwelling yield) extracted from Housing ID report for each centre.
- **Housing Opportunity** = Development assumption result, minus Demolished Dwellings, plus Forecast ID sites

SCENARIO 2 – ADOPTED STRUCTURE PLANS

SCOPE

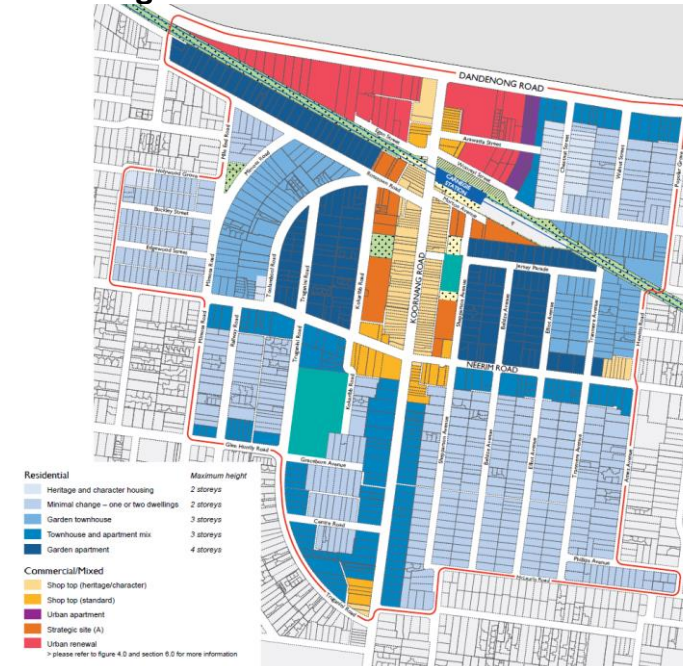
This scenario investigates implementation of:

- Bentleigh Structure Plan.
- Carnegie Structure Plan.
- Elsternwick Structure Plan.
- No changes to remaining Activity Centres or Out-of-centre areas compared with existing policy (scenario 1).

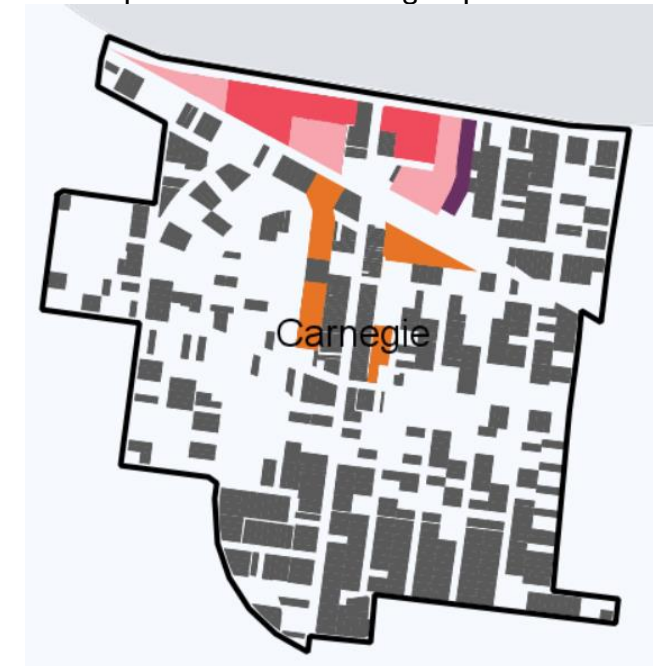
KEY VARIATIONS FROM SCENARIO 1 – EXISTING POLICY (ADOPTED STRUCTURED PLANS FOR BENTLEIGH, CARNEGIE & ELSTERNWICK)

The structure plans propose changes to planning controls to facilitate the building types listed in Council's Quality Design Guidelines. This involves changing zone boundaries as well as introducing variations such as setbacks, and building height controls. The structure plans also introduce strategic uplift areas such as 'Strategic Sites' and 'Urban Renewal', where more intensive development will be concentrated. Urban Renewal areas have also been attributed with a higher development assumptions than the remainder of these centres (assuming increased uptake in these areas).

Carnegie Structure Plan



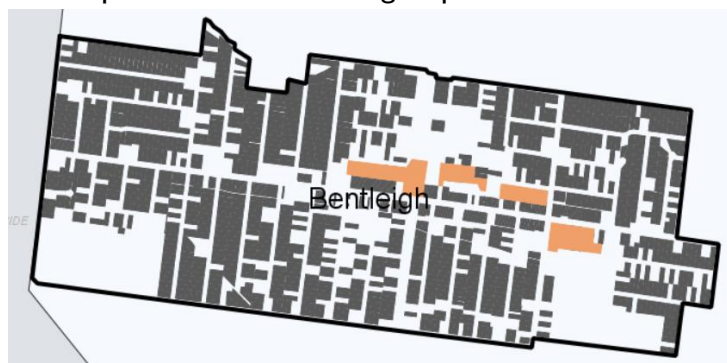
Developable land with strategic uplift areas



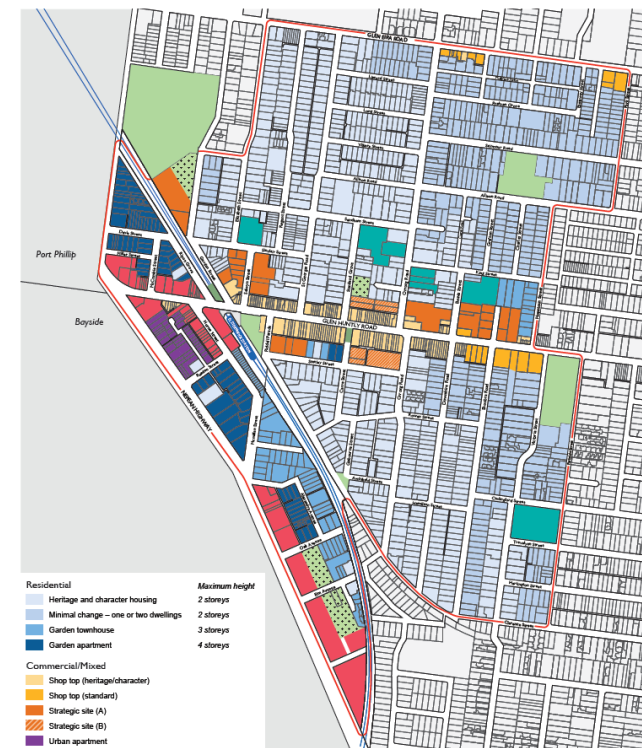
Bentleigh Structure Plan



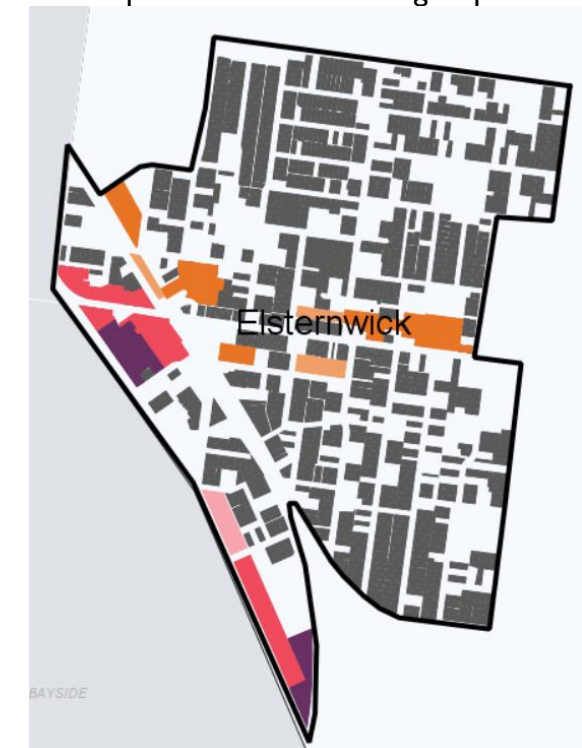
Developable land with strategic uplift areas



Elsternwick Structure Plan






Developable Land with strategic uplift areas



RESULTS FOR ADOPTED STRUCTURE PLAN AREAS - BREAKDOWN

STRUCTURE PLANNED URBAN RENEWAL AREAS (WITH INCREASED DEVELOPMENT ASSUMPTIONS)

			ELSTERNWICK URBAN RENEWAL SOUTH	ELSTERNWICK URBAN RENEWAL NORTH	CARNEGIE URBAN RENEWAL NORTH			
								
BUILDING TYPE	HEIGHT	DENSITY	AREA (HA)	DWELLING YIELD	AREA (HA)	DWELLING YIELD	AREA (HA)	DWELLING YIELD
Urban renewal	8 to 12	500	1.74	869	2.48	1239	2.75	1374
Urban Renewal (transitional areas)	6 to 8	400	0.95	378	0.00	0	2.33	931
Urban Apartment	4	250	0.96	241	1.33	333	0.51	129
THEORETICAL CAPACITY (DWELLINGS)				1488		1572		2433
DEVELOPMENT ASSUMPTION (%)			Comrehensive urban renewal	100%	Infill urban renewal	50%	Infill urban renewal	50%
HOUSING OPPORTUNITY (DWELLINGS)				1488		786		1217

REMAINDER OF STRUCTURE PLANNED ACTIVITY CENTRES

			ALL OF BENTLEIGH		REST OF CARNEGIE		REST OF ELSTERNWICK	
BUILDING TYPE	HEIGHT	DENSITY	AREA (HA)	DWELLING YIELD	AREA (HA)	DWELLING YIELD	AREA (HA)	DWELLING YIELD
Heritage and character housing	2	18	20.26	365	1.20	22	32.45	584
Minimal change	2	18	48.89	880	14.26	257	20.36	366
Garden townhouse	3	75	6.02	451	3.79	284	2.86	215
Townhouse and apartment mix	3	150	4.19	628	5.00	750	0.00	0.00
Garden Apartment	4	220	1.93	424	3.65	803	2.56	563
Shop top heritage character	4	350	0.28	97	2.61	913	3.07	1075
Shop top standard	5	220	4.41	971	1.01	223	0.21	46
Strategic site A	8	400	0.00	0	2.09	836	4.31	1724
Strategic site B	5	300	3.70	1110	0.00	0.00	1.27	382
Urban renewal	8 to 12	500	0.00	0	See above.	See above.	See above.	See above.
Urban Renewal (transitional Areas)	6 to 8	400	0.00	0	See above.	See above.	See above.	See above.
Urban Apartment	4	250	0.00	0	See above.	See above.	See above.	See above.
THEORETICAL CAPACITY (DWELLINGS)				4926		4087		4955.067
DEVELOPMENT ASSUMPTION (%)				28%		36%		36%
DEVELOPMENT ASSUMPTION RESULT (DWELLINGS)				1379		1471		1784
DEMOLISHED DWELLINGS				326		198		337
FORECAST ID SITES (PERMITS) (DWELLINGS)				569		1109		721
HOUSING OPPORTUNITY (DWELLINGS)				1622		2382		2168

Formulas used to create data in these tables:

- **Density** for each zone= applied as detailed within section 5.5 of this report.
- **Dwelling yield** for each zone = Total Area of developable land for each zone (Appendix A), multiplied by Density
- **Development Assumption** = Extracted from Housing ID report for each centre, and detailed within section 5.4 of this report.
- **Demolished Dwellings** = Total number of properties, multiplied by Development Assumption, multiplied by 0.8.
- **Forecast sites** = Approved permit data (dwelling yield) extracted from Housing ID report for each centre.
- **Housing Opportunity** = Development assumption result, minus Demolished Dwellings, plus Forecast ID sites

RESULTS FOR ADOPTED STRUCTURE PLAN AREAS – TOTAL

Activity Centre	Applicable land	Development Assumption	Housing Opportunity (Breakdown)	HOUSING OPPORTUNITY (TOTAL)
Bentleigh	Entire Activity Centre Study Area	28%	1622	1622
Carnegie	Urban Renewal Area	50%	1217	3599
	Remainder of Activity Centre Study Area	36%	2382	
Elsternwick	Urban Renewal South	100%	1488	4442
	Urban Renewal North	50%	786	
	Remainder of Activity Centre Study Area	36%	2168	

RESULTS – FINAL

ZONES	DENSITY	ACTIVITY CENTRE STUDY AREA (DWELLING YIELD FOR EACH ZONE)																	OUT OF CENTRE (ID report)	TOTAL
		Alma Village	Bentleigh	Carnegie	Caulfield Junction	Caulfield Park	Caulfield South	East Bentleigh	East Village	Elsternwick	Gardenvale	Glen Huntly	Hughesdale	McKinnon	Moorabbin	Murrumbena	Ormond	Patterson	Ripponlea	
NRZ*	18	265			111	854	1154	1328	1649		467	744	334	877	210	252	668	745	263	
GRZ*	150	789			44	2652	2371	4071	0		0	1909	840	2108	935	3406	4809	0	60	
RGZ I	250	0			219	0	0	0	0		0	0	0	0	0	0	0	0	0	
MUZ*	300	24			0	0	32	50	0		0	273	90	0	0	99	131	0	26	
CIZ	400	248			323	712	3103	1137	240		307	1303	232	685	321	547	1170	450	28	
C2Z	0	0			0	0	0	0	0		0	0	0	0	0	0	0	0	0	
PUZ*	0	0			0	0	0	0	0		0	0	0	0	0	0	0	0	0	
IN*	0	0			0	0	0	0	0		0	0	0	0	0	0	0	0	0	
PPRZ	0	0			0	0	0	0	0		0	0	0	0	0	0	0	0	0	
PDZ*	0	0			0	0	0	0	0		0	0	0	0	0	0	0	0	0	
SUZ*	0	0			0	0	0	0	0		0	0	0	0	0	0	0	0	0	
THEORETICAL CAPACITY (DWELLINGS)		1326			696	4218	6660	6585	1889		774	4230	1496	3671	1465	4303	6778	1195	376	
DEVELOPMENT ASSUMPTION (%)		20%			36%	28%	28%	16%	8%		20%	28%	24%	24%	28%	28%	24%	20%	20%	
DEVELOPMENT ASSUMPTION RESULT (DWELLINGS)		265			251	1181	1865	1054	151		155	1184	359	881	410	1205	1627	239	75	4018
DEMOLISHED DWELLINGS		50			40	218	325	211	92		67	208	72	199	66	122	219	109	39	
FORECAST ID SITES (PERMITS) (DWELLINGS)		79			2505	198	164	383	36		12	416	43	248	109	287	263	0	75	192
HOUSING OPPORTUNITY (DWELLINGS)		294	1622	3599	2716	1161	1704	1225	95	4442	99	1392	330	930	454	1370	1671	130	111	4210
																				27557

(INPUTS THAT VARY FROM ‘SCENARIO I – EXISTING POLICY’ ARE HIGHLIGHTED IN RED)

SCENARIO 3 – CITY-WIDE CHANGES RESULTS

SCOPE

This scenario investigates the implementation of:

- Bentleigh, Carnegie and Elsternwick Structure Plans.
- East Village Structure Plan.
- Remaining activity centres – anticipated changes based on current strategic work.
- No changes to Out-of-centre areas compared with existing policy (Scenario 1).

KEY VARIATIONS FROM SCENARIO 1 – EXISTING POLICY

Bentleigh, Carnegie and Elsternwick Structure Plans

As detailed in scenario 2.

East Village Structure Plan

The East Village Structure Plan area is projected to provide 3000 additional dwellings within a single consolidated urban renewal site. Housing Opportunity for the East Village Activity Centre Study Area is 3095 dwellings, comprising 3000 dwellings for the urban renewal site and 95 dwellings for the remainder of the activity centre (see existing policy assessment).

Remaining Activity Centres

Council's Activity Centres, Housing and Local Economy Strategy (adopted July 2017) and Quality Design Guidelines (adopted March 2018) provide a number of recommendations for activity centres that will inform the development of future planning scheme controls through structure planning or a similar process. The key recommendations explored in this analysis are as follows:

- All General Residential Zoned Land (150 DPH) updated to achieve a 'Garden Townhouse' on local streets (75 DPH) and 'Townhouse and Apartment Mix' (75 DPH) on main roads.
- All Residential Growth Zoned Land (250 DPH) updated to achieve a 'Garden Apartment' (220 DPH).
- All Commercial 1 Zoned land (400 DPH) updated to achieve variations of the 'Shoptop (Heritage Character)' (220 DPH) or the 'Shoptop (Standard)' (350 DPH). As strategic work has not been undertaken to determine which building types would apply in each centre, a broad average of 300 DPH has been applied across all centres, assuming a lower yield than the current average 6-8 storey apartment building trend (400DPH).

Site-specific analysis will be required to determine the exact details and process for implementation. However in the meantime, the above methodology has been applied as a preliminary assessment of the likely future impact on lower order activity centres.

RESULTS

ZONES	DENSITY	ACTIVITY CENTRE STUDY AREA (DWELLING YIELD FOR EACH ZONE)																	OUT OF CENTRE (ID report)	TOTAL	
		Alma Village	Bentleigh	Carnegie	Caulfield Junction	Caulfield Park	Caulfield South	East Bentleigh	East Village	Elsternwick	Gardenvale	Glen Huntly	Hughesdale	McKinnon	Moorabbin	Murrumbeena	Ormond	Patterson			Ripponlea
NRZ*	18	265			111	854	1154	1328			467	744	334	877	210	252	668	745	263		
GRZ (TOWNHOUSE APARTMENT MIX)	150	76			44	719	660	636			0	394	0	182	188	853	451	0	60		
GRZ (GARDEN TOWNHOUSE)	75	357			0	967	855	1717			0	757	420	963	374	1277	2179	0	0		
RGZI (GARDEN APARTMENT)	220	0			193	0	0	0			0	0	0	0	0	0	0	0	0		
MUZ*	300	24			0	0	32	50			0	273	90	0	0	99	131	0	26		
CIZ (SHOPTOP - VARIATIONS)	300	186			242	534	2328	853			231	978	174	514	240	410	878	337	21		
THEORETICAL CAPACITY (DWELLINGS)		907			589	3074	5029	4584			697	3146	1018	2536	1012	2890	4307	1083	370		
DEVELOPMENT ASSUMPTION (%)		20%			36%	28%	28%	16%			20%	28%	24%	24%	28%	28%	24%	20%	20%		
DEVELOPMENT ASSUMPTION RESULT (DWELLINGS)		181			212	861	1408	733			139	881	244	609	283	809	1034	217	74	4018	
DEMOLISHED DWELLINGS		50			40	218	325	211			67	208	72	199	66	122	219	109	39		
FORECAST ID SITES (PERMITS) (DWELLINGS)		79			2505	198	164	383			12	416	43	248	109	287	263	0	75	192	
HOUSING OPPORTUNITY (DWELLINGS)		211	1622	3599	2677	841	1247	905	3095	4442	84	1089	215	658	327	974	1078	107	110	4210	27491

(INPUTS THAT VARY FROM 'SCENARIO I - EXISTING POLICY' ARE HIGHLIGHTED IN RED)

Formulas used to create data in above table:

- **Density** for each zone= applied as detailed above (see section 5.5 of this report for methodology associated with application of densities).
- **Dwelling yield** for each zone = Total Area of developable land for each zone (Appendix A), multiplied by Density
- **Development Assumption** = Extracted from Housing ID report for each centre, and detailed within section 5.4 of this report.
- **Demolished Dwellings** = Total number of properties, multiplied by Development Assumption, multiplied by 0.8.
- **Forecast sites** = Approved permit data (dwelling yield) extracted from Housing ID report for each centre.
- **Housing Opportunity** = Development assumption result, minus Demolished Dwellings, plus Forecast ID sites