

Christchurch City Council
Assessment of demand, plan enabled and feasible plan
enabled housing capacity for the partial withdrawal of PC14
October 2025

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1. Purpose of this assessment

- 1.1. The purpose of this assessment is to provide quantitative and qualitative information, and commentary on plan enabled housing capacity, feasible plan enabled housing capacity through the operative District Plan from 3 September 2025, and on housing demand for Christchurch for the next 30 years. The assessments reflect the changes necessary to support the Council's decision to pursue a partial withdrawal from the Medium Density Residential Standards under the Resource Management (Consenting and Other System Changes) Amendment Act 2025.
- 1.2. This assessment is an interim assessment that provides information to support the Council decision on PC14 of 3 September 2025. It is not a complete update to the Housing Capacity Assessment and is structured to better align with the information required for the withdrawal process.

2. Content, structure and context

- 2.1. This update presents quantitative and supporting information that is necessary to for an assessment of:
 - Plan-enabled housing capacity.
 - Plan-enabled feasible housing capacity.
 - Housing demand based in a high population projection with a 20% competitive buffer.
- 2.2. Relevant commentary is provided on the updated capacity assessment, the results from this and any relevant trends since the 2021 Greater Christchurch Housing Capacity Assessment and the 2023 Christchurch housing capacity assessment update (provided for the PC14 hearings process). The two previous assessments provide information on the composition of demand and trends for population growth for the next thirty years. Furthermore, the appendix to the 2023 assessment reports on the composition of demand and remains relevant¹. A full update to the capacity assessment will be completed in 2026.

3. Background

- 3.1. The National Policy Statement on Urban Development 2020 (NPS-UD) requires Tier 1 local authorities, every three years, to demonstrate that they have at least sufficient development capacity in their region or district to meet expected demand for housing: (a) in existing and new urban areas; (b) for both standalone and attached dwellings; and (c) in the short, medium and long term.
- 3.2. Christchurch City Council has to date, prepared three Housing Capacity Assessments (HCA), the first in 2018, then in 2021 and then an interim assessment in 2023 (2023 HCA). The 2023 HCA assessment considered the capacity potential of the Medium Density Residential Standards (MDRS) of the Resource Management (Enabling Housing Supply and Other Matters) Amendment Act 2021, and the changes to zones required by the National Policy Statement on Urban Development 2020. This assessment was provided as evidence to the Council Plan Change 14 (PC14) process.

¹ <https://chch2023.ihp.govt.nz/evidence>

- 3.3. The hearings for PC14 were completed in 2024. Those parts of PC14 relevant to the NPS-UD Policy 3 areas were made operative by Council in December 2024. The Council is required to make operative the remainder of PC14 no later than December 2025.
- 3.4. The Council has decided to request the Minister to approve the withdrawal of the undecided parts of PC14 under Schedule 3C of the Resource Management Act on the basis that the Operative District Plan will meet the Act's requirement for sufficient feasible housing capacity. The Resource Management (Consenting and Other System Changes) Amendment Act 2025 provides Council with a bespoke process² to choose where to implement the MDRS in areas outside of the extents of the Policy 3 decisions. On the 3 September 2025 Council decided on the extent of new areas for the Medium Residential Zone. These potential impact on capacity of these changes and those of December 2024 are assessed in this updated HCA.

4. Context

- 4.1. The 2025 HCA uses the Council's feasibility models for assessing medium density intensification. Adjustments and changes to base assumptions have been made to bring these as up-to-date as possible with changing market conditions (e.g. building costs and sale prices). Land values used in the model are the August 2022 rating valuations (the same data used for the 2023 HCA) as this remains the most recent city-wide assessment of land value.
- 4.2. The updated 2025 HCA considers the greater enablement for development as directed by the Council's PC14 decisions in Dec 2024 (implementing NPS-UD Policy 3) and of 3 September 2025 (implementing further MDRS).
- 4.3. The capacity assessment is based on the operative provisions of the District Plan, including those that provide for medium density outcomes such as within commercial centres and as alternative Specific Purpose zones. For high-density intensification a bespoke extrapolation approach has been applied; developed from the sample site assessment model used for PC14³. The assessment of feasible greenfield housing capacity has been carried over from the previous capacity assessments and amended to reflect the latest monitoring data. This assessment does not consider housing capacity from potential new greenfield opportunities that have emerged since 2023 but which have yet to complete plan change processes to become operative. When applicable, these areas will be considered in a future HCA.
- 4.4. The feasible plan enabled capacity estimate presented in this report is a point-in-time assessment based on assumptions for what may be built on a commercial bases for profitable sale. Estimated capacity will change over time as the housing development market adjusts to changes in economic conditions and as new trends in development outcomes emerge. The medium and high-density provisions of PC14 enable a wider and denser range of housing typologies compared to the operative District Plan prior to December 2024. The more enabling permitted baseline for development in the medium and high-density zones potentially allows greater densities to be achieved through the resource consent process where developers may choose to build higher or denser than the rules permit. At the time of this update, it largely remains to be seen how the development community will adjust design and density responses to more fully use the capacity that is now enabled in the District Plan. Ongoing monitoring of development trends will help to

² <https://environment.govt.nz/assets/publications/RM-reform/Christchurch-City-Council-Bespoke-Process.pdf>

³ [13-Ruth-Allen-Statement-of-evidence-final.PDF](#)

inform adjustments to the settings of future capacity assessments, including the testing of new, denser, development outcomes.

- 4.5. Dynamic economic and other factors will continue to influence housing demand and supply, and the base assumptions and modelling parameters, in particular building costs, revenue expectations and land prices. These will likely change over the next thirty years and change is possible in the short-term also; in the period since the 2023 HCA, building costs have continued to rise while sales prices have shown less movement. Consequently, the balance of costs and revenue has changed, and feasible capacity has been eroded. Despite this change to conditions, development has continued at a reasonable pace in Christchurch.
- 4.6. For comparison purposes and to quantify the impact of more recent trends in the development market, Appendix 3 contains the overall feasible capacity results with, for medium and high density zoned areas, the margin target for development achieves 15%. This illustrates the potential capacity including sites where feasibility is close to, but does not attain, the modelled 20% margin target. These sites will be more sensitive to future changes towards more favourable development conditions that may occur from time to time over the next 30 years.
- 4.7. Plan enabled capacity has also been updated to reflect the spatial extents of District Plan zones, post 3 September 2025. The density assumptions for the plan enabled capacity of each zone have been reviewed and updated.
- 4.8. In common with previous capacity assessments, reported capacity is limited to what can be tested for, or reasonably estimated to be, 'commercially viable'. Other potential sources of plan enabled housing supply are omitted from the totals reported. These other sources include minor dwelling units, not-for-profit housing (e.g. community housing providers), or any other type of development that may not be offered for immediate market sale or that has not been developed on a commercial basis (e.g. owner occupier development for rental or sale, build-to-rent development). In Section 5, detail is provided of potential housing capacity sources that is not tested or included in the capacity totals.

5. Housing Demand

- 5.1. **Dwelling demand** -The household demand is based on the following and the Christchurch City 30 year Household Growth Projections are provided in Table 1 below :

- Statistics New Zealand High-growth population household projection, as supplied.
- A 20% competitive buffer has been applied to the 'High' projection.
- The Christchurch City Territorial Authority Area.

Table 1: Household Growth Projections			
Growth projection	Short (5 year)	Medium (10 year)	Long (30 year)
High	9,340	18,460	54,700
High +20%	11,208	22,152	65,640
Medium (most likely scenario)	6,100	11,800	31,060

- 5.2. **Demand commentary** - Whilst over recent years Christchurch has experienced higher consenting rates than the historical average, the population growth trend for Christchurch has generally followed the medium Statistics New Zealand projections. The proportion of total growth for the Greater Christchurch Area that occurs within Christchurch City shows a slight decline, with a greater share of housing demand met in through greenfield subdivision growth in Selwyn and Waimakariri. For example, in 2021, approximately 12% of households in Greater Christchurch are in Selwyn and over the next 30 years 33% of the total growth in households is projected to occur in Selwyn District. The increase in supply of new greenfield development across Greater Christchurch over the past 20 years has generated a strong greenfield derived growth base that continues to be reflected in Statistics New Zealand projections (i.e. on-going strong growth greenfield growth drives the projections of demand to more greenfield growth).
- 5.3. Demand today is not necessarily reflective of the future demand. While new developments, particularly greenfield, continue to be enabled in the neighbouring districts, Christchurch City remains the focal point for economic activity in Greater Christchurch. Changes to socio-economic settings such as the reaffirmation of the City as the economic centre of Greater Christchurch and wider South Island, alongside changes to regulation and infrastructure investment to implement a more compact urban form across Greater Christchurch, has the potential to significantly shift housing preferences and demand. Since 2018, most new dwellings in Christchurch have been provided through intensification, with the proportion peaking at 66% in 2022 and tracking at 68% for 2025⁴.

6. Plan-enabled capacity

- 6.1. **Plan enabled capacity totals** - The HCA assumes a dwelling to household ratio of 1:1. The Census 2023 occupied dwelling count for Christchurch was 150,909. The total dwelling count was 166,749. The total household count was 156,808.

Table 2. Plan Enabled dwelling capacity based on density assumptions. Gross count.		Estimated existing households (2023 StatsNZ)
Zone Group	Count	Count
Residential	387,000	152,634
Commercial	12,600	239
Mixed-Use	58,500	1287
Total	458,262	

Approximately 2,600 existing households are in other zones not included in the table.

- 6.2. **Plan-enabled capacity assessment method and assumptions** - Plan Enabled capacity is calculated by applying a density assumption to the zoned area for each zone of the Christchurch Operative District Plan (Christchurch ODP) that provides for residential activity. The density assumption for each zone is set-out in Table 3. These are probable densities based on the observations of typical development outcomes in existing zones, or where the plan has become more enabling, estimating reasonable outcomes based on built form potential under new sets of rules. These assumptions are not the maximum density that may be achieved in the zone (for most zones the maximum outcomes are higher), and do not account for all possible development outcomes enabled in the rules. For some zones the prevailing density outcome may be low density but specific provisions

⁴ [Built environment reporting : Christchurch City Council](#)

allow for medium density outcomes, for example in the Residential Suburban zone and in the Residential New Neighbourhood zone.

6.3. Appendix 1 contains further detail of the density assumptions and rational for these.

Table 3 Dwelling yield per hectare assumptions for plan enabled capacity. Assumed as one household per dwelling.		
District Plan Zones		Density assumption HH/Ha
Zone Group	Zone Type	
Residential	High Density Residential	120
Residential	Medium Density Residential	80
Residential	Residential Suburban Density Transition Zone	60
Residential	Residential Suburban	16
Residential	Residential New Neighbourhood	15
Residential	Residential Hills	10
Residential	Residential Large Lot	7
Residential	Residential Small Settlement	10
Residential	Residential Banks Peninsula	15
Commercial	Central City	200
Commercial	Local	80
Commercial	Neighbourhood	80
Commercial	Town Centre	100
Mixed-Use	Central City Mixed Use & South Frame	200
Mixed-Use	Mixed Use	150

6.4. **Qualifying Matter influence on plan enabled capacity** - Plan enabled capacity may be influenced by a Qualifying Matter overlay. Approximately 95,200 of the plan enabled capacity is within one or more Qualifying Matter extent. This indicates that for a portion of plan enabled capacity the density assumption may need adjustment to account for the influence of the Qualifying Matter. At a site level, and for some Qualifying Matters in general, the density assumption may be unaffected by the presence of a Qualifying Matter, subject to resource consent. Appendix 2 provides detail of the potential influence of Qualifying Matters on plan enabled and feasible capacity.

7. Feasible Plan Enabled Capacity

7.1. Feasible Plan Enabled Capacity is the total estimated capacity based on an assessment of the feasibility to build dwellings in the appropriately zoned areas of the city (i.e. within the areas identified for the Plan Enabled capacity). The total feasible housing capacity is provided in Table 4.

Table 4: Estimated Feasible Housing Capacity Minimum (total range is for with and without QM adjustment). Totals are net of existing dwellings.	
Housing Capacity Assessment Source	Estimated Feasible Capacity
All residential zones: Medium density intensification	50,800
Greenfield remaining capacity	7,600
High density Residential Central City	4,500
Mixed-use apartment City Centre Zone	5,300
Total	68,200 (range: 68,200 to 78,400)

7.2. **Feasible capacity assessment methods** - Feasible capacity is estimated using three separate methodologies:

- Intensification development, in whole or in part, of existing residential zoned sites.
- High density residential development and residential development in non-residential zones as part of mixed-use development (e.g. Central City and Town Centres).
- Greenfield – remaining housing capacity.

8. Intensification - medium density in residential zones

8.1. Redevelopment and infill of existing residential zoned sites is currently the largest potential source of housing capacity in Christchurch. Modelling for this capacity considers all sites zoned for residential development and the development outcomes that may be assessed for commercial feasibility. The modelling approach is also used to assess the potential of medium density in the Central City Mixed Use zones as residential development only (a common development outcome for the zone). The model process, in its current form, does not test mixed commercial and residential development outcomes. However, an additional and separate process has considered this capacity.

8.2. **Model inclusions and exclusions** - The model tests individual zoned and serviced, residential sites for medium density commercially feasible development outcomes that comply with the built form standards of the zone. This includes an assessment of full redevelopment and infill development (subdivision with retention of the existing dwelling). The model does not consider sites that are small and unlikely be developed further, or very large sites which may require a site-specific assessment to fully understand the development potential. Sites that are zoned for residential use but are used for another enduring purpose (e.g. stormwater, electricity infrastructure) are also excluded.

8.3. **Intensification modelling approach** - The model is in part a spatial model and in part a financial model. The spatial component identifies suitable sites for comprehensive redevelopment, generates new sites for subdivision, and assesses the built form compliant potential of each site. Once sites are identified/generated, the modelling process becomes a financial one to determine feasibility of potential outcomes by comparing the costs of development with potential revenues. The approach is based on the suggested approach of the MfE/MBIE NPS-UD Development Feasibility Tool⁵.

8.4. The model steps are summarised as follows and Appendix 3 provides a diagram of the modelling process:

- Identify sites that are spatially located, sized and shaped to allow for intensification development, either for complete redevelopment or for subdivision and part redevelopment (infill). For part redevelopment, generate new site boundaries. Identify and exclude sites with low potential for development.

⁵ <https://www.hud.govt.nz/assets/Uploads/Documents/NPS-UDC-Development-Feasibility-Tool-3.xlsx>

- Assess sites against the built form standards of the zone to determine a building envelope, the maximum built area and access potential.
 - Test a range of development scenarios on each site, while considering built form potential, landscaping and private open space requirements.
 - Calculate the development cost of each scenario and test a profit margin expectation to determine a minimum dwelling sales price required to achieve the desired profit margin.
 - Test the sales price against a typology and location specific price ceiling to determine if the sales price is realistic and the development scenario is profitable.
 - Where there are multiple development scenarios for a site, select that which maximises profit.
 - Further assess the probability of development occurring by removing comprehensive redevelopment sites with a low land value to capital value relationship (i.e. have a high improvement value). These sites are still assessed for subdivision potential. Considering sites where the majority of the capital value is attributed to the land provide a more realistic assessment of short to medium term feasibility.
- 8.5. **Inputs to the intensification model** - All inputs are updated to the most current data available. The modelling process draws on a range of spatial, quantitative and qualitative information, including:
- Council spatial data, for rating units, zone boundaries and existing building information.
 - Council rating valuations, for site land and capital value.
 - District Plan built form standards.
 - Development costs (provided by a Quantity Surveyor).
 - Development scenarios, based on typical higher density development outcomes and anticipated outcomes for new, more enabling, rules.
 - Data on house price sales is from the Council's valuation database and processed sales data supplied by Quotable Value. Further price expectation data is collated from real estate listings and similar sources for new development being sold off-plan or for the first time.
- 8.6. **Profitability assumption** - The profit margin tested for development scenarios is 20% profit. This is unchanged from previous housing capacity assessment. For comparison, profitability is tested at a lower expectation; appendix 5 provides the capacity from the same feasibility settings but with a profit margin expectation of 15%.

9. Assessment of High Density and Mixed-use

- 9.1. **Model methodology, inclusions and exclusions** - High density and mixed use development in the Central City, Town Centres and Local Centres is assessed using a methodology developed from the approach presented as evidence through Plan Change 14. The model focuses on sites that show a stronger potential for development based on the relationship of land value to improvement value of 80% or higher, with a particular focus on sites identified as vacant. Sites planned for key developments, or those in the Central City with heritage status, are identified and removed.
- 9.2. The overall approach is based on the extrapolation of the outcome of the sample site feasibility testing presented in evidence to PC14. The process, as set-out in the evidence, identified a sample of sites in high density and mixed use areas. These were amalgamated to form development sites in which several development typologies were developed using the built form and activity

standards of the zone. The outcome of this assessment was costed and tested for revenue to determine what sites and types of development may be considered feasible. For the wider assessment, the process was extrapolated to identify sites with similar characteristics to the sample sites and similar potential for development. A further explanation of the process can be found in Appendix 6.

10. Assessment of remaining capacity from greenfield subdivisions

- 10.1. Capacity in greenfield areas was fully assessed for the 2018 HCA. Since that time greenfield development has been underway across these areas, with the ongoing development activity signalling that these areas remain feasible. The monitoring of development activity and dwelling completions is used to estimate the remaining capacity based on a 15HH/Ha density assumption. No significant areas of new greenfield development have been made operative since 2018. New areas are emerging, and some are the subject of plan change requests⁶. However, as of September 2025, none have become operative. Once operative, any new areas will be tested for feasible development potential as part of a future HCA update.

11. Qualifying Matter influence on feasible capacity

- 11.1. The feasible development of sites may be influenced by one or more Qualifying Matters (QM). It is possible at a site level to determine if the overlap of a QM extent with a site is significant for development of the site. A partial overlap may be considered insignificant where the overlap is limited to the part of a site that is non-buildable such as within a boundary setback or an access strip. Where the overlap is with the buildable area of a site the overlap may be minor and preserve sufficient buildable area to still exceed the maximum building coverage for the site. The parts of the site that do overlap with a QM extent can still be used to provide for access, car parking, open space and landscaping requirements. These types of overlap are readily identified through spatial mapping processes.
- 11.2. For some QM the permitted development threshold is reduced by the QM. This will usually mean that a reduced set of development scenarios can still be assessed without the QM being a consideration. For example, where the height limit is reduced from three storey to two storey development only as permitted development, the feasibility test can be limited to two storey topologies only.
- 11.3. For sites where the spatial overlap of one or more QM extents is determined to be significant, the capacity emanating from these sites is flagged as being influenced by a QM. The total capacity from these sites is approximately 10,000 dwellings. Much of this capacity may still be realisable but may require an additional resource consent process to address the QM constraint. It is however difficult to quantify this further without recourse to a site-specific assessment which considers both the site and the details of the QM, particularly for sites where multiple QM are relevant.
- 11.4. The evidence provided to the Independent Hearings Panel on Plan Change 14 contains more detail on each QM and the potential impact on development⁷. Appendix 5 provides detail of the potential influence of Qualifying Matters on plan enabled and feasible capacity.

⁶ [Private plan changes : Christchurch City Council](#)

⁷ <https://chch2023.ihp.govt.nz/evidence>

12. Capacity not assessed or included in capacity total

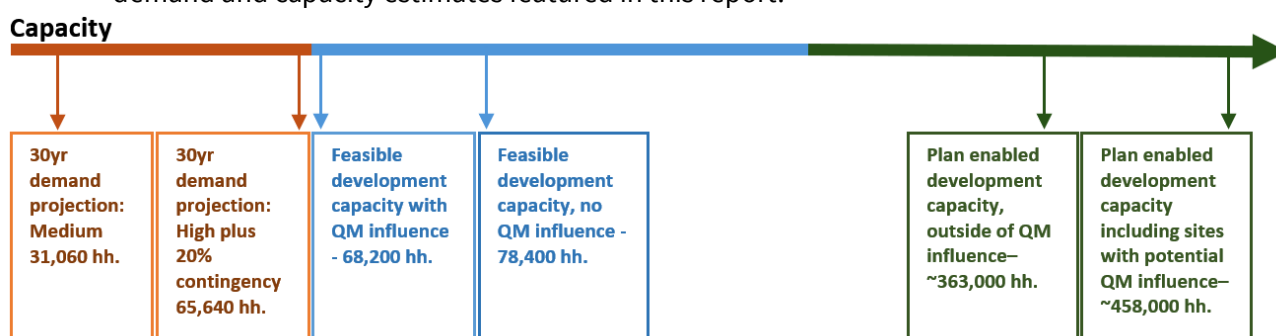
- 12.1. Housing capacity exists outside of the current scope of the capacity assessment methods. This potential capacity may be spatially separate, fall outside the current modelling parameters, or be from alternative approaches for development that either provide for not-for-sale supply, are non-commercial, or that increase the density of development. These potential sources of further capacity are provided in Table 5.

Table 5. Sources of housing capacity not assessed/not included in total capacity	
Source of potential capacity	Reason(s) for not assessing/including, commentary
Medium density development achieving margins between 15% and <20% (as assessment of this is provided in Appendix 3)	These outcomes are close to but do not meet the minimum 20% profit expectation. For some developers a 15% profit margin may be an acceptable level of risk. These developments are also indicative of potential capacity that may be realised when development conditions are more favourable.
Medium density development higher than permitted standards e.g. four storey development as Restricted Discretionary activity in precinct overlays.	Currently there is uncertainty over development response, uptake of provisions and any additional design and consent costs. Activity in this space will continue to be monitored and assessed for incorporation into future capacity assessments.
Banks Peninsula Residential Zones (other than Lyttelton)	Outside of the Christchurch Urban Area. Noting that the demand assessment does include this area.
Social housing and community housing, other alternative non-profit models (e.g. co-housing)	Not-for-profit non-commercial development falls outside the scope of the assessment.
Home owner led subdivision/build and minor dwelling units	Not-for-profit non-commercial development, falls outside the scope of the assessment. Future updates to the HCA may consider how to assess these developments for feasibility as long-term rental units.
Commercial non-sale, for rent, development (e.g. a developer retains ownership as a build to rent development)	It is outside the scope of the current modelling approach to assess the commercial feasibility of long-term rental yield model rather than immediate sale. These have the potential to broaden the range of housing typologies to better meet a broad range of housing demands. This may include high density apartment complexes and medium density small home complexes. Current consented examples in Christchurch include the development of multiple small units as infill (i.e. four new units on site with existing house retained). These are rented individually and held/managed under one ownership. Alternatively, a single multi-level building of small studio units, provided with balcony space and with no provision for parking. These types of development yield capacity at or above typical medium density outcomes, and likely have different dynamics for the developer when determining feasibility. Future updates to the HCA may consider how to assess contributions from the build to rent sector.

Brownfield developments ⁸ This includes large residential zoned sites that are/have been used for commercial activity.	Generally, larger sites that require site specific qualitative assessment to address likely site specific matters (e.g. land remediation for ex-industrial sites, new infrastructure costs).
City Centre zone, higher height typologies (above 19 storeys)	Outside of model capability and not addressed through PC14 evidence.
Alternative zone yield within school and hospital zones.	Require site specific qualitative assessment and timing is uncertain (sites where activity has already ceased are considered brownfield sites).
Site amalgamation – land assembly potential to increase overall yield. Medium density zone outcomes.	Spatially, the potential for site amalgamation has been assessed, however, there is uncertainty with accurately estimating additional process and holding costs associated with the amalgamation process. This capacity has consequently not been assessed and will be re-visited as part of the 2026 update.
Higher density greenfield scenarios (above the minimum 15HH/Ha)	Uptake of this potential and a feasible assessment is outside the current scope of the model. Greenfield housing yield can be up to 40HH/Ha across 20% of the total area, yielding 20HH/Ha average. While these density outcomes are observed, it is difficult to predict this outcome in the future with sufficient certainty to include in this capacity assessment.
Private plan change areas ⁹	Require site specific quantitative and qualitative land assessment and building feasibility assessment to confirm implied feasibility. Cannot be included as not operative zoned areas. Currently active private Plan Changes propose a total of 1,330 new dwellings (not reflected in capacity totals).

13. A spectrum for housing sufficiency (a summary of demand and supply)

13.1. The diagram below provides the relative positions on a broad supply spectrum of the housing demand and capacity estimates featured in this report.



⁸ Appendix 2 contains details of estimated yield (untested) from a small selection of example brownfield sites.

⁹ [Private plan changes : Christchurch City Council](#)

Appendix 1. Plan enabled capacity: Zone density outcome assumptions.

Table XXYX: Christchurch residential density theoretical and observed yields for the Operative District Plan Residential Zones			
Zone or overlay	Theoretical (HH/Ha)	Typical yields (HH/Ha)	Reasoning, observations on recent development outcomes, potential outcomes with changes to development approach.
Zones			
Residential Suburban	25	16	Theoretical – based on a 400m² minimum lot size – DPR 14.4.1.3 RD1. RS density across the city ranges between 7 and 25HH/Ha. Typical yield reflects average. A permitted development pathway for medium density housing within the built form standards exists for the zone as Older Person Housing (OPH) and community/social housing. A resource consent may also be sought to remove any tenure encumbrance from OPH developments. This outcome is not reflected in the theoretical density assumption but may be expected to yield a site density in the range of 30 to 60HH/Ha, dependent on typology.
Residential Suburban Density Transition (to be retained as an alternative pathway within the boundaries of the pre-PC14 zone, and in limited areas as the operative zone)	70	60	Theoretical - Potential from RSDT. The upper density reflects the potential for multi-unit development in the zone. Capacity yields over the last five years for multi-unit developments averaged 50HH/Ha, with more recent examples achieving over 70HH/Ha. Typical typology - one/two storey townhouse, 70 to 80 square meters, with a single carpark. Multi-unit is the most common redevelopment typology in the zone.
Residential Medium Density (to be retained as an overlay alternative pathway within the boundaries of the pre-PC14 zone,)	100	70	Theoretical - RMD modelling. Average consented yields over the last five years for multi-unit developments average 60-70HH/Ha. Typical typology - two/three storey townhouse, 70 to 105 square meters, single carpark. Developments that omit on-site parking can achieve densities of over 100HH/Ha. There are examples of this type of development, but current market outcomes suggest that developers will continue to provide some level of on-site parking for most developments.
Medium Density Residential Zone (operative in some areas since December 2024)	100	80	As a new zone, further monitoring is required to refine the assumed density outcomes. These are anticipated to be similar to RMD outcomes, with a greater allowance to more permitting rules. The assessment does not include overlay areas that are more enabling in height and recession plane allowances.

High Density Residential Zone (operative in some areas since December 2024)	120+ (Centres) to 150+ (Central City)	120	The Central City height overlay allows for greater building height in the Central City HRZ. Similar zone provisions in the Central City have achieved densities of more than 200HH/Ha for apartment development, 120HH/Ha for townhouse development (and higher for zero car parking developments). Applications for development outside the Central City, suggest densities of 130HH/Ha or more are achievable for low-rise apartments. Apartment typologies that use the height available as a restricted discretionary consent can readily achieve higher density outcomes (particularly in the Central City).
Residential New Neighbourhood	15-18	15	Rules require a minimum yield of 15hh/ha, with most greenfield developments in recent years yielding above the minimum. Density yield is based on the overall density of the Outline Development Plan area. Actual site or block density may be higher. Recent new neighbourhood developments have incorporated areas of medium density housing at 30HH/Ha or higher.
Residential Hills	17	10	Based on a 585m ² minimum lot size – DPR 14.7.1.3 RD1. Density varies considerably across the zone dependent on topography and other constraints.
Residential Large Lot	7	7	Based on a 1350m ² minimum lot size – DPR 14.9.1.3 RD2
Residential Banks Peninsula	25	15	Based on a 400m ² minimum lot size – DPR 14.8.2.1 a. i. Density varies considerably across the zone dependent on topography and other constraints.
Residential Small Settlement	10	10	Based on a 1000m ² minimum lot size – DPR 14.10.2.1 a. i.
Central City Mixed Use	200	200	Potential density, based on an approximate middle of the range of densities delivered in the zone.
Central City Zone	200	200	Potential density, based on an approximate middle of the range of densities delivered in the zone.
Mixed use	150	150	Estimated based on potential outcomes in the zone.

Appendix 2 Assessment of the Impact of Qualifying Matters on housing capacity.

Qualifying Matters in the Operative District Plan are set out in Table Appendix 5.1. A detailed explanation of the range of Qualifying Matters and their effect can be found in Part 2 of the Section 32 Assessment for Plan Change 14. Detail on each Qualifying Matter may be found the Council evidence for PC14. The Council has accepted the PC14 IHP recommendations for Qualifying Matters¹⁰.

Points to note for interpretation of this assessment:

- Some sites overlap more than one Qualifying Matter. Capacity figures are not cumulative, and the impact of each Qualifying Matter is assessed and reported independently of other Qualifying Matters.
- The presence of a Qualifying Matter does not necessarily mean lost capacity and development may still be possible.
- Spatial overlaps of a Qualifying Matter with a site can be partial and insignificant on the buildable area of the site, and such overlaps may remain available for other uses (e.g. access, open space, landscaping).

¹⁰ <https://chch2023.ihp.govt.nz/assets/IHP-Report-/IHP-Recommendations-Report-Part-5-29-July-2024.pdf> and <https://chch2023.ihp.govt.nz/assets/IHP-Report-/IHP-Recommendations-Report-Part-4-29-July-2024.pdf>

Table Appendix 2.1 – Plan enabled capacity and feasible plan enabled dwelling capacity, Qualifying Matters (QM) assessment.

Modelling approach:	Yield calculated as per table 3. Yield total is based only on intersection of QM extent with applicable zone.	Site level assessment.	
Qualifying Matter Name	Assessed Plan Enabled capacity for zone area within the QM extent (reported as Dwellings Gross)¹¹ Totals are rounded and not cumulative.	Feasible plan enabled capacity for sites or portion of sites that are within the QM extent¹² (net of existing)¹³. Sites where the overlap is insignificant are excluded. Totals are rounded and not cumulative. <i>Where applicable, the capacity from a more restrictive permitted activity is provided with commentary in italics (i.e. capacity not impacted by QM).</i>	For detail of the assessment of the impact of QM please refer to PC14 evidence and S42a reports. Comments or alternative enablement, noting any relevant changes to the QM following the IHP recommendations.
Sites of Ecological Significance s77I(a),s77K	200	<100	
Outstanding Natural features and Landscapes s77I(a),s77K	100	<100	
Wāhi Tapu / Wāhi Taonga s77I(a),s77K	Site specific and item specific assessment required. (12,500 from the areas within the Cultural Significance spatial extent)	Site specific and item specific assessment required. No feasibility impact assessment undertaken. (1,800 contained within the Cultural Significance spatial extent)	

¹¹ Assesses overlap of QM extent on urban block. Actual capacity loss may be subject to site specific considerations or avoided with use of a resource consent to mitigate adverse effects or demonstrate that they are avoided (in particular for sites with a partial overlap with a QM extent). Dwelling totals based a narrow set of potential development outcomes. Total yield may increase or decrease if different development typologies are tested.

¹² Estimated feasible development for sites where QM extent intersects site and potentially impacts on capacity. Sites where the QM extent overlap is partial or insignificant can be feasible for development (e.g. overlap is with access driveway or within required street/boundary setback; i.e. not affecting buildable area).

¹³ Feasible capacity estimates are reported as net totals of existing development except where the capacity is from infill development outcomes where the original dwelling is retained on site (i.e. the total is a mix of gross and net depending on the development outcome).

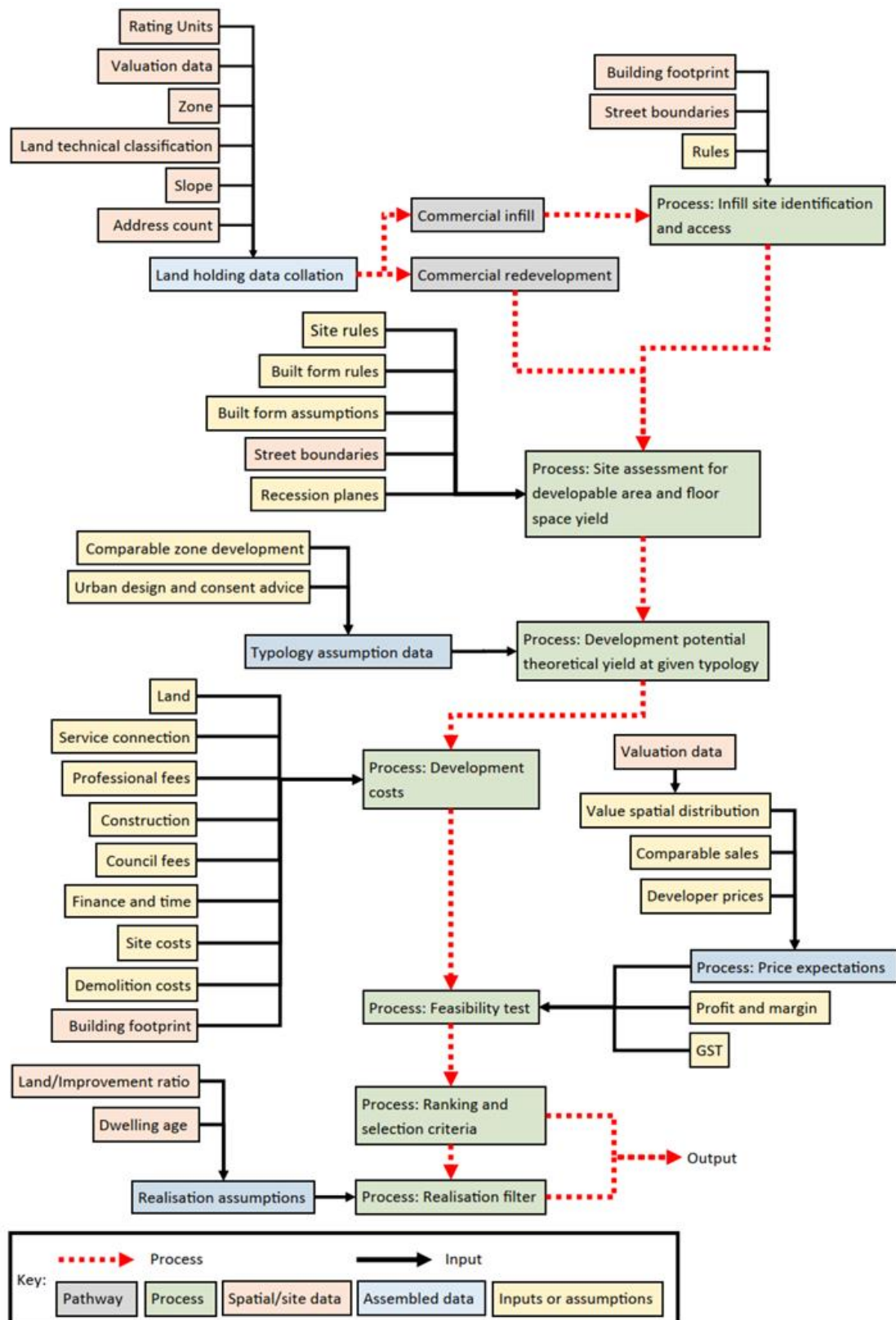
Heritage items and settings s77I(a) – Existing, Removed and New	6,600	260	
High Flood Hazard Management Area s77I(a),s77K	1,700	150	
Flood ponding management area ¹⁴ - s77I(a), s77K	2,600 <i>(note: impact is confined to greenfield areas. Greenfield planning addresses constraint)</i>	<100 <i>(note: impact is confined to greenfield areas and reflected in greenfield total)</i>	
Slope Instability High Hazard Management Areas - s77I(a), s77K	1,500	<100	
Waterbody Setbacks - s77I(a), s77K	8,100	1,200	
Significant and Heritage trees - s77I(a),s77K, s77I(j)	1,100	<100	
Coastal Hazard Medium and High Risk Management Areas ¹⁵ - New s77I(a), s77K and s6(h) (includes high erosion extents)	7,300	590	
Tsunami inundation areas	21,500	1,850	
Residential Heritage Areas New s77I(a), s77K and s6(f)	3,000	370	
Lyttelton Port Influences Overlay - s77I(e), s77K	<100	<100	
NZ Rail Network building setback - s77I(e), s77K	300	<100	

¹⁴ The estimate excludes areas currently zoned Residential New Neighbourhood (i.e. greenfield) but does include some large areas to the south of QE2 drive which are zoned for residential activity under the operative plan but still show as undeveloped and/or are now open space, for example Buller Stream.

¹⁵ Combines Medium and High risk areas.

Electricity Transmission and Distribution Corridors - s77I(e), s77K	900	230	
Radio Communications Pathways - s77I(e), s77K	200	<100	
Christchurch International Airport Noise Influence Area - s77I(e), s77K	23,400 <i>No impact on plan enabled capacity at permitted maximum (3 dwellings/site)</i>	3,378 <i>Feasible Plan enabled capacity at permitted maximum (3 dwellings per minimum 400m2 site), not allowing for subdivision: 220 in MRZ/HRZ zone.</i>	Four or more new units are restricted discretionary activities limited to managing reverse sensitivity effects through compliance with insulation and ventilation requirements.
Residential Character Areas - s77I(j) – reduced spatial extents	7,000	900	IHP recommendation for reduction in extent of RCAs and operative RCA overlays to be retained. Controlled activity consent required for design matters only.
Vacuum sewer wastewater constraint - s77I(j)	11,900	1,250	
Industrial Interface	4,200 <i>No impact to plan enabled capacity at permitted maximum (2 storey typologies).</i>	880 <i>Feasible Plan enabled capacity at permitted maximum (2 storey typologies): 750.</i>	Plan-enabled and feasible development to two storey is permitted. Resource consent for higher typologies to address reverse sensitivity.
Designations	3,300	<100	

Appendix 3: Intensification feasibility model process diagram



Appendix 4: Examples of brownfield sites not included in feasible capacity totals.

Note: Development for residential use of the sites identified below is not confirmed. Proposed yields are based on publicly available information. Yield estimates are based on site area.

Example of large site development potential		
Site	Description	Stage and potential plan enabled yield or reported yield
Sydenham Yard, Sydenham.	Former city depot and council housing complex. Zoned for High Density Residential and Industrial.	In design. Proposal is for 80 medium density dwellings.
Princess Margarets Hospital, Cashmere.	Closed in 2024. Zoned as Special Purpose Hospital, alternative zone RSDT.	Yield unknown. Large site(>9Ha) with existing multi-level (>6) buildings. Alternative zone allows for housing. Assessment based on area and utilising existing height: Potential for an estimated 400 dwellings.
Former Central New Brighton School, New Brighton.	1.6 ha site. Alternative zone RSDT.	In development. Anticipating 76 to 86 homes.
Former Christchurch Women's Hospital Site, Central City.	2 ha site. Alternative zone HRZ.	Yield unknown. Development within alternative HRZ zone may yield potentially 200 or more dwellings.

Appendix 5: Feasible capacity assessment, impact of changed assumptions.

Table 5a below repeats table 4 in the body of the document. The outputs provided in the table are after adjusting the profit expectation to 15%. This assessment adjusts medium density outcomes in the Medium Density Residential Zone and High Density Zone only.

Table 5a: Estimated Feasible Housing Capacity Minimum (range shown for with and without QM adjustment) 15% profit margin.	
Housing Capacity Assessment Source	Estimated Feasible Capacity
All residential zones: Medium density intensification	61,700
Greenfield remaining capacity	7,600
High density Residential Central City	4,500
Mixed-use apartment City Centre Zone	5,300
Total	79,100 (range: 79,100 to 93,100)

Table 5b below repeats table 4 in the body of the document. The outputs provided in the table are from all sites regardless of the land value to capital value ratio. In this scenario, all sites showing a feasible outcome are assumed developable in the long term, i.e. over 30 years. Profit expectation is retained at 20%. This assessment adjusts medium density outcomes in the Medium Density Residential Zone and High Density Zone only.

Table 5b: Estimated Feasible Housing Capacity Minimum (range shown for with and without QM adjustment) No land value filter.	
Housing Capacity Assessment Source	Estimated Feasible Capacity
All residential zones: Medium density intensification	57,700
Greenfield remaining capacity	7,600
High density Residential Central City	4,500
Mixed-use apartment City Centre Zone	5,300
Total	75,100 (range: 75,100 to 87,500)

Appendix 6: High density feasibility method detail.

Introduction

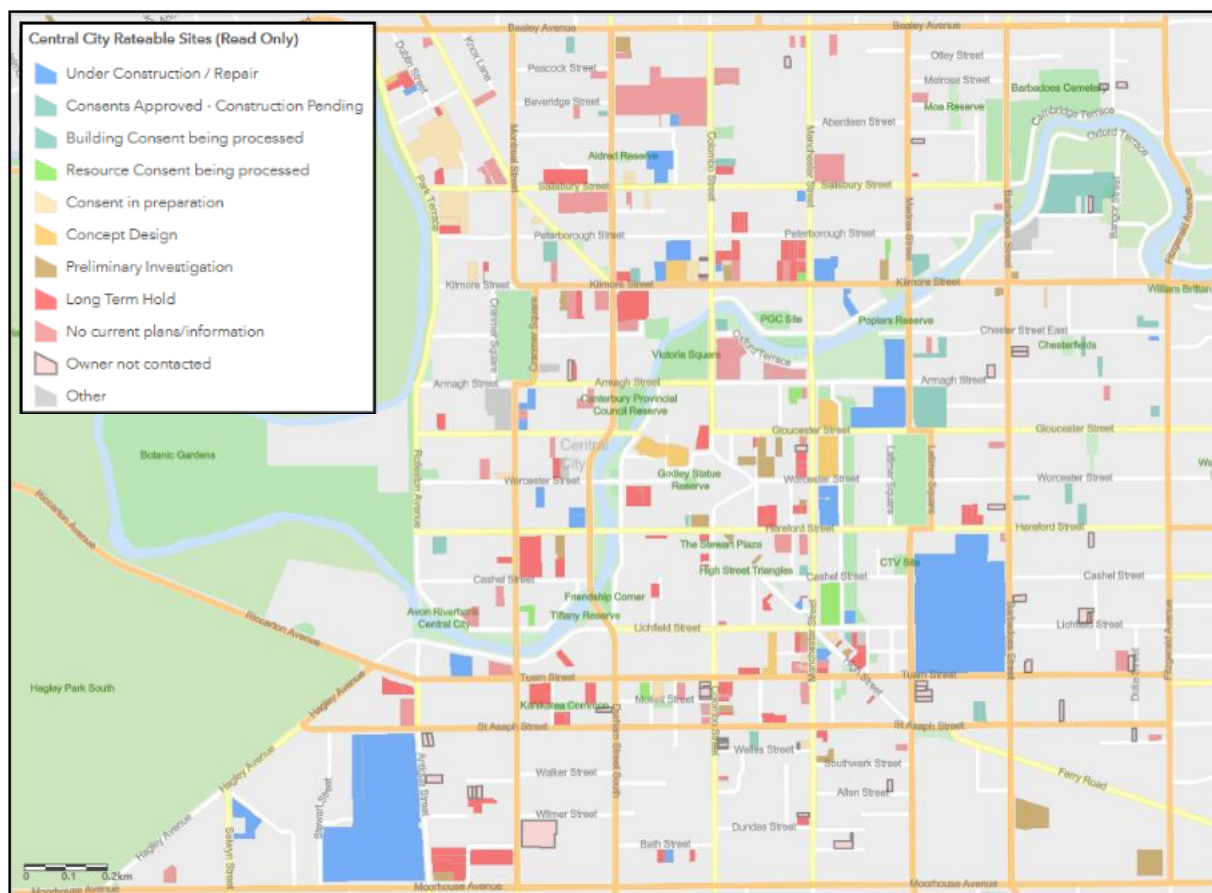
The following details the modelling process to calculate potential commercial feasibility of mixed use development in commercial zones and the feasibility of high density residential development in the Central City Residential Precinct, utilising feasibility evidence presenting through Plan Change 14. This focuses on the City Centre zone (CCZ), Town Centre zone (TCZ), Local Centre zone (LCZ), and the High Density Residential Zone as it replaces to the Central City Residential Precinct. This evaluation was completed in May 2025.

Central City Zone – Mixed Use feasibility process

Input data for CCZ mixed use begins with joining rating information for land value and improvement value and comparing the value ratio of improvement value against land value.

Sites that have an improvement value of 0.8 or less of the land value are included (80% LVR) in the evaluation. This provides a benchmark of where there it is likely viable to demolish any existing buildings or structures in order to redevelop the site.

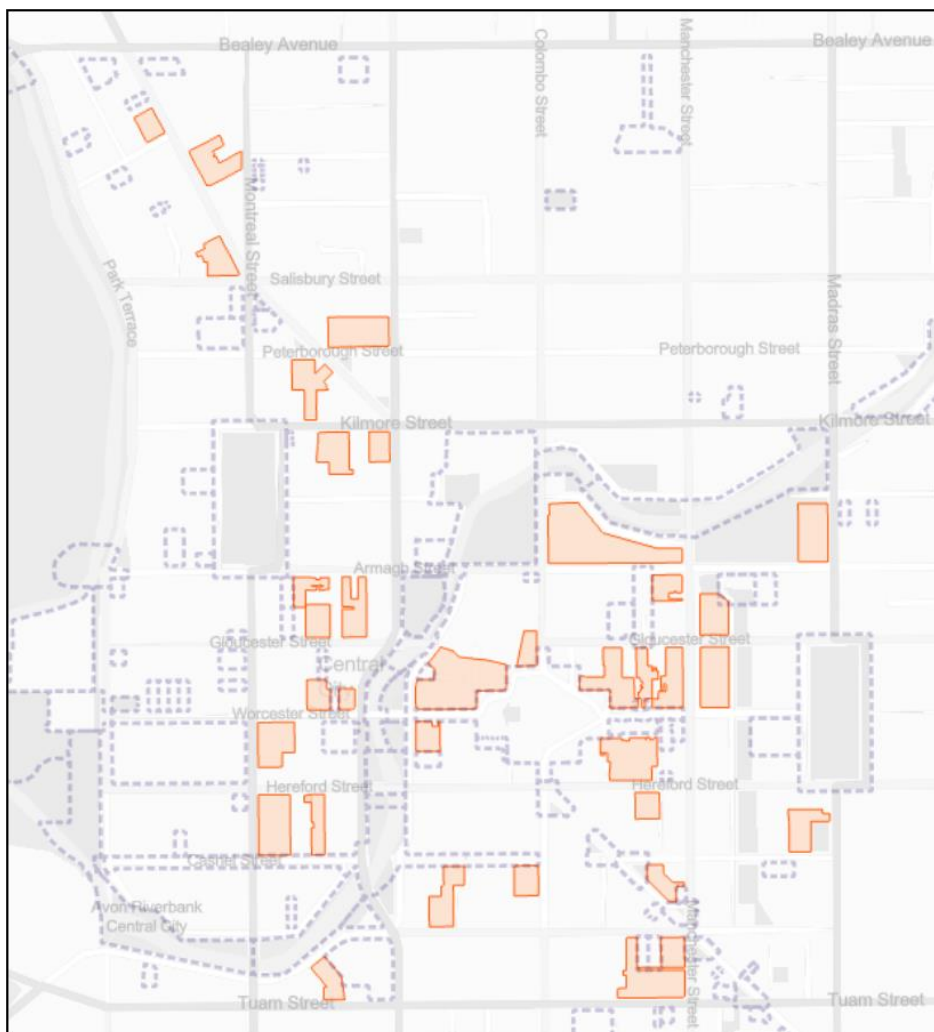
Key development sites are removed, such as Te Kaha One New Zealand Stadium and Parakiore Recreation and Sports Centre. Consenting information and land status was further compared against Council's city centre site data used to monitor the [City Vacant Differential Rate](#), as illustrated below (retrieved June 2025):



Adjoining parcels were then merged to create amalgamated sites that may (collectively) result in sufficient space to develop. This resulted in an initial 729 parcels, which were then further distilled to economically-developable sites. These individual sites had any adjoining 80% LVR site boundaries dissolved to create amalgamated blocks that may have a greater potential for containing larger buildings.

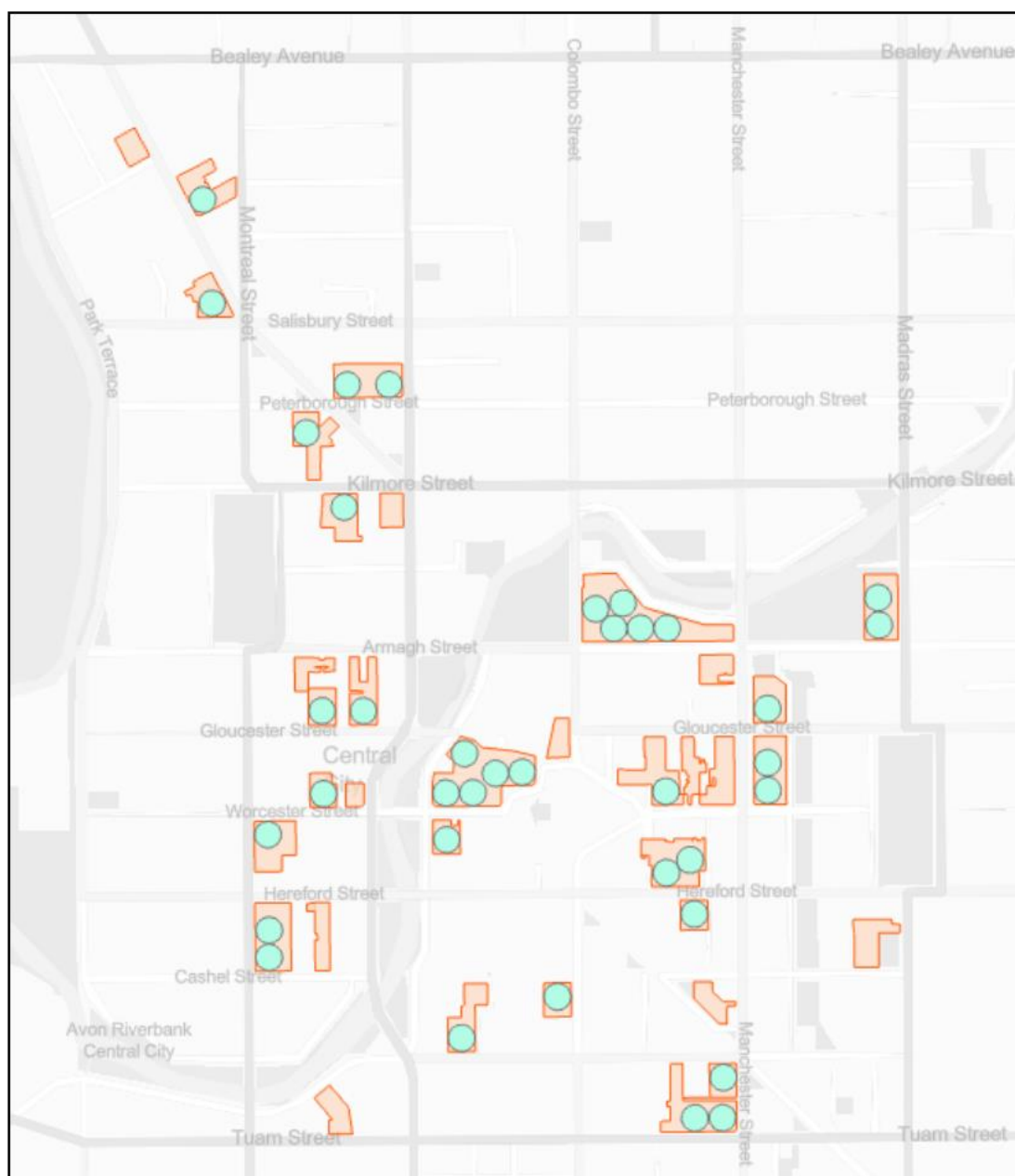
The 'development site' used for feasibility modelling was based on previous economic reporting on PC14. This was completed by The Property Group¹⁶, which modelled mixed use feasibility on the site at 78 and 82 Worcester Street, having a combined area of 2,040m² with a dimension of approximately 40 x 50m. For this modelling exercise, a 40m diameter circle was used to model where mixed-use building sites as the amalgamation process was anticipated to leave residual areas that, in practice, would be able to accommodate a similar scale of building.

The final process was to remove areas within a heritage setting (qualifying matter) or who, after amalgamation, were too small to accommodate scale buildings. This produced 33 larger amalgamated sites able to be developed, as shown below, with heritage settings in background:



¹⁶ Ruth Allen (2023). Statement of primary evidence of Ruth Allen on behalf of Christchurch City Council. Commercial Feasibility – High density residential development (page 32 of PDF). Available here: [13-Ruth-Allen-Statement-of-evidence-final.PDF](#)

Next, circles with a 40m dimension were drawn and tested on each dissolved shape to determine the number of prospective units could be developed across an amalgamated development site.



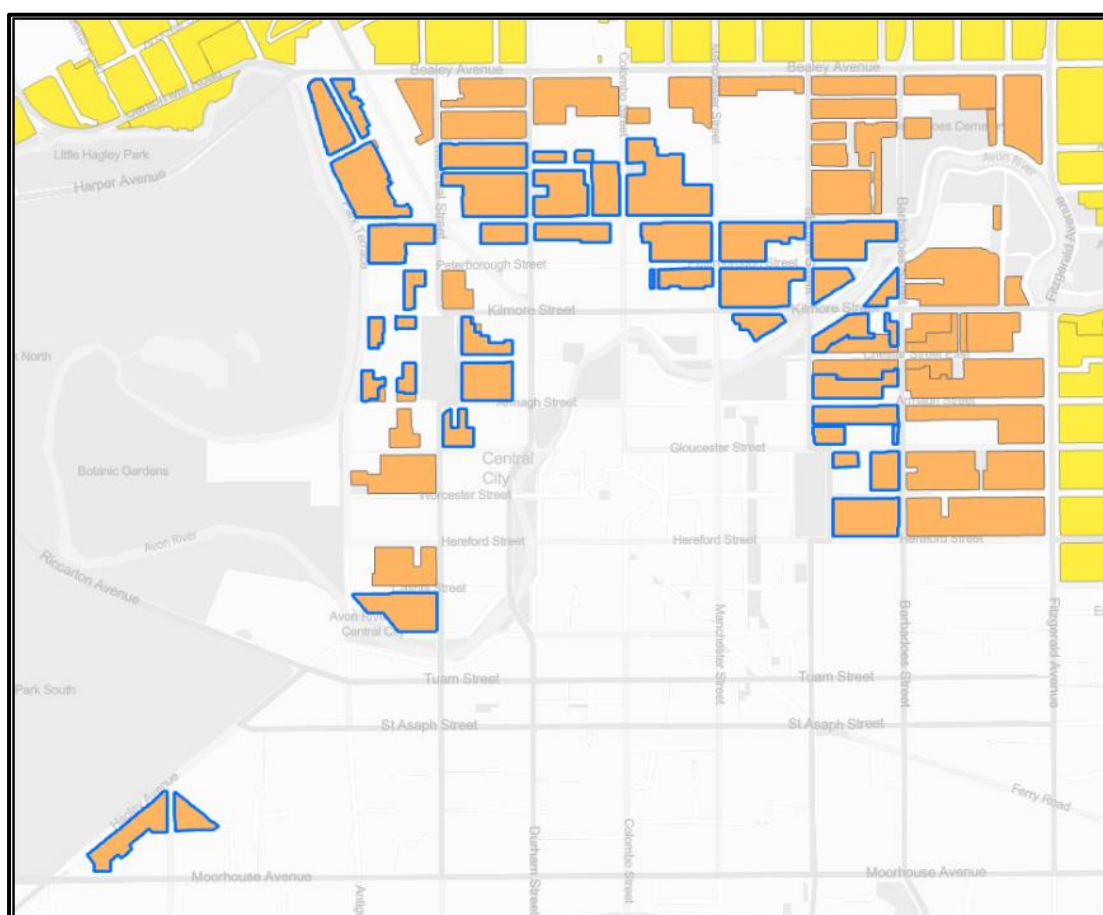
The above approach generated 41 prospective building sites. However, once heritage items and settings (qualifying matters) were considered, this was reduced to 37 prospective building sites. Applying the Property Group model of 144 units per building, generates just **over 5,300 residential units**. In reality, it is reasonable to expect that some of these amalgamated sites would be developed by multiple parties, given the likely considerable financial outlay, albeit that the net housing result would remain the same. It is also noted that the model is based on the evidential model of The Property Group, which is limited to a 60m (19 level) typology, and that greater heights may also be feasible but are unexplored for this assessment.

This approach is also considered a conservative approach due the degree of modelled undeveloped area across amalgamated sites. Total coverage of modelled building areas is approximately 37% of the sum of amalgamated sites, leaving a total 8.7ha undeveloped modelled land. It is conceivable that building placement for the given context would lead to a more efficient use of development sites (e.g. as an

aggregate, the housing yield would double the above modelled yield, based on the sampled site size of 1,920m²). However, this has not been factored into the total stated feasible yield due to the use of a fixed typology, as per the Property Group evidence.

Central City Residential Precinct

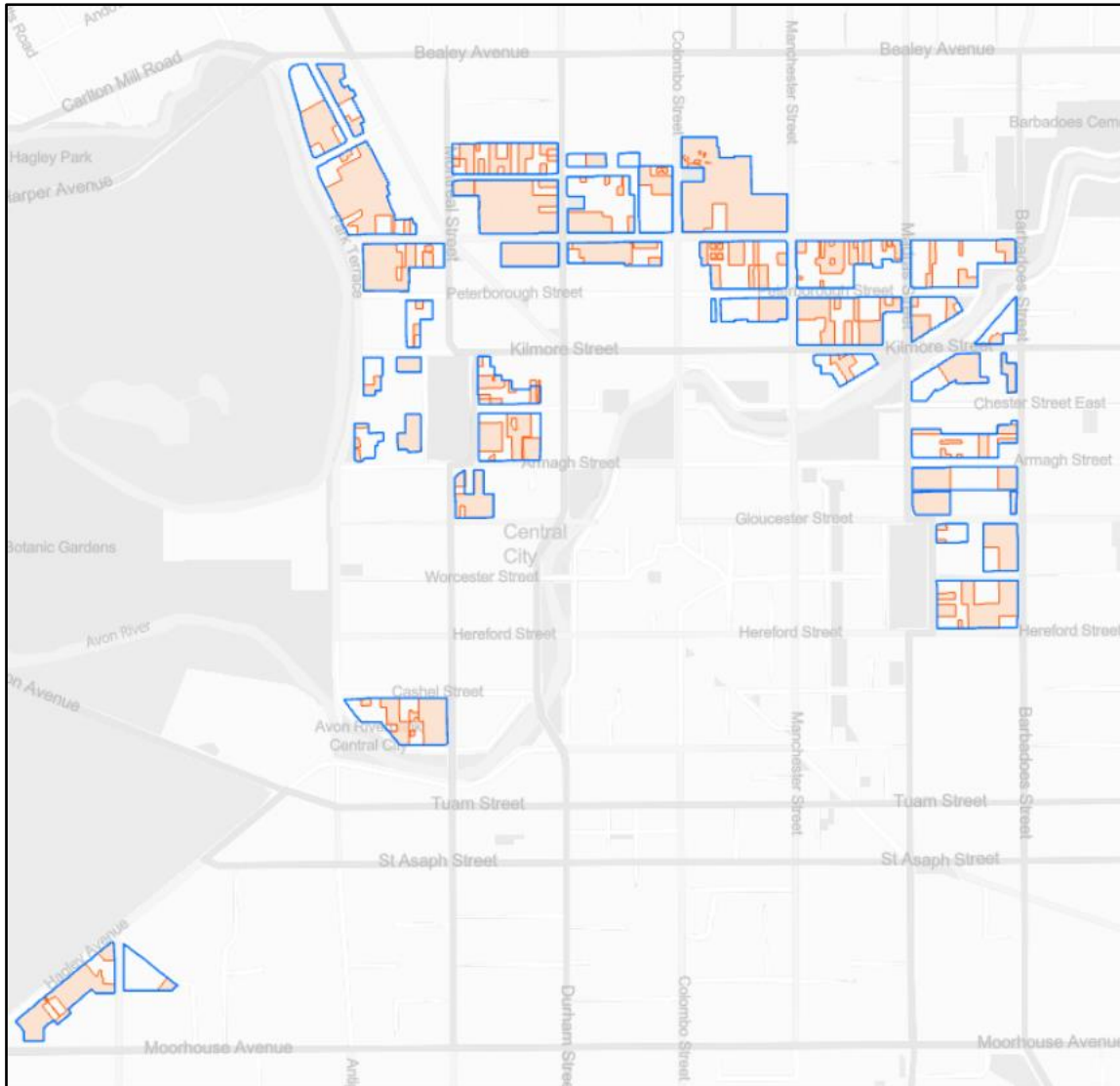
High density residential feasibility evidence by the Property Group¹⁷ provided as part of Plan Change 14 demonstrated that such development was only feasible within the Central City Residential Precinct (CCRP).



The above image shows the extent of High Density Residential zoning in orange, with Medium Density Residential zoning in the surrounds. Those parts within the CCRP are shown in a blue outline, denoting where the increased (39m) permitted building height precinct is applied, allowing for 12-storey development.

As per the CCZ approach, sites with an LVR of 80% were selected within the CCRP spatial extent, with adjoining boundaries dissolved to create amalgamated sites for scale high density development.

¹⁷ Ruth Allen (2023). Statement of primary evidence of Ruth Allen on behalf of Christchurch City Council. Commercial Feasibility – High density residential development (page 34 of PDF). Available here: [13-Ruth-Allen-Statement-of-evidence-final.PDF](#)

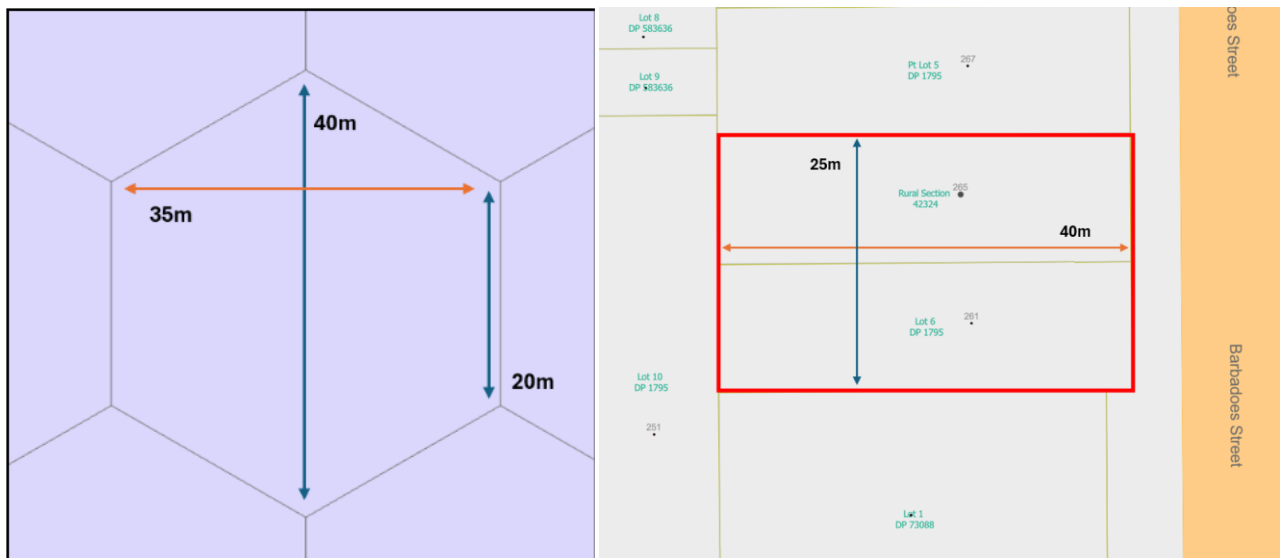


This generated just over 100 amalgamated sites, with an average site size of 2,000m² and a total sum area of 23.4ha.

ArcGIS Pro tessellation tool was used to manage an area of this scale. This tool generates a grid of a given shape and size over the complete spatial extent of a given area. This is useful to evaluate how many of a specific square building, for example, could fit over an area. However, the tool is limited in this regard due to its inability to align a grid with a given polygon, such as a parcel.

Testing was initially undertaken with a square shape, however ultimately found to be inferior due to its inability to reflect narrow deeper sites typical of the Christchurch context and of the test example used by the Property Group in feasibility reporting. Feasibility reporting adopts an amalgamated site of 25m wide and 40m deep.

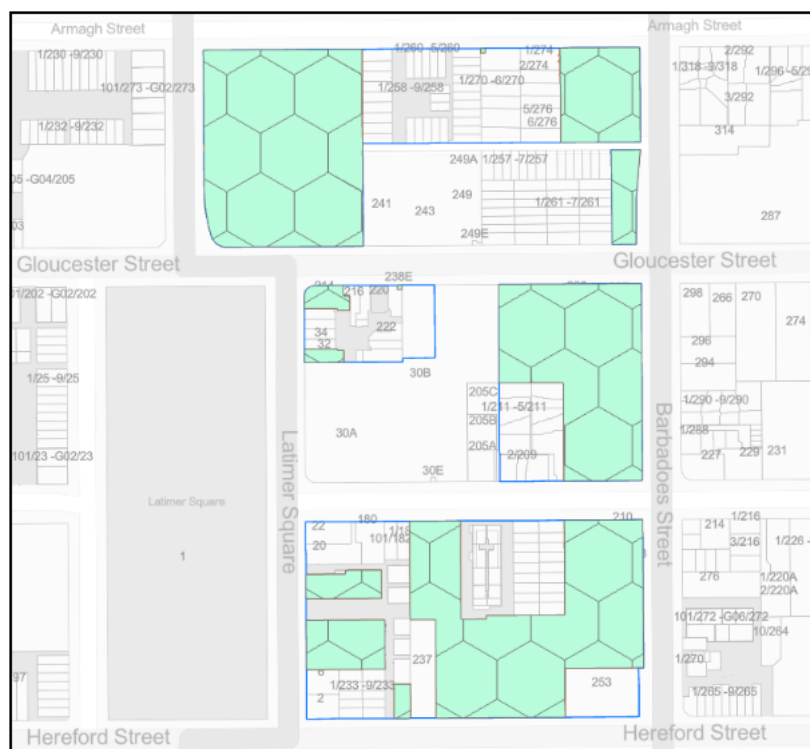
The traverse hexagon tessellation was found to best reflect a rectangular shape. The following shape dimension was selected:



In the above, the modelled tessellation used is on the left, compared with the development site used by The Property Group for which this has been modelled.

The above dimension accounts for the modelled site depth and inflates the required 25m width of the hexagon to account for the sloped top and bottom edges, which a rectangular shape would otherwise provide for.

Traverse hexagon tessellation was generated over the CCRP total extent and clipped to the amalgamated 80% LVR sites.

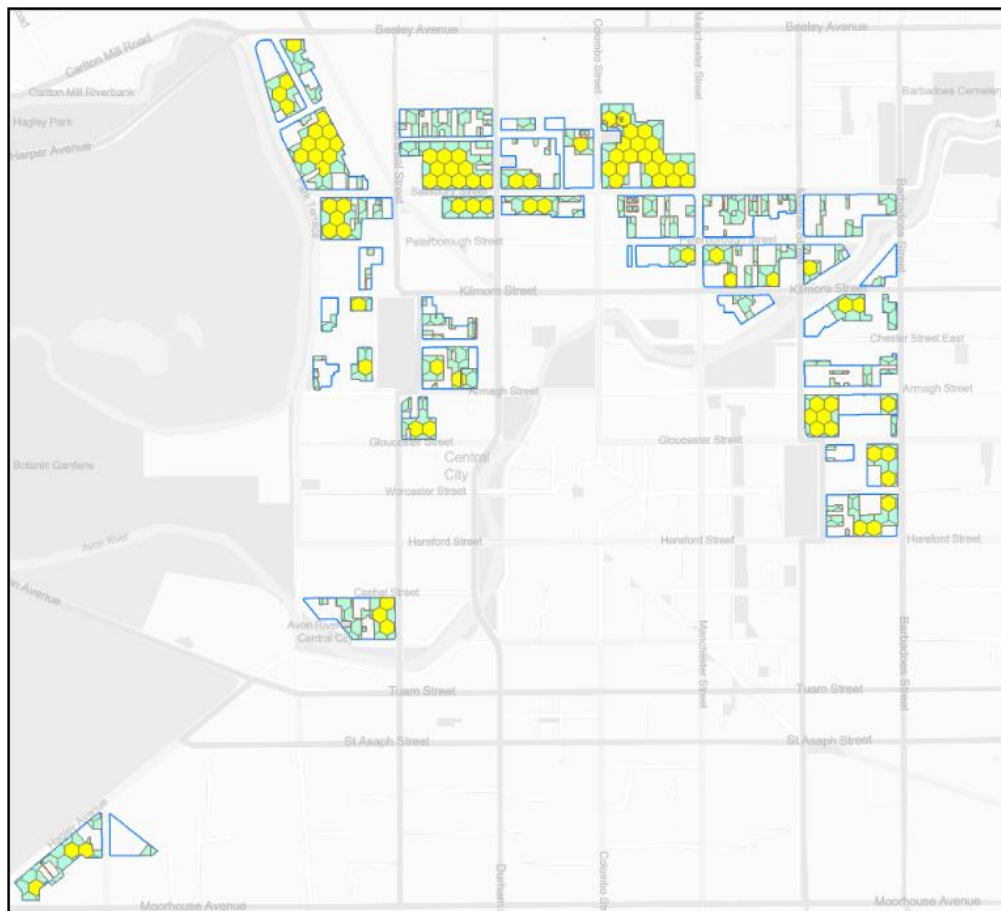


The above provides an example of how the hexagonal grid intersects with amalgamated sites and demonstrates the modelled 'mismatch' with each amalgamated site.

To provide a more realistic outcome, those hexagons representative of at least 85% of their original area were retained, as illustrated in yellow below.



The full outcome at a CCRP extent of 80% LVR amalgamated sites is shown below.



The 85% area approach is considered appropriate as the grid is indifferent to the fit of amalgamated sites and therefore there is likely to always be 'residual' tessellation that would reasonably make up the required site sites.

A total of 90 sites were found using the above approach. Using the modelled typology of 50 residential units per building provides for total of **4,500 residential units** (being a net density of 192 hh/ha). As above, this is likely a conservative yield given that site-specific context is not accounted for and a more efficient and/or comprehensive use of sites would increase total yields.

Mixed use development in Commercial Centres

Plan Change 14 has further enabled development across every commercial centre zone across suburban areas, as summarised in the following table:

Centre Type	Location	Council Decision: Commercial height	Council Decision: Residential surrounding height
City Centre	Christchurch CBD	22-45m+	22/39m
Large Town Centre	Papanui	32m	14m
Large Town Centre	Riccarton	32m	14m
Large Town Centre - Hornby	Hornby	32m 22m	14m 12m
Town Centre	Shirley	22m	14m
Town Centre - Linwood	Linwood	22m 20m	14m 12m
Town Centre	North Halswell	22m	12m
Town Centre – Belfast/Northwood	Belfast /Northwood	22m	14m
Larger Local Centre	Merivale, Sydenham, Church Corner	22m	14m
Local Centres	About 30 centres	14m	MRZ – 12m
Local Centre – Peer Street	Peer Street	14m	MRZ – 12m Operative, RS/RSDT 8m
Neighbourhood Centres	Numerous	14m	MRZ – 12m

In the above, those cells in a red shade indicate where high density residential zoning is also provided surrounding centres, further enhancing development prospects across these 10 centres.

Commercial rules for each of these centres permit the development of residential units above ground level. It is therefore considered that the mixed use potential of development in these areas should be considered in the overall make up of residential capacity provided across the city.

The Council's commercial centre lead, Mr Kirk Lightbody, evaluated the total above ground floorspace capacity of commercial centres in Appendix 8 of his [s42A report](#) (from page 204 of PDF). Reporting summarises the following above ground residential capacity across Town and Local centres:

Commercial Centre	ha	m2
All Town Centres theoretical capacity	656.8	6,568,000
All Local Centres theoretical capacity	444.6	4,446,000
TOTAL:	1,101.4	11,014,000

Modelling feasibility mixed use capacity has historically been challenging as such developments are more dependent on local context and other variables that are difficult to cost and accurately account for. Arguably, the two main reasons for this are, firstly, the anticipated building consenting costs and complexity with managing the transition between a residential and commercial premises, and second, the engineering requirements and disruption caused to commercial tenants for any development above established buildings. In this regard, this modelling is based on additional development on established sites, rather than vacant lot development or comprehensive redevelopment of a site.

With the above in mind, the following breaks down the various assumptions made to determine feasible residential capacity.

Any development over established commercial centre zones are assumed to either have been constructed above existing commercial buildings or new, fit-for-purpose, premises constructed over unoccupied land. Existing occupation of commercial sites is highly variable and context dependent, with some areas completely covering a site, or others leaving large areas of parking, including parking buildings integrated with commercial developments. For this exercise, a 50% reduction in available floor area has been applied to reflect this variability as an assumed area that could be viable for further development. This is likely to a conservative approach as there is no District Plan restriction on building coverage across commercial centre zones, or proportional parking requirements, save for mobility and loading areas, therefore any such development could therefore simply expand horizontally before progressing with vertical development (noting that residential must still be above ground floor).

In terms of GFA per unit, the Property Group's high density residential feasibility reporting works on an assumed 62.3m² GFA per unit. However, it is considered that such a typology is likely to be more desirable in higher density environments surrounding the city centre. Council's Built Environment Reporting reports that the average floor area per unit over the last 5 years has been 103m² for multiunit developments. For the purposes of this modelling, an average of these two has been assumed (83m²) and inflated by 25% (about 21m² per unit) to account for internal building access and any outdoor living areas, totalling 103m².

At the modelled GFA of 103m² against an assumed available floor area of 5.5 million square metres, produces **53,304 residential units** that could theoretically be possible.

However, assumptions need to be made about the commercial viability of such developments. Given the aforementioned issues with such mixed use development, a more conservative approach than residential reporting is appropriate. Typical feasibility reporting for HBA's and alike tend to deliver a feasible yield being 10-15% of what is theoretically possible. The modelling undertaken for PC14 demonstrated that 14.7% of the theoretical 934,000 Plan Enabled yield was commercially feasible. A percentage that is approximately half this is therefore considered reasonable. This is still considered conservative, as the total theoretical floor area has already been reduced by 50% for this exercise, and total yield could therefore be much higher. At 7%, the total assumed feasible yield would be **3,731 residential units**.

SUMMARY OF MODELLED YIELDS

Source	Modelled feasible residential units
City Centre Zone, mixed use development	5,328
Central City Residential Precinct, 12-storey apartments	4,500
Commercial Centres, mixed use development	3,731*
TOTAL FEASIBLE	9,828

*Untested through economic feasibility and therefore not counted towards total.

Appendix 7 Capacity Assessment: Caveats and contextual considerations.

1. The modelled results provide a range of possible scenario outcomes. They are not however the exhaustive output of all possible outcomes. Other scenarios, using different model inputs may be considered and therefore the context of each scenario (the parameters of the model run) should be understood and carefully considered.
2. Estimating a price for completed dwellings across a wide range of potential sizes and typologies is fraught with opportunity for error resulting in over or understating dwelling prices. Sales data provides a useful starting point but has limited resolution for the detail, particularly around quality of build. Dwelling size is recorded in sales data but again this is only an indicative measure that does not account for shared space or how a dwelling may be set-out (e.g. to determine the number of bedrooms). Furthermore, the new dwelling typologies possible with the MDRS and other more enabling provisions are yet to be tested widely in the Christchurch market. The theoretical densities achievable under the new standards are higher than the typologies tested in the model. Ongoing monitoring of development outcomes will determine if adjustment to the tested typologies are supported for future capacity assessments.
3. Build costs have been standardised and applied to all developments, with some variation for different typologies and known development conditions for which costs can be separated. For individual developments, the square metre build cost will vary within typologies as well as between typologies. For example, all other factors being equal, the relationship between wall area and roof area is such that an apartment block on a regular shaped square site will be a lower cost to construct than a similarly sized apartment block on an irregular shaped or thinner, rectangular shaped site. As modelled, the feasibility assessment does not take site shape into account and any implications this may have on building complexity. To do so would require a more detailed spatial model and further work to estimate a wider range of estimated costs to for a wider variety of development typologies.
4. Building costs used in the feasibility model for this update are based on those from Quarter 1, 2025.
5. The skills, attributes and capacity of the developer can be a significant factor in development. The model does not differentiate across different scales of development companies or account for different types of construction techniques or processes that a developer may be able to bring to a project. Developers may be able to reduce or minimise certain costs where economies of scale may be realised or some functions are undertaken in-house, in so doing helping to reduce fees or professional costs. Other developers may be in the position to minimise borrowing costs or minimise the additional cost of capital that must be applied to various components of development through, for example, the minimisation of contingencies through project management and cost controls. Developers focusing on a very limited range of site and building typologies can be more confident in controlling costs and lowering project risk. Ultimately, these factors may translate into lower risk for the developer and a willingness to accept reduced profit margin expectation at project outset. In summary; a particular project may be feasible for one developer, but not for another.
6. The demand methodology relies upon Stats NZ unconstrained population projections where externalities such as planning interventions, capital works improvements, Government policy, unforeseen global and social change and future technologies are unable to be factored into the 30 year projections.
7. The model is a two-dimensional assessment that does not account fully for the effects of three-dimensional development constraints. These include, for example, the effects of slope across a development site or between development sites. The impact of slope is particularly significant for development sites in the Residential Hills and Residential Banks Peninsula zones. Consequently, the feasible capacity results for the Port Hills and Lyttelton Harbour area should be considered to have a significant margin of error.