

PROPERTY **E**ECONOMICS



**COMBINED WAIRARAPA
COMMERCIALY FEASIBLE
RESIDENTIAL CAPACITY
ASSESSMENT**

Client: Masterton, Carterton and
South Wairarapa Councils

Project No: 52249

Date: July 2023



SCHEDULE

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1. INTRODUCTION

Property Economics has been engaged by the Combined Wairarapa District Councils¹ (CWDC) as part of a wider Wellington region residential capacity project to undertake an assessment of the commercially feasible residential capacity (supply) of the Wairarapa Districts within the context of Council's obligations under the National Policy Statement on Urban Development (NPS-UD).

The purpose of this report is to provide the CWDC with robust market intelligence to assist in making more informed and economically justified decisions in regard to the design and implementation of a residential policy framework for the District Plan and other strategic planning documents.

This report discusses the work undertaken by Property Economics in analysing the existing theoretical residential capacity of CWDC and developing a capacity model for calculating the level of feasible development within the areas. This will inform policy makers on the feasible level of housing supply, and which areas are able to accommodate future residential development based on current zonings, policy settings and market parameters.

1.1. GLOSSARY

- **Theoretical Yield / Plan Enabled Capacity** – The total number of properties that could be developed under the proposed IPI Medium Density Residential Standards provisions within the permitted building envelope, irrelevant of market conditions.
- **Comprehensive Development** – A development option that assumes the removal of all existing buildings for a comprehensive redevelopment of the entire site with less restrictions.

¹ Masterton District Council, Carterton District Council and South Wairarapa District Council

- **Infill Development** - A development option that assumes the existing building is retained, and new residential house(s) are developed on balance of the site (i.e., the backyard).
- **Standalone House** – Single detached dwelling.
- **Terraced** – Dwellings that are attached horizontally to other dwellings but not vertically. This typology is always built to the ground floor (i.e., does not include homes built above retail stores).
- **Apartments** – Dwellings that are attached vertically and potentially horizontally. Usually in multi-storey developments of higher density.
- **Total Yield**- The total number of dwellings developed.
- **Net Yield** – The total number of dwellings constructed net of any existing dwellings removed. For Infill development, the total yield is equal to the net yield, while for Comprehensive development the net yield is equal to the total yield less the existing dwellings.

2. THEORETICAL (ENABLED) CAPACITY

Property Economics have been provided with GIS layers containing the sites within the CWDC that provided for infill, or comprehensive redevelopment. Theoretical residential capacity was calculated by CWDC utilising current District Plan policy settings and algorithmic, GIS and 3D modelling. The information contained several different scenarios, based on housing typology and quantum, that were identified as theoretically viable to develop.

Table 1 below outlines the theoretical capacity outputs by suburb based on the model provided to Property Economics (maximum dwelling number per site).

TABLE 1 – CWDC THEORETICAL RESIDENTIAL DEVELOPMENT CAPACITY BY SUBURB – URBAN CAPACITY

Theoretical Capacity							
Suburbs	Residential	Future Urban	Residential Greenfield	Total Residential	Unadjusted Commercial	Adjusted Commercial	Total Capacity
Aorangi Forest	174	296	74	544	-	-	544
Cameron and Soldiers Park	830	-	141	971	-	-	971
Carterton North	2,077	-	102	2,179	367	184	2,363
Carterton South	4,576	-	252	4,828	57	29	4,857
Douglas Park	1,054	-	123	1,177	175	88	1,265
Featherston	2,665	-	204	2,869	184	92	2,961
Greytown	3,022	1,054	108	4,184	591	296	4,480
Homebush-Te Ore Ore	-	-	-	-	323	162	162
Kahutara	50	-	-	50	-	-	50
Kokotau	-	1,839	-	1,839	-	-	1,839
Kuripuni	919	-	290	1,209	488	244	1,453
Lansdowne East	2,033	-	1,244	3,277	-	-	3,277
Lansdowne West	1,257	-	273	1,530	17	9	1,539
Martinborough	1,653	1,390	-	3,043	271	136	3,179
Masterton Central	154	-	-	154	2,741	1,371	1,525
McJorow Park	704	-	162	866	-	-	866
Mount Holdsworth	-	-	132	132	-	-	132
Ngaumutawa	800	-	73	873	6	3	876
Opaki	143	527	120	790	-	-	790
Solway North	1,444	-	294	1,738	693	347	2,085
Solway South	2,904	-	-	2,904	776	388	3,292
Tauherenikau	-	1,642	-	1,642	-	-	1,642
Upper Plain	284	1,979	98	2,361	1,144	572	2,933
Whareama	834	-	-	834	10	5	839
Total	27,577	8,727	3,690	39,994	7,843	3,922	43,916

Source: Property Economics, CWDC

Table 1 shows there is theoretical capacity within CWDC of 43,916 new dwellings. The suburb of Carterton South has the largest theoretical capacity at 4,857 dwellings.

It is important to note that Table 1 represents the sum of the maximum attainable yield of any typology on an individual site basis. The theoretical model outputs provided to Property Economics contained several different development scenarios on each site, therefore the theoretical yield represents the scenarios on each site where the development potential is the highest.

CWDC has, for the purposes of this modelling, defined all sites greater than 5ha as Greenfield. Approximately one third of the Theoretical Yield within the Future Urban Zone are large over 5ha Greenfield sites while the Theoretical Yield of the remaining greenfield sites are shown in the Residential Greenfield column.

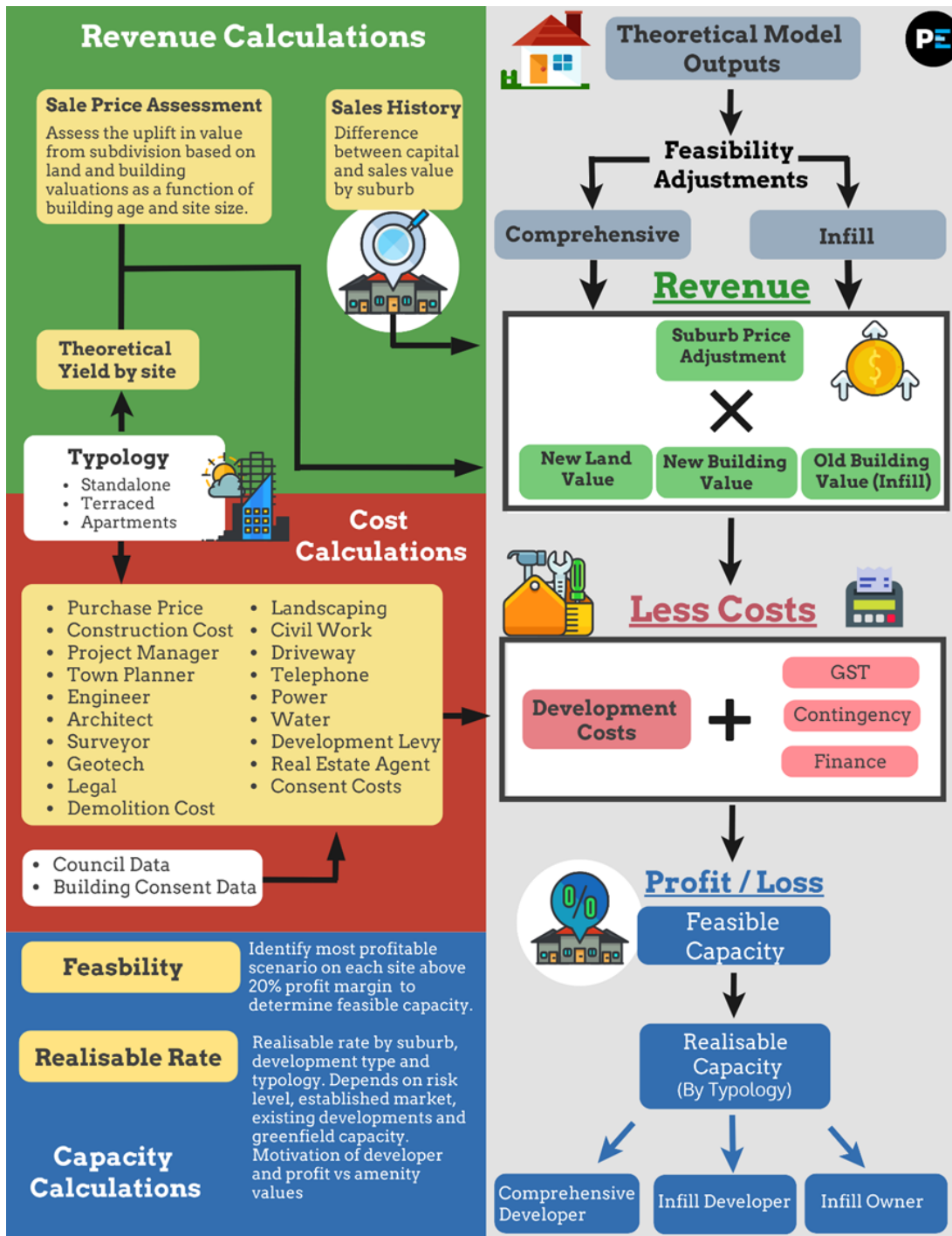
For the most part, these greenfield sites are treated the same as the smaller urban sites. The only adjustment applied is to assume 30% of each site is required for internal roading. Unlike many of the other districts in the Wellington Region, sloping constraints is not a major issue in the Wairarapa and the Medium Density Residential Standards do not apply, thereby enabling the Council to include a 350sqm minimum site size across their residential zone.

Table 1 shows the Commercial Capacity both before and after adjustments. The adjustments this refers to is to reduce the residential capacity by the proportion of that zone which is expected to be business. The ratio applied in all zones within the Wairarapa districts is 50%.

3. FEASIBLE CAPACITY MODELLING

A high-level overview of the model utilised by Property Economics in determining the feasible residential capacity for the CWDC is outlined in the flow chart in Figure 1 below, with detailed descriptions of each stage of the process given following.

FIGURE 1: PROPERTY ECONOMICS RESIDENTIAL FEASIBILITY MODEL OVERVIEW



Using the ratings database provided by CWDC the land value per sqm and improvement value per sqm is calculated. This is then summarised by suburb, size and typology to give the average per sqm value for various types of dwellings.

By splitting the valuation into land and improvement value, it accounts for variations of both sizes e.g., a large dwelling on a small piece of land compared to the same size dwelling on a larger piece of land.

Values are not the same across each suburb (due to differing structures and quality), and thus it is required to give the per sqm value for each suburb individually. Also, the per sqm rate for land and improvement value are shown not to be consistent across all sizes. For example, a larger dwelling has on average a lower per sqm improvement value than a smaller one. This inverse relationship between size and per sqm value is the same for both land value per sqm and building value per sqm.

Table 2 demonstrates how a subdivision primarily makes it profit through an increase in land value. Note that this is a generic example, (i.e., does not represent a specific site in the Wairarapa) that is simply included for demonstration purposes.

TABLE 2: EXAMPLE OF HOW BUILDING VALUE AND LAND VALUE CAN VARY BETWEEN STANDALONE AND TERRACED DEVELOPMENT OPTIONS

Development Option on 500sqm site	Building Value per dwelling	Site Size per dwelling	Land Value per dwelling	Sale Price per dwelling	Land Value Per SQM	Total Land Value
One 100sqm Standalone	\$ 400,000	500	\$ 500,000	\$ 900,000	\$ 1,000	\$ 500,000
Two 100sqm Standalone	\$ 400,000	250	\$ 400,000	\$ 800,000	\$ 1,600	\$ 800,000
Three 100sqm Terraces	\$ 400,000	167	\$ 360,000	\$ 760,000	\$ 2,160	\$ 1,080,000

Source: Property Economics

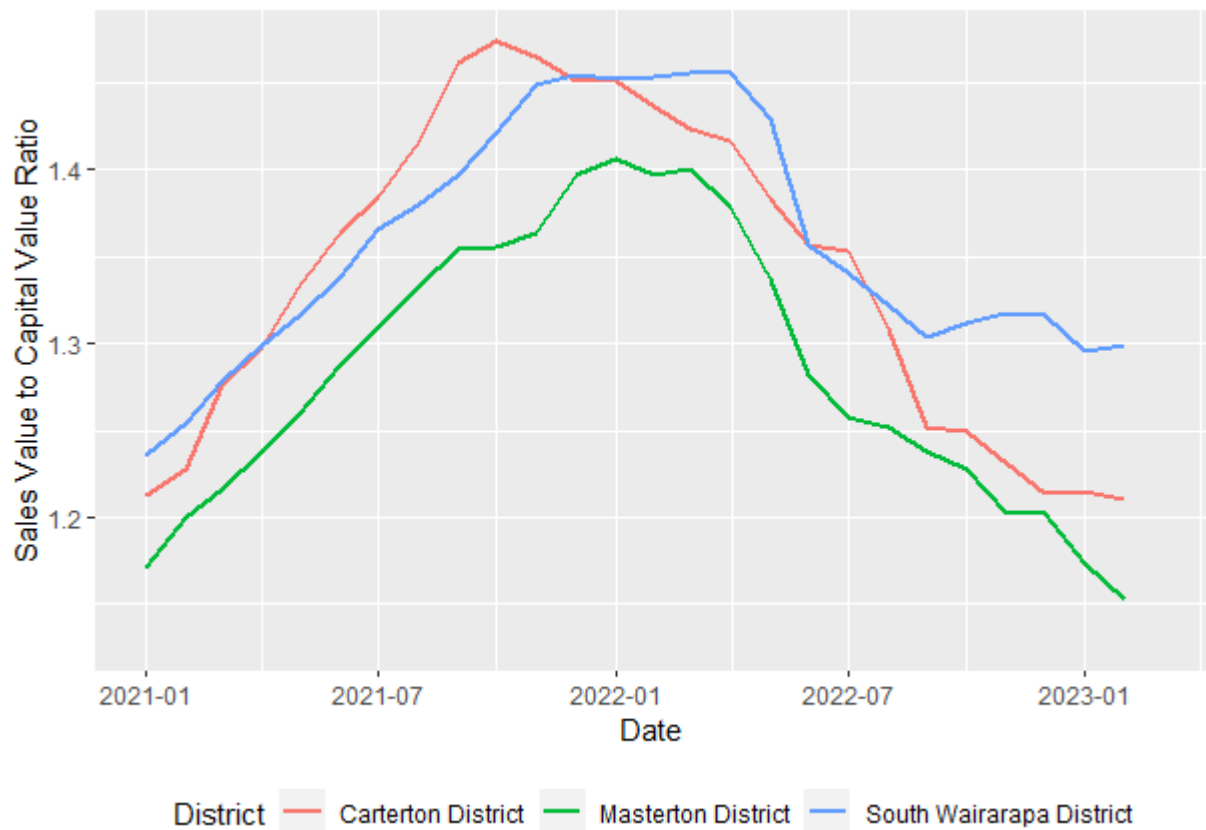
As this table shows, the value of each individual 100sqm building does not change. Rather the value in building more terraces is inherent in the increase in land value from \$1,600 per sqm to \$2,160 per sqm, which is the result of being able to build more homes on the same site. If building terraces did not result in a greater yield (i.e., only two terraces or two standalone options) then the Feasible Capacity Model results would likely show the standalone to be the preferred option.

Wairarapa Sales Price

Figure 2 shows how the average sales price compares to capital valuation between January 2021 and February 2023. This provides an indication of how sales price has changed over the past few years. These valuations were undertaken in September of 2020.

The sales to capital value ratio analysis has been undertaken at a district level however it should be noted that this does increase the variance due to the low sales count.

FIGURE 2: AVERAGE HOUSE PRICE IN WAIRARAPA BETWEEN 2021 AND 2023



Source: Property Economics, CWDC, Core Logic

At its peak at the end of 2021, Properties in Carterton and South Wairarapa were selling for an average of 50% higher than their current valuations. The increase in Masterton has been slightly lower than the other districts reaching a peak of only 40% higher than their valuations on average.

The Sales Data used to produce Figure 2 was provided to Property Economics by the district councils up till September 2022. However, Property Economics has also obtained further sales from Core Logic to generate the series into early 2023. This shows that property prices have continued to drop on average as is the trend across the wider Wellington Region. The sales data suggests that prices have returned to early 2021 levels at approximately 20% higher than their valuations.

4. FEASIBILITY MODELLING OUTPUTS

4.1. FEASIBLE CAPACITY OUTPUTS

Property Economics has assessed the variables outlined above in the combined CWDC market and run feasible capacity models across the range of locations, land values, improvement values, and land value changes. A key component of the market's willingness to develop infill is the relationship between a site's land value, fixed subdivision costs and the identifiable 'uptake' in value (sqm) through subdivision.

Table 3 below outlines a summary of the number of potential sections on sites where the ratios meet a profit level suitable to meet market expectations (20% for the purpose of this analysis).

TABLE 3- CWDC FEASIBLE RESIDENTIAL DEVELOPMENT CAPACITY BY ZONE- OWNER AND DEVELOPER

Feasible (Max Profit)	Theoretical	Standalone	Terraced	Total	% of Theoretical
Commercial	3,922	270	683	952	24%
Residential	27,577	4,626	9,960	14,586	53%
Greenfield	3,690	266	2,289	2,555	69%
Future Urban Zone	8,727	363	7,915	8,278	95%
Total	43,916	5,525	20,847	26,371	60%

Source: Property Economics, CWDC

Table 3 represents the subdivision undertaken by either an owner occupier or a developer, with the capacity representing the most profitable. This is an important difference as motivations and capital outlay are often different. These figures have removed all 'double ups' i.e., where multiple instances were tested on a specific site and represent the most profitable scenario for that site.

If developments were to be undertaken by either a developer or owner occupier, there is then potential for 26,371 additional units within the CWDC market. As all development options have been considered in Table 1, this represents the total feasible capacity in the market. This level of feasible capacity represents an 60% feasibility rate on the theoretical capacity.

Table 4 below shows how the feasible capacity is distributed across the suburbs.

TABLE 4 – CWDC FEASIBLE RESIDENTIAL DEVELOPMENT CAPACITY BY SUBURB– OWNER AND DEVELOPER

Suburbs	Feasible Capacity				
	Theoretical Capacity	Feasible Standalone	Feasible Terraced	Total Feasible Capacity	Feasibility Rate
Aorangi Forest	544	245	296	541	99%
Cameron and Soldiers l	971	138	232	370	38%
Carterton North	2,363	254	949	1,203	51%
Carterton South	4,857	615	2,759	3,374	69%
Douglas Park	1,265	221	231	452	36%
Featherston	2,961	341	1,583	1,924	65%
Greytown	4,480	549	2,504	3,053	68%
Homebush-Te Ore Ore	162	-	-	-	0%
Kahutara	50	-	-	-	0%
Kokotau	1,839	103	1,574	1,677	91%
Kuripuni	1,453	228	217	445	31%
Lansdowne East	3,277	348	1,507	1,855	57%
Lansdowne West	1,539	246	548	794	52%
Martinborough	3,179	475	1,861	2,336	73%
Masterton Central	1,525	27	522	549	36%
McJorow Park	866	3	46	49	6%
Mount Holdsworth	132	-	132	132	100%
Ngaumutawa	876	101	301	402	46%
Opaki	790	228	441	669	85%
Solway North	2,085	344	283	627	30%
Solway South	3,292	384	1,122	1,506	46%
Tauherenikau	1,642	90	1,464	1,554	95%
Upper Plain	2,933	147	2,275	2,422	83%
Whareama	839	438	3	441	53%
Total	43,916	5,525	20,847	26,371	60%

Source: Property Economics, CWDC

Carterton South is the suburb that exhibits the largest nominal (maximum profit) feasible capacity, the majority of which are a Terrace typology.

The most profitable development option on each site is driven by a range of factors including the geometry and development potential of the site, the underlying zone and land values. higher land values typically favour smaller site sizes.

4.2. REALISABLE CAPACITY OUTPUTS

Additional to the feasible capacity modelling, practical considerations must be taken into account as to what is likely to be developed in the 'real world'. While this section is separated from the sensitivities above the realisation rates essentially provide for 'development chance' given the propensity for development variances.

These considerations are based on:

- Dwelling typology
- Development option
- Greenfield competition

The identification of these variables not only provides for sensitivities but also addresses the relativity between typologies. While all three typologies may be feasible the development model identifies the site scenario with the highest profit margin. However, practically while the model assesses the standard 20% profit margin, there is greater risk in some typologies. The assessment below endeavours to consider these risks, and motivation, differentials.

On top of the greenfield consideration, the relative risk of each development type must be considered in quantifying what will practically be developed by the market. The risk is not homogenous across typology or development type, and thus a matrix of 'risk factors' have been applied across each combination of typology and development type.

Risk has been accounted for developments undertaken by developers by increasing the required profit level for a development to be classified as 'realisable', on top of being feasible. Table 5 below shows the profit levels required for each combination of typology and development option to be considered realisable by the model.

TABLE 5 – DEVELOPER REALISABLE PROFIT RATES

	Comprehensive Developer	Infill Developer	Infill Owner
House	24%	20%	29%
Terraced	27%	24%	33%

Source: Property Economics

This reflects the market practicality that developments taken on by a developer have relatively lower risk if they are an infill development, rather than a comprehensive development. It also shows the increasing risk of development as the typology increases in scale from standalone dwellings, through to terraced product.

For an owner occupier the model considers the profit level of the development relative to the capital value of the existing dwelling(s). This is because motivations for an owner to subdivide their property are inherently linked with the relative profit they can achieve against the value of their own home e.g., a \$100,000 profit on a \$1,000,000 site will be less likely to be developed by the owner, compared to a \$100,000 profit on a \$500,000 site, assuming similar fixed costs.

Therefore, as a methodology for this, the model considers that the lowest quartile of feasible infill developments in terms of the relative profit / CV ratio will not be realised by the market.

Taking these market practicalities into consideration, Table 6 shows the realisable capacity within the CWDC area. This shows the total capacity that is reasonable expected to be realised by taking the most “realisable” development option for each site.

TABLE 6: CWDC REALISABLE RESIDENTIAL DEVELOPMENT CAPACITY BY ZONE

Realisable	Theoretical	Standalone	Terraced	Total	% of Theoretical
Commercial	3,922	269	515	783	20%
Residential	27,577	4,534	5,544	10,078	37%
Greenfield	3,690	194	2,289	2,483	67%
Future Urban Zone	8,727	809	6,915	7,724	89%
Total	43,916	5,806	15,263	21,068	48%

Source: Property Economics,

Table 6 shows that the realisable capacity across CWDC is around 21,068 new dwellings, representing a 48% realisation rate across the area. In essence, this represents a 80% realisation rate of the already calculated feasible capacity outlined in Table 4 above.

It is important to note that neither the theoretical nor feasible model takes into account some of the more nuanced details of each individual site. There may be instances where the shape or slope necessitates a standalone or terraced development.

Table 7 shows the Realisable Capacity by District and by whether or not the capacity lies within the existing urban zone. This shows that almost half of the capacity within the South Wairarapa District lies within the Future Urban Zone. As a result, it also has the highest realisability rate of the three districts.

TABLE 7: REALISABLE RESIDENTIAL DEVELOPMENT CAPACITY BY DISTRICT AND – ALL ZONES

District	Zoning	Theoretical	Standalone	Terraced	Total	% of Theoretical
Carterton District	Existing Urban Zone	7,351	595	2,353	2,948	40%
	Future Urban Zone	1,839	212	1,242	1,454	79%
	Carterton Total	9,190	807	3,595	4,402	48%
Masterton District	Existing Urban Zone	19,365	2,657	3,055	5,711	29%
	Future Urban Zone	2,506	149	2,107	2,256	90%
	Masterton Total	21,871	2,806	5,162	7,967	36%
South Wairarapa	Existing Urban Zone	8,473	1,745	2,940	4,685	55%
	Future Urban Zone	4,382	448	3,566	4,014	92%
	South Wairarapa Total	12,855	2,193	6,506	8,699	68%
Total	43,916	5,806	15,263	21,068	48%	

Source: Property Economics

Table 8 disaggregates the Realisable Capacity by suburb.

TABLE 8 – CWDC REALISABLE RESIDENTIAL DEVELOPMENT CAPACITY BY SUBURB – ALL ZONES

Realisable Capacity					
Suburbs	Theoretical Capacity	Realisable Standalone	Realisable Terraced	Total Realisable Capacity	Feasibility Rate
Aorangi Forest	544	245	296	541	99%
Cameron and Soldiers Park	971	33	39	72	7%
Carterton North	2,363	238	535	773	33%
Carterton South	4,857	357	1,686	2,043	42%
Douglas Park	1,265	261	84	345	27%
Featherston	2,961	393	1,124	1,517	51%
Greytown	4,480	775	2,161	2,936	66%
Homebush-Te Ore Ore	162	-	-	-	0%
Kahutara	50	-	-	-	0%
Kokotau	1,839	212	1,242	1,454	79%
Kuripuni	1,453	238	120	358	25%
Lansdowne East	3,277	382	1,181	1,563	48%
Lansdowne West	1,539	219	350	569	37%
Martinborough	3,179	639	1,601	2,240	70%
Masterton Central	1,525	32	442	473	31%
McJorow Park	866	-	-	-	0%
Mount Holdsworth	132	-	132	132	100%
Ngaumutawa	876	104	220	324	37%
Opaki	790	263	348	611	77%
Solway North	2,085	265	157	422	20%
Solway South	3,292	306	261	567	17%
Tauherenikau	1,642	141	1,325	1,466	89%
Upper Plain	2,933	297	1,959	2,256	77%
Whareama	839	407	1	408	49%
Total	43,916	5,806	15,263	21,068	48%

Source: Property Economics, CWDC

4.3. GREENFIELD

Table 9 shows the Feasible and Realisable Greenfield Capacity for each suburb. Note that this, capacity was included in the preceding tables and is not additional to the capacity outlined in the earlier capacity tables.

Most of the empty Greenfield sites were feasible for development. In most cases, the sites that are not feasible are schools or in the case of Lansdowne East, a hospital.

The capacity shown below is predominately based on a 350sqm average site size across the board. In reality, it is likely that some of these sites will have a mix of typologies and site sizes as this enables developers to cater to a wider market.

TABLE 9: GREENFIELD FEASIBLE AND REALISABLE CAPACITY

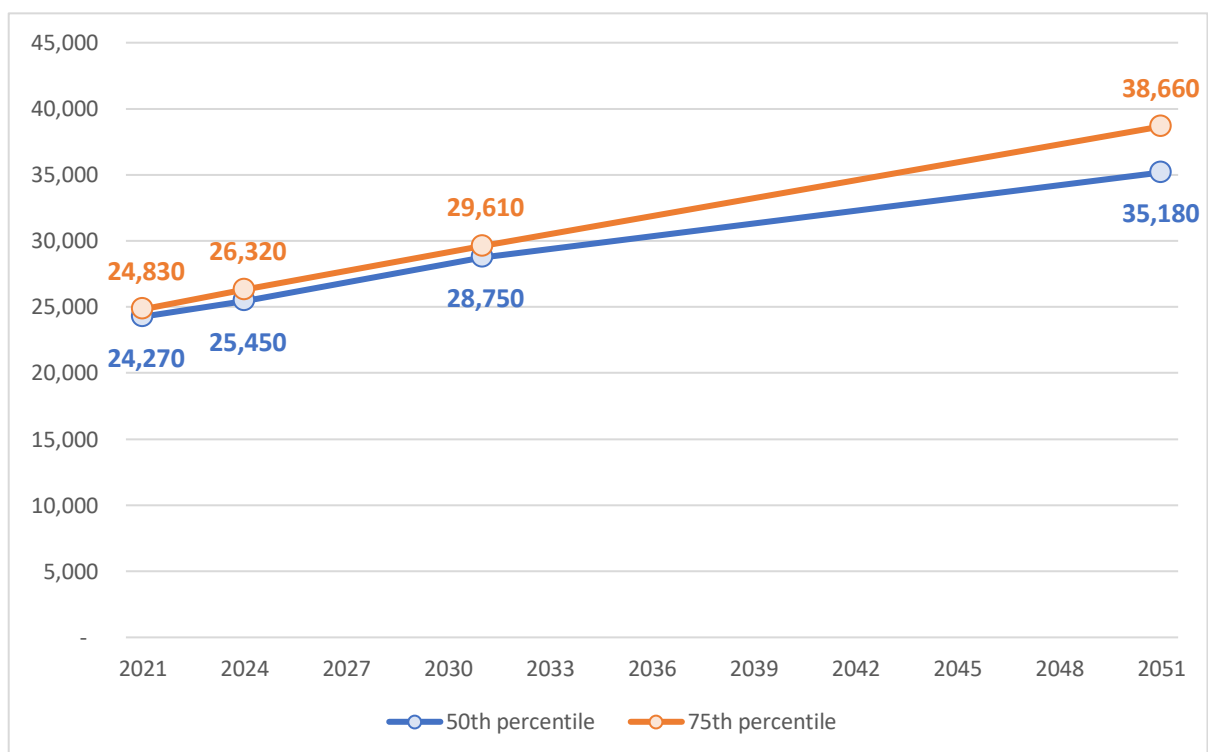
Suburbs	Theoretical Capacity	Feasible	Feasible Ratio	Realisable	Realisable Ratio
Aorangi Forest	370	370	100%	370	100%
Cameron and Soldiers Park	141	72	51%	-	0%
Carterton North	102	102	100%	102	100%
Carterton South	252	240	95%	240	95%
Douglas Park	123	-	0%	-	0%
Featherston	204	200	98%	200	98%
Greytown	662	661	100%	661	100%
Kuripuni	290	-	0%	-	0%
Lansdowne East	1,244	1,070	86%	1,070	86%
Lansdowne West	273	266	97%	266	97%
McJorow Park	162	-	0%	-	0%
Mount Holdsworth	132	132	100%	132	100%
Ngaumutawa	73	73	100%	73	100%
Opaki	412	412	100%	412	100%
Solway North	294	-	0%	-	0%
Tauherenikau	660	655	99%	655	99%
Upper Plain	1,185	1,183	100%	1,183	100%
Total	6,579	5,436	83%	5,364	82%

Source: Property Economics

5. DEMAND RECONCILIATION

Figure 3 below shows the dwelling projections according to the projections developed by Sense Partners for the combined Wairarapa Districts. It shows growth according to their 50th and 75th percentile projections showing medium, and high growth scenarios. Under these scenarios, the projected 30-year growth between 2021 and 2051 ranges from 10,910 dwellings under the medium and 13,830 dwellings under the high projection.

FIGURE 3: SENSE PARTNERS DWELLING PROJECTIONS



Source: Property Economics

Is clear that the combined Wairarapa Districts have more than sufficient realisable capacity (of 22,781) to meet its projected demand under even the higher 75th percentile growth scenario (13,830 dwellings or 16,146 including the NPS-UD margins).

The question remains however, as to whether or not this capacity is suitable to meet the needs and preferences of the Wairarapa housing market. It is therefore important to reconcile this capacity with the demand.

Sense Partners Projections break down the household demand by household type (i.e., couple without kids, single parent family etc) which we can use to estimate the typology and size demanded by the population in each location over the next 30 years.

Based on Sense Partners breakdown of Standalone and Attached Dwellings and their projected household demographic changes, Property Economics has estimated the number of Small, Medium and Large dwellings of each typology will be required. As there are no

apartments in the Theoretical Capacity, it has been assumed that all Attached dwelling demand will be for terraces.

The model then reconciles the feasible capacity against this demand by sorting each of the sites by profit and systematically allocating each of them to be “realised” as one of the six typology / sizes.

Table 10 shows the split by typology and size. This highlights that under the Medium Growth Scenario there is sufficient capacity to meet demand for all typology options. However, the residual capacity for Small Standalone and Terraces is small which means that almost all of the capacity will need to be realised to meet the demand. Table 10 shows that the Small Standalone typology as being having the highest demand which is due most of the household growth in the Wairarapa is projected to be singles and couples.

TABLE 10: DEMAND RECONCILIATION BY TYPOLOGY AND SIZE FOR MEDIUM PROJECTION

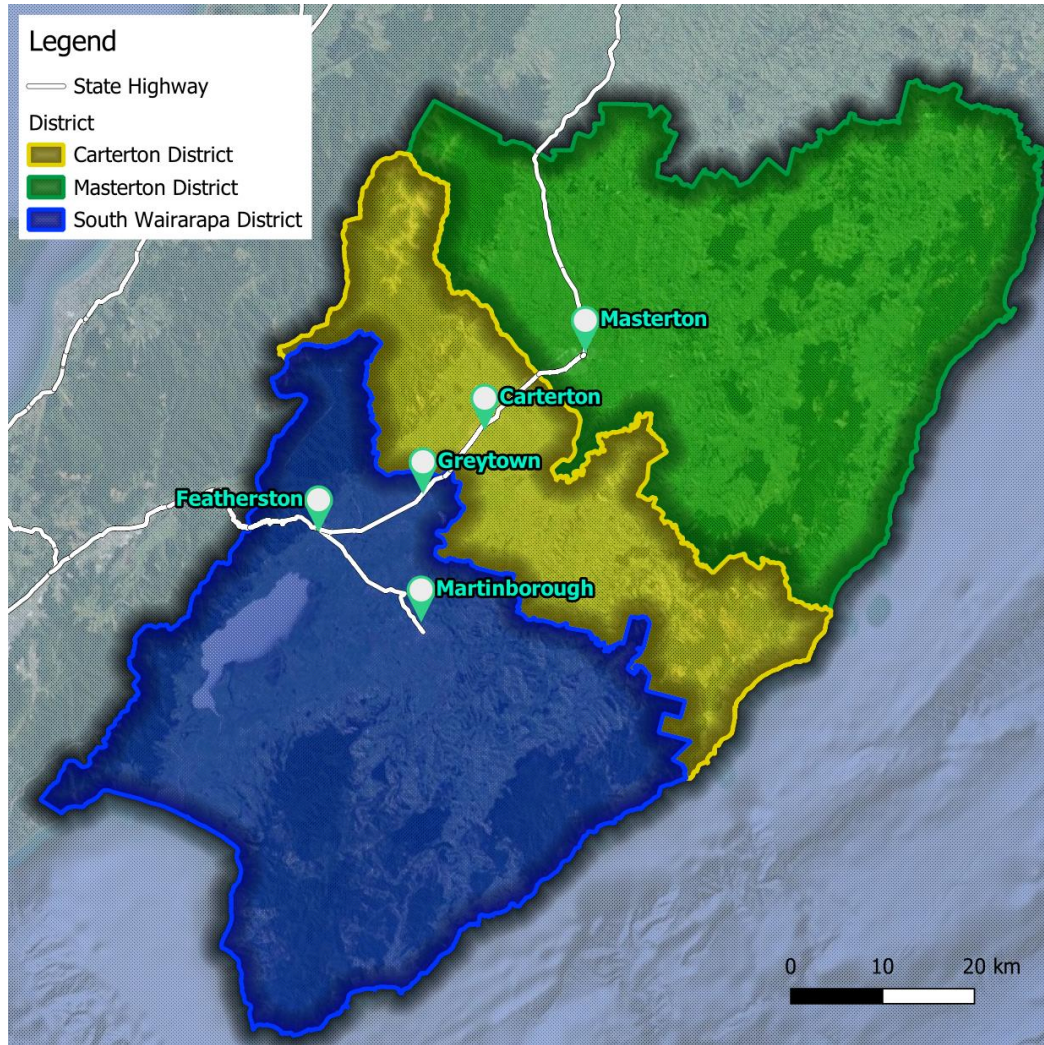
Typology	Size	Demand	Reconciled Capacity	Sufficiency	Residual Capacity
Standalone	Large	1,513	1,513	100%	2,150
	Medium	2,692	2,692	100%	4,419
	Small	3,212	3,212	100%	368
Terraced	Large	284	284	100%	1,414
	Medium	1,139	1,139	100%	441
	Small	2,069	2,069	100%	25
Total		10,909	10,909	100%	8,816

Source: Property Economics, Sense Partners

As well as ensuring there is sufficient capacity to support the likely demand by typology, it is also important to ensure there is sufficient capacity in each location. Sense Partners dwelling projections included a breakdown by Statistical Area 2 (SA2). However, Property Economics does not consider it appropriate to assess demand and capacity at an SA2 level due to the margin of error and substitutability of demand across SA2s.

Instead, Property Economics have split the growth into the three districts that make up the Wairarapa area for a finer grain locational analysis. The district boundaries are shown on Figure 4 below.

FIGURE 4: WAIRARAPA DISTRICT BOUNDARIES

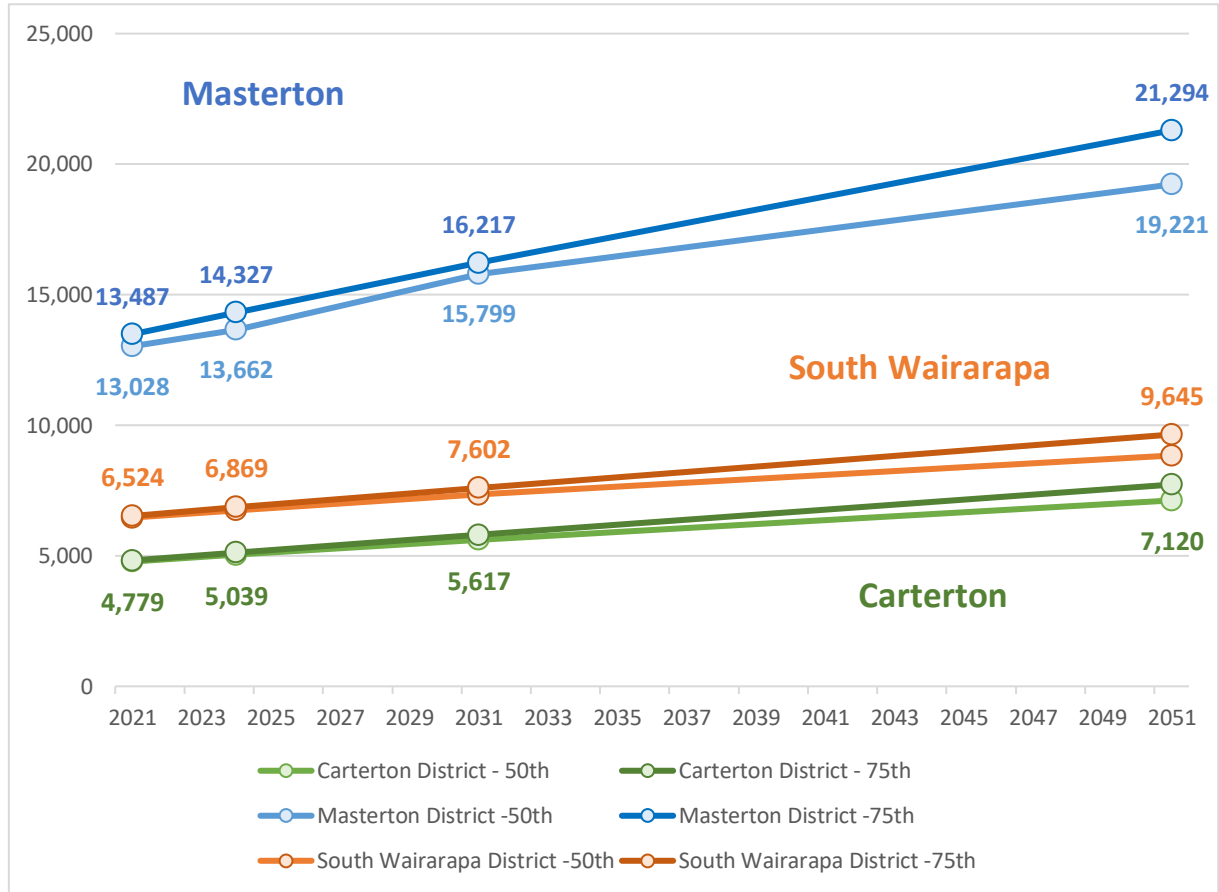


Source: Property Economics, StatsNZ

Figure 5 following breaks down the medium and high dwelling projections by district. This shows that growth is projected across all three districts, but that Masterton and Carterton is expected to have faster dwelling growth at around 48% over the 30-year period for the medium 50th percentile growth compared to 37% in the South Wairarapa District.



FIGURE 5: MEDIUM AND HIGH HOUSEHOLD PROJECTIONS BY DISTRICT



Source: Property Economics, Sense Partners

Table 11 shows the breakdown of capacity sufficiency by district and typology. This shows that there is sufficient capacity by typology to meet demand in each district. In South Wairarapa the residual capacity is more than double demand while in Carterton and Masterton the residual capacity well exceeds the competitiveness margin requirements of the NPS-UD. There is however only a small surplus of Attached Dwellings in Masterton.

TABLE 11: DEMAND RECONCILIATION UNDER THE SENSE PARTNERS MEDIUM PROJECTION BY TYPOLOGY AND SIZE

Catchment	Type	Demand	Reconciled Capacity	Sufficiency	Residual Capacity
Masterton	Standalone	3,205	3,205	100%	1,420
	Attached	2,988	2,988	100%	29
Carterton	Standalone	2,089	2,089	100%	1,188
	Attached	251	251	100%	185
South Wairarapa	Standalone	2,123	2,123	100%	4,328
	Attached	253	253	100%	1,667
Total		10,909	10,909	100%	8,816

Source: Property Economics

As Table 13 highlights, a significant quantum of the capacity in the Wairarapa Districts lies within the Future Urban Zone. Table 12 below investigates the sufficiency of supply if this land is not live-zoned. This shows that without the Future Urban Zone, there is a potential shortfall in the Masterton District over the long term. In Carterton, the shortfall of Attached Dwellings could be supplied by the residual Standalone capacity however, the capacity would not meet the competitiveness margin requirements of the NPS.

TABLE 12: DEMAND RECONCILIATION UNDER THE SENSE PARTNERS MEDIUM PROJECTION BY TYPOLOGY AND SIZE – EXCLUDING FUTURE URBAN ZONE

Catchment	Type	Demand	Reconciled Capacity	Sufficiency	Residual Capacity
Masterton	Standalone	3,205	3,127	98%	0
	Attached	2,988	2,433	81%	0
Carterton	Standalone	2,089	2,089	100%	270
	Attached	251	245	98%	0
South Wairarapa	Standalone	2,123	2,123	100%	1,790
	Attached	253	253	100%	205
Total		10,909	10,270	100%	2,264

Source: Property Economics

Despite having the largest Future Urban Zone, the model suggests most of the additional land may not be required in South Wairarapa to meet the projected demand under the medium projections over the next 30 years. Given that the 75th percentile only raises the demand by around 750 dwellings, the Future Urban Zone may still not be necessary provided sufficient urban redevelopment occurs.

For the purposes of comparison with the other estimates of capacity, Table 13 breaks down the Demand Reconciled Capacity by Typology and Zone. Note that this includes both the capacity required to meet demand and the Residual Capacity shown in Table 11 above.

TABLE 13: WAIRARAPA DEMAND RECONCILED CAPACITY BY ZONE

Demand Reconciled	Theoretical	Standalone	Terraced	Total	% of Theoretical
Commercial	3,910	269	565	833	21%
Residential	27,577	8,088	1,578	9,666	35%
Greenfield	3,690	1,171	1,087	2,258	61%
Future Urban Zone	8,727	4,826	2,144	6,970	80%
Total	43,904	14,353	5,373	19,726	45%











Source: Property Economics

The demand reconciled capacity, although based upon the realisable capacity, is reduced due to the change the spread of typologies and sizes. Specifically, the commercial capacity increases due to a shift to small terraces from large terraces, while capacity in other zones has been decreased due to the shift towards larger standalone dwellings.

6. ALTERNATIVE SCENARIOS

Table 14 shows the Feasible and Realisable capacity based on Quarter 1 2023 prices (i.e., a further reduction assessed at a district level according to the trends shown in Figure 2). This reduction in sale price correlates with a larger decrease in the land values as improvement values have not materially changed.

TABLE 14: FEASIBLE AND REALISABLE CAPACITY AS AT EARLY 2023 PRICES

		Theoretical	Standalone	Terraced	Total	% of Theoretical
Feasible (Max Profit)	Commercial	3,922	142	511	653	 17%
	Residential	27,577	3,081	8,486	11,567	 42%
	Greenfield	3,690	194	2,084	2,278	 62%
	Future Urban Zone	8,727	340	7,872	8,212	 94%
	Total	43,916	3,757	18,953	22,710	 52%
Realisable Capacity	Commercial	3,922	68	411	478	 12%
	Residential	27,577	2,608	2,533	5,141	 19%
	Greenfield	3,690	194	1,884	2,078	 56%
	Future Urban Zone	8,727	760	4,591	5,351	 61%
	Total	43,916	3,630	9,419	13,048	 30%

Source: Property Economics

This drop in sales price has a significant impact on the level of Feasible and Realisable capacity, dropping the Realisable Capacity from 21,068 to 13,048. Notably, this capacity is still sufficient to meet the projected demand under the medium projections even with the required competitiveness margin, but not the high projections.

In fact, this Realisable Capacity falls just short (93%) of meeting the demand without any buffer. This indicates that if the current lower prices and high construction costs remain at their current ratios long term, then some additional zoned land may be required over the long term in order to meet the 75th Percentile projection.

7. SUMMARY

Table 15 shows the projected dwelling demand under the Sense Partners 50th and 75th percentile forecast and the NPS-UD² uplift requirement for the Combined Wairarapa area. This shows that over the next 30 years (2021 – 2051), the three districts require capacity for 12,771 dwellings under the medium 50th percentile projection and a capacity of 16,146 dwellings under the higher 75th percentile projection.

TABLE 15: COMBINED WAIRARAPA HOUSEHOLD PROJECTIONS OVER SHORT, MEDIUM, AND LONG TERM

Capacity Requirements		Short Term (2021 - 2024)	Medium Term (2024 - 2031)	Long Term (2031 - 2051)	Total Increase
50th Percentile	Households	1,179	3,307	6,424	10,910
	NPS Buffer	20%	20%	15%	-
	Total	1,415	3,968	7,388	12,771
75th Percentile	Households	1,488	3,292	9,052	13,832
	NPS Buffer	20%	20%	15%	-
	Total	1,786	3,950	10,410	16,146

Source: Property Economics, Sense Partners

Table 16 shows the summary of the four different measures of capacity for both Urban and Future Urban Sites.

TABLE 16: WAIRARAPA CAPACITY OVERVIEW

Capacity Overview	Urban	Future Urban	Total
Theoretical Capacity	35,177	8,727	43,904
Feasible	18,139	8,278	26,417
Realisable	13,344	7,724	21,068
Demand Reconciled	12,756	6,970	19,726

Source: Property Economics

² The National Policy Statement for Urban Development requires Councils to provide sufficient capacity to meet projected demand with a 20% competitiveness margin / buffer over the Short to Medium Term and a 15% buffer over the Long Term.

Finally, Table 17 shows a comparison of the Realisable Capacity against total Demand including the NPS-UD margin for each district. This shows that under both demand projections, the Combined Wairarapa area has more than sufficient capacity to meet the projected demand.

However, under the higher growth scenario, there is a potential undersupply in the Masterton District to meet their projected demand over the 30-year period.

TABLE 17: WAIRARAPA SUFFICIENCY

Sufficiency		Carterton	Masterton	South Wairarapa	Combined
50th Percentile	Households	2,341	6,193	2,376	10,910
	Including NPS Buffer	<u>2,734</u>	<u>7,261</u>	<u>2,776</u>	<u>12,771</u>
	Demand Reconciled	3,712	7,642	8,372	19,726
	Difference	<u>+ 978</u>	<u>+ 381</u>	<u>+ 5,595</u>	<u>+ 6,955</u>
75th Percentile	Households	2,904	7,807	3,121	13,832
	Including NPS Buffer	<u>3,388</u>	<u>9,115</u>	<u>3,643</u>	<u>16,146</u>
	Demand Reconciled	3,712	7,642	8,372	19,726
	Difference	<u>+ 324</u>	<u>- 1,473</u>	<u>+ 4,729</u>	<u>+ 3,580</u>

Source: Property Economics