

Before an Independent Hearings Panel

The Proposed Waikato District Plan (Stage 1)

IN THE MATTER OF the Resource Management Act 1991 (**RMA**)

IN THE MATTER OF hearing submissions and further submissions on the Proposed
Waikato District Plan (Stage 1):
Topic 25 – Zone Extents

**PRIMARY EVIDENCE OF ADAM JEFFREY THOMPSON
ON BEHALF OF CSL TRUST & TOP END PROPERTIES LIMITED**

17 February 2021

Counsel Instructed:

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1. SUMMARY OF EVIDENCE

1.1 My full name is Adam Jeffrey Thompson. I am an urban economist and property market analyst.

1.2 I am providing economic evidence in relation to proposed rezoning sought by CSL Trust & Top End Properties (**CSL/Top End**)¹ of land at 179 Helenslee Road, 205 Helenslee Road, Pokeno (**Site**).

1.3 The main findings of my economic assessment are outlined as follows:

- The Council economists' estimate the Waikato District requires 7,100 additional dwellings over the 2017 – 2026 period.
- 5,000 (71%) of these dwellings need to be below \$440,000 and 6,200 (86%) of these dwellings below \$580,000 to meet market demand.
- The WDC has an estimated potential supply of 200 dwellings under \$440,000 and 710 dwellings under \$580,000. This falls substantially short of the demand for 5,000 and 6,200 respectively.
- The WDC has an estimated potential supply of 1,590 dwellings across all price ranges, when demand (i.e. ability to purchase houses within different price ranges) is accounted for. This falls short of the total demand for 7,100 dwellings.
- The Council's capacity analysis has concluded that only 5-10% of plan enabled supply is for housing of less than \$580,000, under the Operative Waikato District Plan (OWDP). While there are no estimates of capacity with respect to private under the Proposed Waikato District Plan (PWDP), given that (a) the majority of the new Residential Zone land supply is in Pokeno and Tuakau, and (b) that the cost of a house and land package on a 450m² site within a large greenfield development in Pokeno is around \$600,000, and a similar price can be expected in Tuakau, there will be very little housing within the Waikato District supplied within the new greenfield areas under the proposed Residential Zone.
- The PWDP Residential Zone provisions are based on an evaluation of commercially feasible capacity under the OWDP. There is no assessment of

¹ Submitter 97 and Submitter 89.

commercially feasible capacity under the PWDP. This is a significant oversight and does not meet the requirements of the NPS-UDC.

- The Residential Zone has a minimum lot size of 450m². The reason given for this in the s42 report is that it enables a quarter acre lot to be subdivided into two lots. This is not a sufficient basis for determining minimum lot size, particularly given the Council's estimated shortage of housing in the less than \$580,000 price range (5,500 dwellings over the next decade, or practically all the required additional housing stock). The s42 report concludes that no evaluation of costs and benefits of a lower minimum lot size has been undertaken, however a detailed report (102 pages) has been prepared on this topic. This report concludes that there are many critical benefits from lower lot sizes.
- Council estimates that a minimum lot size in the Residential Zone of 450m² would enable only 1,870 additional dwellings through subdivision of 1-3 additional dwellings on existing lots, that are a quarter acre or larger in size². Only 30-40% are likely to be commercially feasible, indicating that this minimum lot size would only enable around 650 additional dwellings. This is a minor change to the total housing stock.
- The Residential Zone would therefore predominantly enable new housing in greenfield areas, i.e. if 7,250 additional dwellings are built over the next decade, 6,600 of these will be in greenfield areas, and 650 would be as a result of subdivision of existing urban properties.
- The majority of new residential growth is planned to occur around Pokeno and Tuakau. The exact quantities of growth are not provided, however, it appears from the growth maps provided that around two thirds of future growth will be in these two towns.
- The analysis of demand for housing in Pokeno has found that there is strong demand in the lower price ranges, and in particular for family houses (3 bedrooms with a garage and rear yard) in the \$500,000 - \$700,000 range. This aligns with the Council demand evaluation that found 86% of demand for housing is under \$580,000.

² "There are 1,863 lots within the Residential Zone that have a subdivision potential for 1-3 additional lots". (page 38, Waikato District s32 Residential Zone Minimum Lot Sizes Topic, Market Economics Consulting).

- There is a direct correlation between lot size and the price of the 'house and land package' that is offered to the market. Smaller lots result in lower house and land package prices, and larger lots result in higher house and land package prices. The analysis has found that there is a strong correlation between lot size and the house and land package price in Pokeno and the wider Auckland market. The critical point is that the price of a dwelling on a 450m² lot is around \$600,000, and only dwellings on lots of less than 450m² will result in dwellings that are in line with the prices that are in demand (i.e. predominantly less than \$580,000 based on Councils estimates). Tuakau will have a similar price profile to Pokeno so will perform similarly.
- There are several key competing towns in south Auckland, and most notably Pukekohe. These towns are planned to have more flexible zoning, with Pukekohe for example have a large amount of mixed housing urban and suburban zone land, which allows lots down to 100-200m². When these lots and house and land packages come to the market, they will compete directly with Pokeno on price. For Pokeno to remain a competitive location therefore requires similar size lots and dwelling types to these other competing towns.
- The PWDP has three broad Residential zoning options. These include the Residential Zone as notified, the Housing NZ option which enables smaller lot sizes in locations around centres, and a third, which is a hybrid of these two, which is to retain the Residential Zone as notified (as per the PWDP) however to reduce the minimum Restricted Discretionary lot size to 200m². The third option is considered optimal, as it would enable new houses for less than \$440,000, to align with 71% of the demand.
- Plan enabled capacity is estimated at between 865 and 1,365 dwellings under the OWDP and 2,355 - 3,775 dwellings under the PWDP.
- Given the annual demand of 400 - 500 dwellings, this indicates that Pokeno has only 2-4 years of supply remaining, and that additional Residential Zone land is required under the PWDP to ensure that Pokeno continues to have an efficient housing market.
- There is between 1,500 and 2,410 additional dwellings enabled under the PWDP. This suggests that Market Economics estimates of 3,500 dwellings are too high due to it including existing Residential 2 zone land.

- Recent data indicates in the order of 200 - 300 Building Consents per annum are being issued in Pokeno, with a recent peak of 250 for the 2019 year. In recent years Pokeno has accounted for approximately half the building consents issued in the Waikato District. Given the consistency of the Building Consent data, and the lack of competition in the Pokeno township, there is considered to be fundamental demand for 400 - 500 dwellings per annum in Pokeno.
- Over the medium term, which is most relevant to a district plan review, there is a shortage under both the WDC and UE demand projections, with the only exception being the 100% Greenfield uptake scenario, which would result in a small surplus (0.7 – 1.7 years) as at 2030.
- When the medium term is considered against the Urban Economics demand projections, there is a notable shortage, of 2,490 dwellings or 5.2 years of supply (under the 75% greenfield scenario). Under the 50% greenfield scenario, this shortage increases to 3,250 dwellings or 6.8 years of capacity. Based on this assessment, additional capacity of 2,490 – 3,250 dwellings is required in Pokeno for it to meet the medium term requirements of the NPS-UD. This means that the site is required for Pokeno to meet the NPS-UD capacity requirements over the short-medium term
- The proposal would enable an estimated 105 - 115 FTE employees over the course of the construction period and an additional 10 – 30 FTE employees per annum in the ongoing operation of proposed retail floorspace. This is significantly higher than the estimated 1 FTE employees involved in the Dairy farming process which is considered the second-best land use to residential development.
- The proposal would result in an estimated net increase in Waikato District household expenditure with a PV of \$115.4 million over the next 30 years. This is a significant economic benefit to the local economy.
- The proposal would add a PV of \$34.8 - \$35.2 million to GDP in the construction sector. This is a significant economic benefit.
- The proposal would provide accommodation services with a PV of \$77.8 million over the next 30 years. This is a significant economic benefit.

- The proposal would provide retail floorspace with a PV of \$2 - \$4.9 million over the next 30 years. This is a significant economic benefit.
- The proposal has a net present value (NPV) of \$226.7 - \$230.0 million over the course of thirty years. This represents a significant boost to the Waikato District economy.
- The proposal would increase competition in the residential land development market. This will result in more choice for purchasers and may result in lower prices. This is a significant economic benefit.
- Waikato District Council's 'Pokeno Local Area Blueprint' estimates that the 2016 Pokeno population of 2,100 will increase to 12,000 by 2045. This is an optimal size for a small town as it would support 2-3 primary schools, one secondary school and one supermarket. Ensuring a fast rate of growth is supported in Pokeno would ensure that a high degree of self-sufficiency is achieved within the medium rather than long term.

2. INTRODUCTION

- 2.1 My full name is Adam Jeffrey Thompson. I am an urban economist and property market analyst.
- 2.2 I hold a Bachelor of Resource Studies from Lincoln University (1998), a Master of Planning from Auckland University (2000) and a Dissertation in Urban Economics from the London School of Economics (2014). I have studied urban economics at Auckland University and environmental economics at Lincoln University.
- 2.3 For the past 20 years I have provided consulting services in the fields of urban economics, property market analysis and property development advisory. For the past 16 years I have owned and managed two consulting firms that have provided services in these fields. I am presently the director of Urban Economics Limited.
- 2.4 I have undertaken over 600 economic and property market assessments for a range of private and public sector clients. I have attached my resume in Appendix 3.
- 2.5 My experience as relates to this proposal includes 25-30 economic assessments for similar rezoning proposals, with many being for large projects of over 1,000 dwellings.
- 2.6 I have been involved in the rezoning proposal by CSL/Top End since 2020. This has included a site visit and preparation of an economic assessment.

Scope of evidence

- 2.7 My evidence evaluates the economic costs and benefits of the proposed rezoning sought by CSL / Top End.

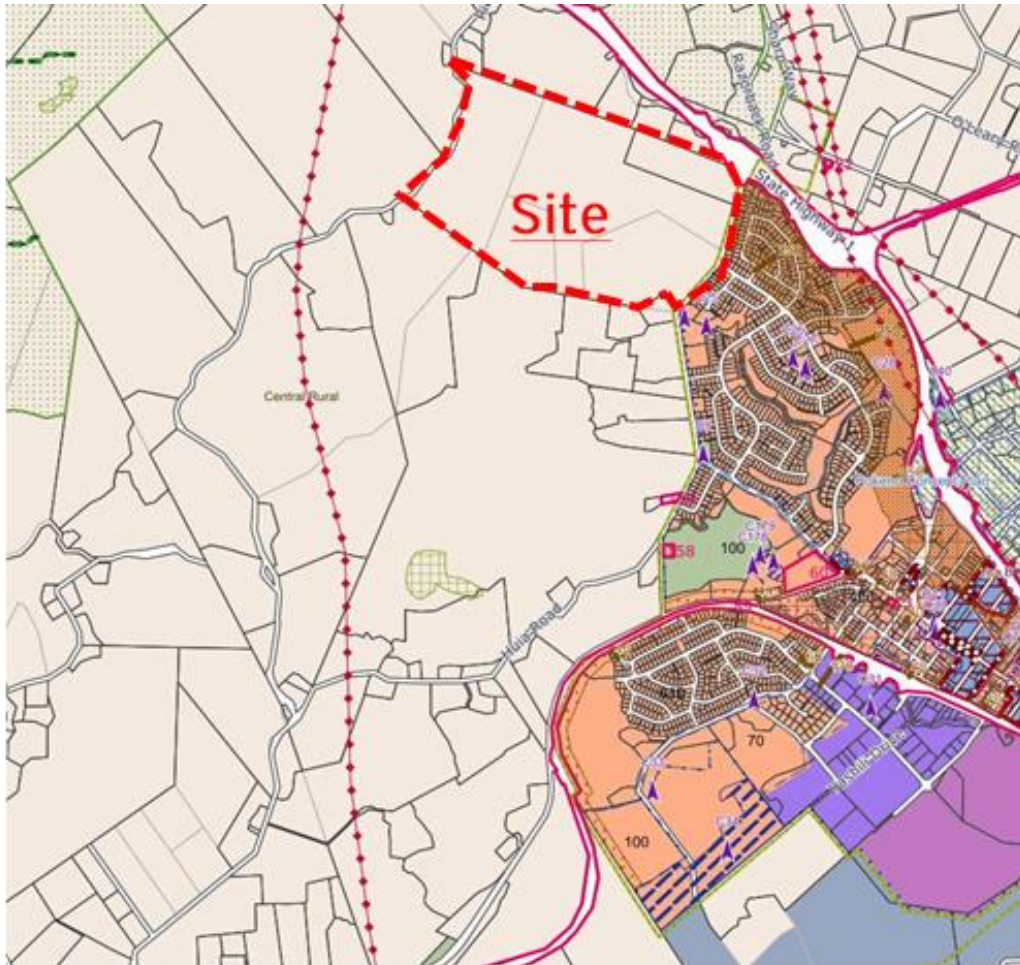
3. CODE OF CONDUCT

- 3.1 I have read the Environment Court's Code of Conduct for Expert Witnesses, and I agree to comply with it. My qualifications as an expert are set out above. I confirm that the issues addressed in this brief of evidence are within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

4. SITE CONTEXT AND CHARACTERISTICS

- 4.1 The CSL/Top End plans have an estimated net yield of 413 lots, of which 55 of them are larger lifestyle blocks in the Country Living zone. A defining characteristic of the site is there is a large amount of bush, a large amount of which would be retained, which would offer high levels of amenity for residents.
- 4.2 Pokeno is a small rural town in the Waikato region, approximately 50km from Auckland's CBD. It has a small local centre with convenience shopping (butcher, bakery, dairy, etc) and two petrol stations. Pokeno's first supermarket opened earlier this year.

Figure 1: Site Zoning and Location (boundary indicative only)

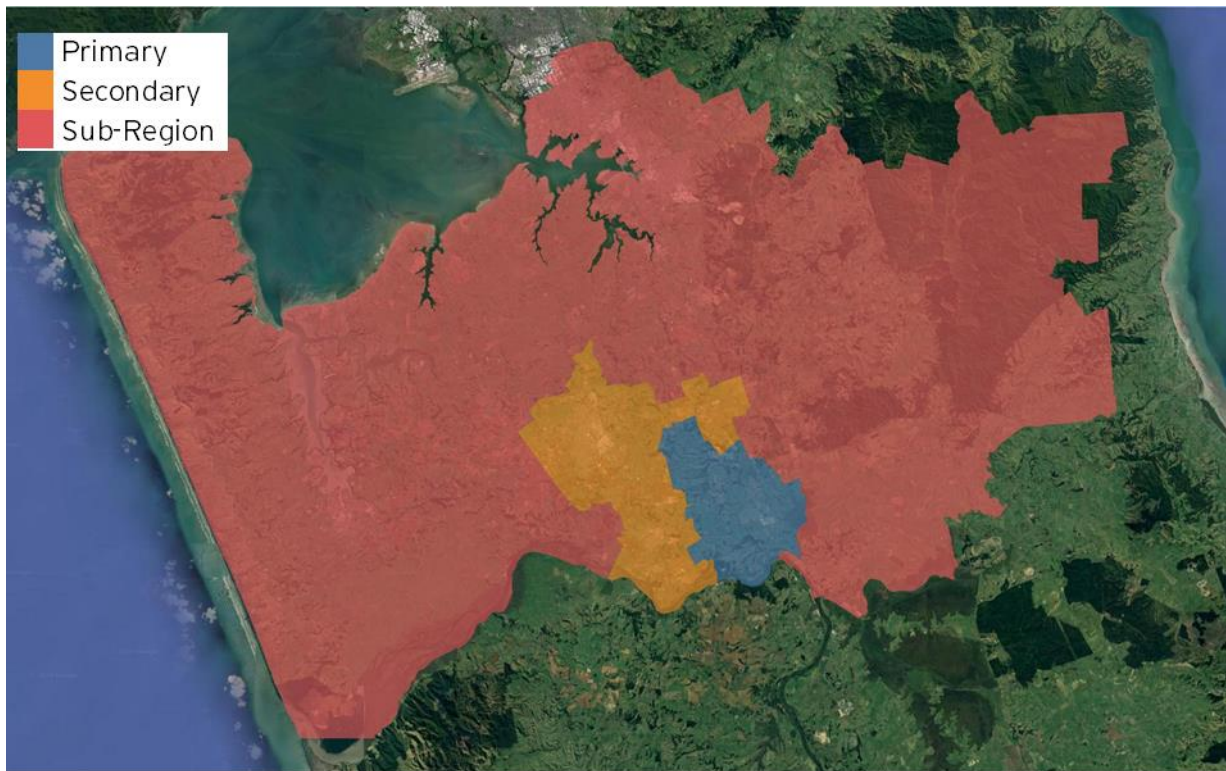


Source: Waikato District Council

5. CATCHMENT DEFINITION

- 5.1 Figure 2 illustrates the boundaries of the catchment areas used for the housing market assessment. Pokeno is within the Primary Catchment, and Pukekohe and Tuakau are within the Secondary Catchment.

Figure 2: Catchment Definition



Source: Urban Economics

6. HOUSING DEMAND

- 6.1 This section provides an analysis of the supply and demand for residential dwellings and land in Pokeno.

Auckland Housing Market Overview

- 6.2 Pokeno functions as part of the Auckland metropolitan area housing market. It is therefore useful to provide a brief overview of the Auckland housing market.
- 6.3 The Auckland housing market has a shortage of 40,000 dwellings, a quantity that is approximately the size of Tauranga. Since the AUP became operative in 2016, house prices have continued to stay at record high prices, of around \$1.0 million on average. Auckland Council's most recent evaluation found that the price of new dwellings in

Auckland will continue to be high, at \$1.2 million on average. This indicates that Auckland housing will experience ongoing upward price pressure.

- 6.4 As Auckland house prices are forecast to increase in price, this will continue to generate demand for housing in Pokeno, particularly from young families and young singles and couples (that may be considering starting a family) presently living in south and east Auckland. Pokeno is one of the few locations across Auckland that offers family housing (3-bedroom, garage and rear yard) in the \$600,000 - \$700,000 price range. This makes Pokeno attractive to first home buyers that work in south and east Auckland.

Population & Household Projections

- 6.5 Figure 3 contains historic and projected population and household numbers (2013 base) for each catchment area. It also contains Statistics NZ most recent subnational population estimates (2020).
- 6.6 The main points to note are:
- Statistics New Zealand forecast a population growth rate of 230 per annum in the Primary catchment for the last two years (2018-2020).
 - Population growth over this period was substantially faster, with 680 additional people residing in the Primary catchment each year.
 - Pkeno has grown at three times the projected growth rate over the past two years.
 - Pkeno currently has a population of 5,750. This population was not expected until 2028, indicating Pkeno has greatly exceeded its growth projections.

Figure 3: Historic and Projected Population and Households, 2018 Census

	Catchment	Historic			Current 2020	Projection		Growth			
		2006	2013	2018		2028	2038	2018 - 2028	Per Annum	2018 - 2038	Per Annum
Population	Primary	1,710	1,780	4,390	5,750	5,800	7,060	2,340	230	3,600	360
	Secondary	22,520	26,530	31,770	33,590	38,770	46,690	5,700	570	13,620	1,360
	Tertiary	21,410	22,270	39,930	41,310	53,540	67,060	29,860	2,990	43,380	4,340
	Total	45,640	50,580	76,090	80,650	98,110	120,810	37,900	3,790	60,600	6,060
Households	Primary	620	680	1,420	1,860	2,020	2,460	600	80	1,040	120
	Secondary	7,650	9,150	10,190	10,950	13,470	16,230	3,280	190	6,040	450
	Tertiary	11,110	12,150	13,130	13,440	18,560	23,250	5,430	1,000	10,120	1,450
	Total	19,380	21,990	24,750	26,250	34,050	41,940	9,300	1,260	17,190	2,020

Source: Statistics NZ

Upper North Island Growth Patterns

- 6.7 The following figures displays net internal migration for the upper North Island for the past two years. Over the 2018 – 2020 period a net -24,400 people migrated from Auckland to elsewhere in New Zealand (shown in red). The largest beneficiaries have been the neighbouring districts, with the Waikato, Waipa, Western Bay of Plenty, Whangarei and Tauranga City all posting high growth from net internal migration (shown in yellow). For the Waikato district, net internal migration is the primary driver of growth with 52% of growth coming from this source. This trend, with high net internal migration driven by an exodus from the Auckland Region, is expected to continue into the future, as it is driven primarily by high house prices in Auckland. This will be exacerbated with recent house price inflation, which will result in more households moving to the location that offer affordable housing.

Figure 4: Net Internal Migration (2018 - 2020)

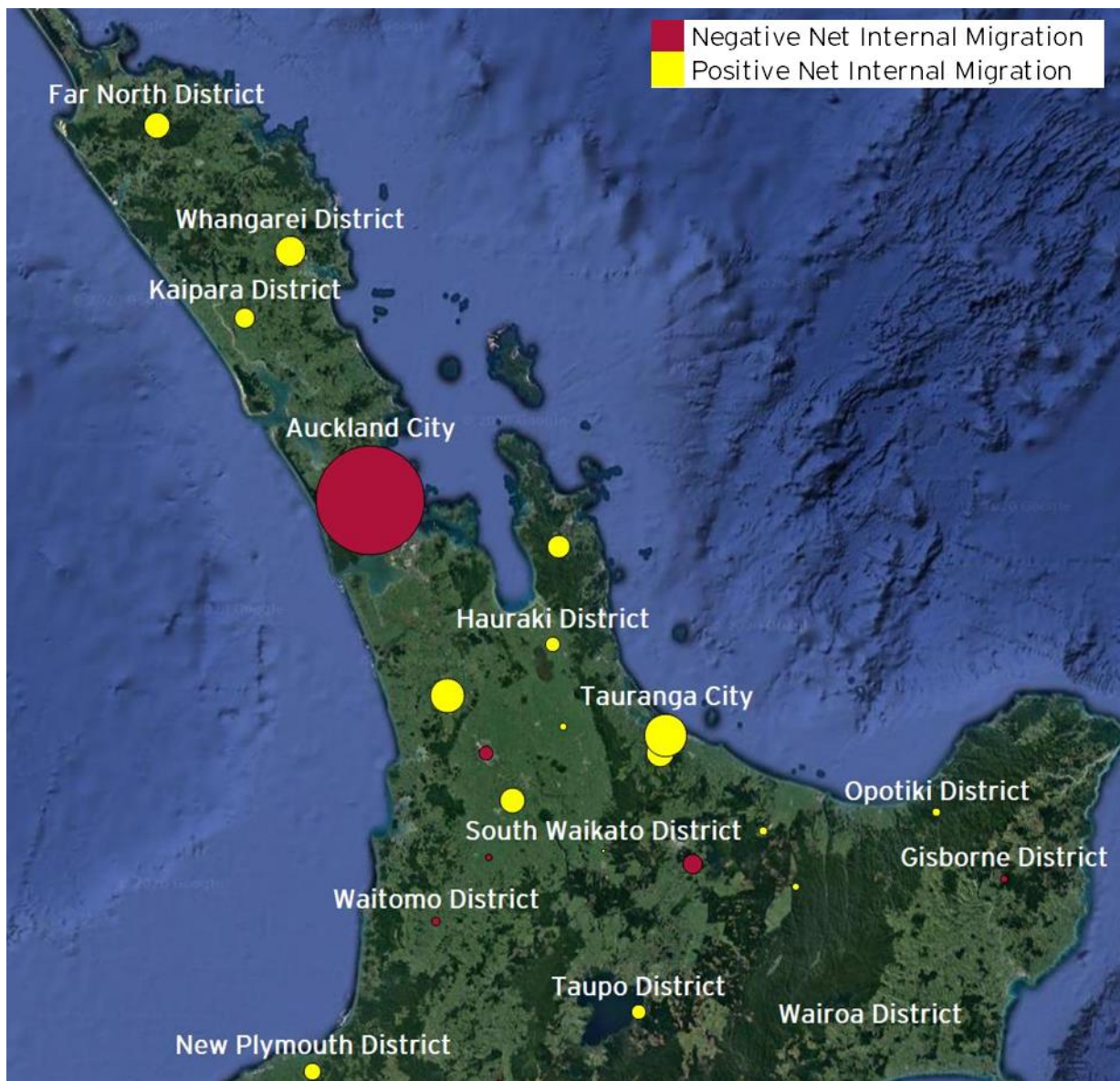


Figure 5: Net Internal Migration for Key Districts 2018 – 2020

Selected Areas	2018 - 2019	2019 - 2020	2018 - 2020 Total
Tauranga City	1,800	1,900	3,700
Waikato District	1,200	1,200	2,400
Whangarei District	960	920	1,880
Western Bay of Plenty District	750	790	1,540
Far North District	630	740	1,370
Waipa District	710	580	1,290
Thames-Coromandel District	500	560	1,060
Kaipara District	420	430	850
Taupo District	210	230	440
Hauraki District	220	210	430
Hauraki District	220	210	430
Ōpōtiki District	60	70	130
Kawerau District	70	60	130
Matamata-Piako District	50	70	120
Whakatane District	30	80	110
South Waikato District	20	10	30
Ōtorohanga District	-40	-30	-70
Gisborne District	-60	-60	-120
Waitomo District	-80	-70	-150
Hamilton City	-110	-280	-390
Rotorua District	-400	-390	-790
Auckland	-11,800	-12,600	-24,400

Source: Statistics NZ

Auckland Growth Patterns

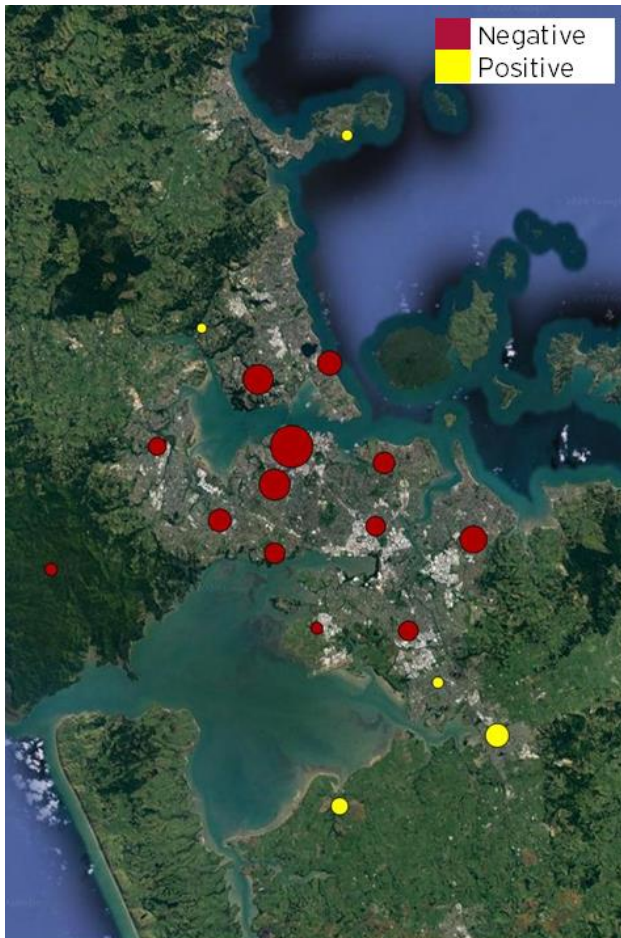
6.8 The following figures display the net internal and international migration for Auckland by local board area, and the distribution of growth across these areas. The key points to note are:

- a) Net internal migration is negative for all central and middle boards and positive for outer or peripheral boards (i.e. there has been a decline in the total number of New Zealander's living in the central and middle suburbs, and an increase in the outer suburbs). This is being driven by the demand for affordable family houses which are in the outer suburbs.
- b) More generally there has been a significant exodus of Aucklanders to the regions over the 2018-2020 period, with a net decline of 24,190 New Zealanders choosing to reside in Auckland. This is due to the regions offering affordable housing.
- c) Population growth in Auckland is being driven almost entirely by international migration, with a net increase of 61,820 people in the 2018 – 2020 period. A large proportion of the international migrants have chosen to

reside in the central and middle suburbs, indicating they are better placed to afford the higher house prices.

- d) The distribution of growth shows clear concentrations of growth in the outer suburbs and satellite towns and relatively low growth within the existing urban area. This is being driven by affordable family homes in these locations.

Figure 6: Net Internal Migration 2018 - 2020



Source: Statistics NZ

Figure 7: Net International Migration 2018 – 2020

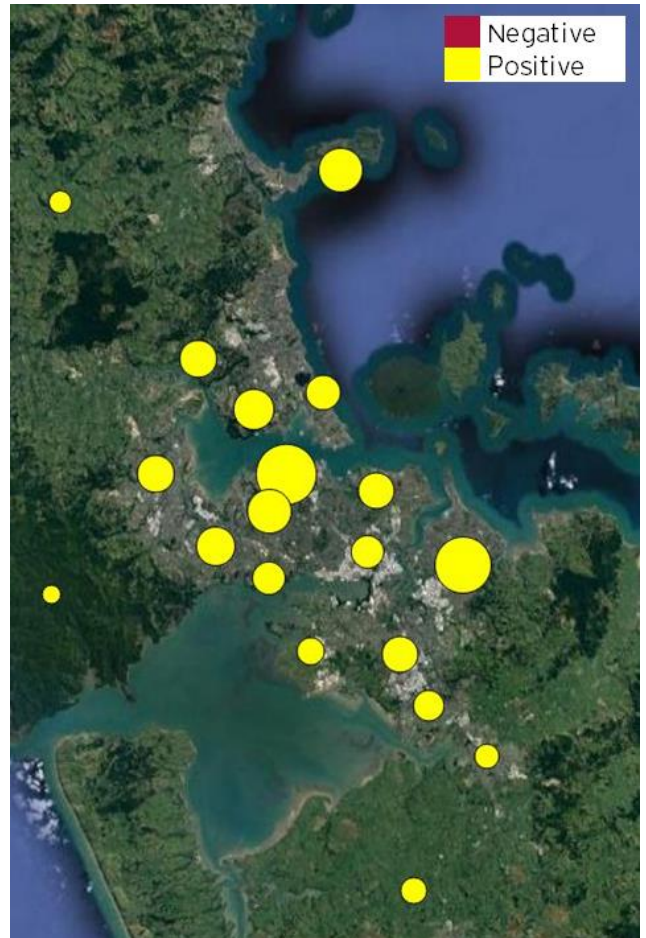
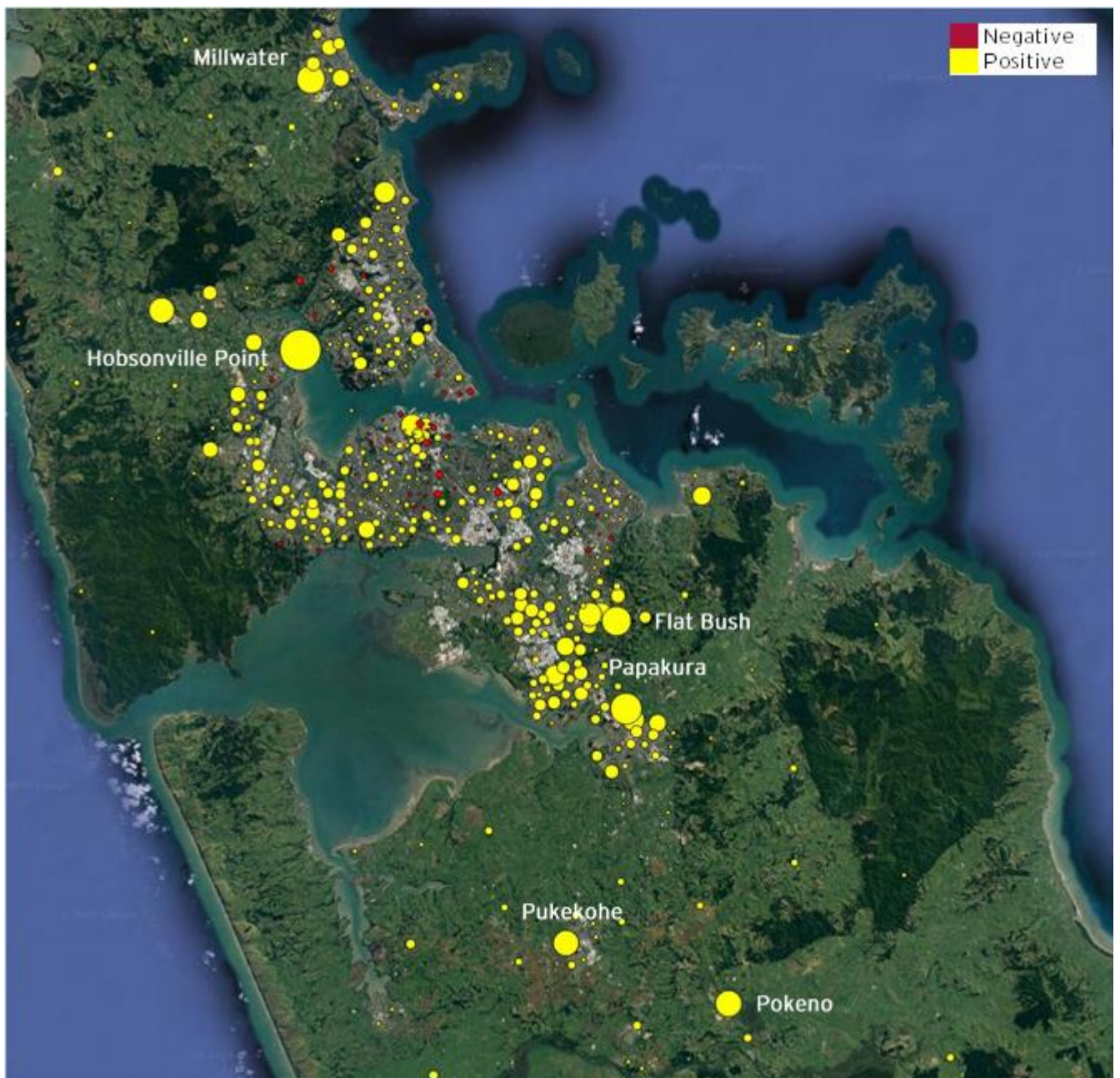


Figure 8: Distribution of Growth from all Sources, Auckland Region, 2018 – 2020



Source: Statistics NZ

Building Consents

- 6.9 The following figures show the historical rate of dwellings consented for Pokeno, Pukekohe and Tuakau over the 2011-2020 period. Residential building consents for the Waikato Region, Waikato District and Hamilton City are also included for context. This shows that since 2013, the rate of new consents in Pokeno has doubled to around 200 - 250 dwellings per annum (as highlighted in yellow).

6.10 By comparison, the rate of new consents in Pukekohe is only marginally above Pokeno. This shows that Pokeno has strong demand within the sub-region given the relative scale of the towns. This can be attributed to the competitively priced family housing in Pokeno, and more specifically the strong regional demand for housing in the \$500,000 - \$700,000 price range. This emphasizes the importance of Pokeno as an urban settlement in the regional context.

Figure 9: Pokeno, Pukekohe and Tuakau Residential Building Consents 2011-2020

Year	Pokeno			Pukekohe				Tuakau			
	SA	TCE	Total	SA	TCE	APT	Total	SA	TCE	APT	Total
2011	4	0	4	69	5	1	75	11	1	0	12
2012	25	0	25	115	0	0	115	24	2	0	26
2013	62	1	63	120	0	0	120	31	10	0	41
2014	122	0	122	132	14	2	148	39	8	0	47
2015	176	1	177	138	8	26	172	40	2	0	42
2016	245	1	246	198	1	0	199	54	1	0	55
2017	161	1	162	239	26	0	265	23	2	0	25
2018	195	7	202	287	60	0	347	18	1	0	19
2019	233	18	251	303	45	7	355	34	1	15	50
2020*	200	8	208	259	60	0	319	52	5	0	57
Total	1,423	37	1,460	1,860	219	36	2,115	326	33	15	374
Per annum	142	4	146	186	22	4	211	33	3	2	37
'16 - '20	207	7	214	257	38	1	297	36	2	3	41

Source: Statistics NZ

*Building Consents for October - December 2020 have been estimated based on current and past trends

Figure 10: Waikato Region, Hamilton City and Waikato District Residential Building Consents

Year	Waikato Region				Hamilton City				Waikato District			
	SA	TCE	APT	Total	SA	TCE	APT	Total	SA	TCE	APT	Total
2011	1,325	73	65	1,463	481	37	65	583	195	12	0	207
2012	1,429	154	32	1,615	501	123	28	652	241	7	0	248
2013	1,654	248	87	1,989	591	214	87	892	334	14	0	348
2014	1,595	181	170	1,946	422	134	162	718	324	13	0	337
2015	2,159	231	187	2,577	766	166	187	1,119	352	8	0	360
2016	2,595	393	65	3,053	755	300	64	1,119	533	9	0	542
2017	2,303	673	98	3,074	445	564	79	1,088	468	12	0	480
2018	2,201	829	43	3,073	531	701	40	1,272	381	17	3	401
2019	2,292	1,038	86	3,416	556	884	57	1,497	439	31	26	496
2020*	1,899	705	95	2,699	403	581	95	1,079	407	64	0	471
Total	19,452	4,525	928	24,905	5,451	3,704	864	10,019	3,674	187	29	3,890
Per annum	1,945	453	93	2,490	545	370	86	1,002	367	19	3	389
'16 - '20	2,241	645	96	2,982	576	533	87	1,196	430	24	5	458

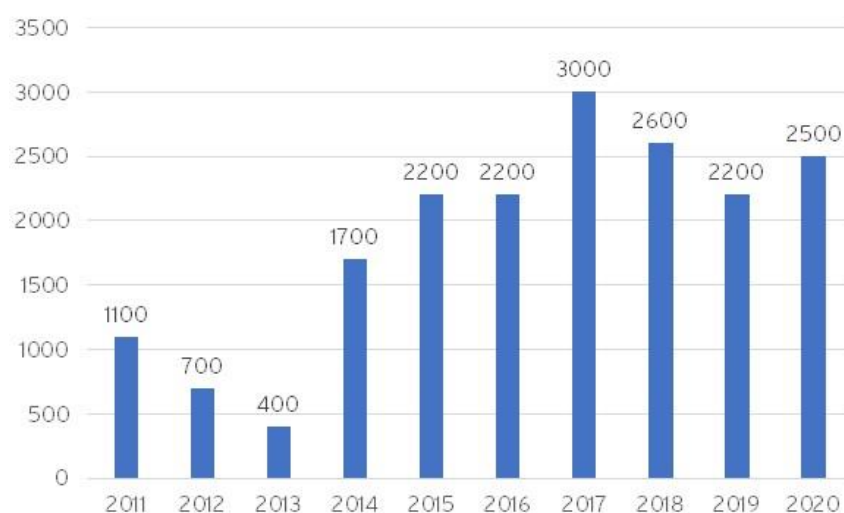
Source: Statistics NZ

*Building Consents for October - December 2020 have been estimated based on current and past trends

Waikato District Population Projections

- 6.11 I have read the report prepared by Mr Cameron entitled 2020 Update of Population, and Family and Household, Projections for Waikato District, 2013-2063.
- 6.12 The main purpose of the report is to account for the Statistics NZ's recently released *Estimated Usually Resident Population* data. These estimates confirm that the Waikato District population has grown much faster than was forecast. As shown in the following figure, Waikato district has achieved an average rate of growth of 2,500 per annum over the past 5 years.

Figure 11: Historic Population Growth Waikato District



- 6.13 The underlying reason behind Waikato's recent high level of growth is that it has experienced very high 'net internal migration'. In particular, a large number of New Zealanders currently living in other districts, notably Auckland and Hamilton, are deciding to relocate to the Waikato. The Waikato has experienced a net 1,200 relocations for the 2019 and 2020 years from other districts, requiring around 500 additional dwellings per annum. The Waikato in fact has the third highest nominal net internal migration of any district in New Zealand, as shown in the following figure. This is more notable when considered within the context of Selwyn and the Waimakariri being part of the large Christchurch region, and Tauranga is a large City.

Figure 12: Net Internal Migration by District

District	2019	2020
Selwyn	1900	2100
Tauranga	1,800	1,900
Waikato	1,200	1,200
Wairarapa	1,100	1,100
Whangarei	960	920
Queenstown-Lakes	800	810
Western Bay of Plenty	750	790
Far North	630	740
Tasman	580	590
Wairarapa	710	580
Kapiti Coast	510	580
Thames-Coromandel	500	560
Horowhenua	530	560
Dunedin	340	530
Central Otago	440	440
Auckland	-11,800	-12,600

Source: Statistics NZ

6.14 As shown in the following figure, around half of all recent growth in the Waikato is from net internal migration. Dr Davey concludes that the main reason for this is that the Waikato offers an attractive lifestyle within close proximity to two major cities, with which I agree.

Figure 13: Composition of Waikato District Growth 2019 & 2020

Jun-18	Population	78,200
	Natural Increase	580
2018 -	Net Internal Migration	1,200
2019	Net International Migration	370
	Net Migration	1,570
	Total Change	2,150
Jun-19	Population	80,400
	Natural Increase	590
2019 -	Net Internal Migration	1,200
2020	Net International Migration	690
	Net Migration	1,890
	Total Change	2,480
Jun-20	Population	82,900

Source: Statistics NZ

6.15 With regard to the urbanisation of the Waikato towns, the most important question facing the Waikato district is whether there will be ongoing high net internal migration into the future. The answer to this question cannot in my opinion be derived from historic demographic trends, and rather requires consideration of whether the Waikato will continue to be relatively attractive when compared to Auckland and Hamilton.

- 6.16 This is in large part a function of the relative affordability of housing in Auckland, Hamilton and the Waikato. If more people consider the Waikato to be relatively more attractive and affordable when compared to Auckland and Hamilton, then more people will move there.
- 6.17 As shown in Figure 14, the price of housing in Auckland increasing by \$154,000 in 2020, to an average price of \$1,040,000, and will probably rise by around \$100,000 in 2021.
- 6.18 Hamilton house prices also increased by \$125,000 in 2020, to an average price of \$730,000, and is on track for a rise of around \$100,000 in 2021, to an average price of \$830,000.
- 6.19 The Waikato also increased, by \$100,000, however the average house price of \$650,000 continued to be notably more affordable than Hamilton and Auckland. Houses in the Waikato are significantly more affordable and will probably rise by around \$80,000 in 2021.
- 6.20 Based on these house prices, it is reasonable to expect that net internal migration in the Waikato, particularly people relocating from Auckland and Hamilton, will increase to 1,500 – 2,000 per annum over the coming decade.

Figure 14: Auckland, Waikato and Hamilton House prices 2019 -2020

Location	Median House Price		
	Dec-19	Dec-20	Increase 2019 -2020
Auckland	\$886,000	\$1,040,000	\$154,000
Waikato	\$555,000	\$650,000	\$95,000
Hamilton City	\$605,000	\$730,000	\$125,000

Source:REINZ

- 6.21 Mr Cameron estimates a 'medium' rate of growth of 1,550 per annum over the next decade, or a total of 15,500 people. Mr Cameron estimates a 'high rate of growth of 1,900 per annum over the next decade, or a total of 19,000 people. In my opinion, growth will continue to increase in the Waikato, and will be closer to 3,000 people per annum, or 30,000 people over the next decade. This is only marginally above the rate of growth experienced over the past 5 years, of 2,500 per annum, and is in my opinion likely to occur when considered within the context of unaffordable housing in Auckland and Hamilton.
- 6.22 It should be noted that previous projections have significantly underestimated demand. In *'Population, Household, and Labour Force projections for the Waikato Region, 2013-*

2063' (2014) Cameron and Cochrane estimated growth in the Waikato District at between 2,300 – 6,800 over the 2016 – 2020 period.

- 6.23 In 2016 this report was updated, projecting growth between 4,400 and 7,000 over the 2016 – 2020 period. Actual growth for the same 5-year period is 12,500, around 5,500 more than both reports high-end projections. This highlights a significant under projection made by the research reports of between 179% - 184%. This is due in large part to the high net internal migration from Hamilton and Auckland into Waikato District.

Figure 15: Previous Population Projections vs Statistics NZ Actual's (2015 – 2020)

Projection	Series	Measure	2015	2016	2017	2018	2019	2020	5-Year Growth
Cameron, M.P., and Cochrane, W. (2014)	Low	Total Population Growth P.A.	65,700 -	66,200 500	66,600 400	67,100 500	67,600 500	68,000 400	2,300
	Medium	Total Population Growth P.A.	66,500 -	67,400 900	68,200 800	69,100 900	70,100 1,000	71,000 900	4,500
	High	Total Population Growth P.A.	67,300 -	68,600 1,300	69,900 1,300	71,300 1,400	72,700 1,400	74,100 1,400	6,800
Cameron, M.P., and Cochrane, W. (2016)	Low	Total Population Growth P.A.	68,200 -	69,000 800	69,900 900	70,800 900	71,700 900	72,600 900	4,400
	Medium	Total Population Growth P.A.	68,600 -	69,700 1,100	70,800 1,100	72,000 1,200	73,100 1,100	74,300 1,200	5,700
	High	Total Population Growth P.A.	69,100 -	70,400 1,300	71,700 1,300	73,100 1,400	74,600 1,500	76,000 1,400	7,000
Stats NZ	Actual	Total Population Growth P.A.	70,400 -	72,600 2,200	75,600 3,000	78,200 2,600	80,400 2,200	82,900 2,500	12,500

Source: StatsNZ, Cameron, M.P., and Cochrane, W.

- 6.24 Given the recent rate of growth achieved in Pokeno, the high demand for outer suburbs and towns, the increasing house prices and the historical lack of land supply competition in Pokeno (suppressing growth that would have otherwise occurred), there is considered to be demand for 400 - 500 dwellings per annum in Pokeno.

Pokeno Local Area Blueprint

- 6.25 Waikato District Council's 'Pokeno Local Area Blueprint' estimates that the 2016 Pokeno population of 2,100 will increase to 12,000 by 2045. This equates to an increase of 9,900 people over the 29 years from 2016 to 2045, an increase of 340 per annum. Based on an average person per dwelling ratio of 2.5, this equates to 140 households or dwellings per annum.

Waikato 2070 Plan

- 6.26 The Waikato 2070³ document outlines Waikato's 50-year growth plan and contains an estimate that the 2020 population of 2,500 will increase to 16,000 by 2070. This equates to an increase of 13,500 over the next 50 years, or 270 per annum. Based on an average person per dwelling ratio of 2.5, this equates to 110 households or dwellings per annum.

Real Estate Agent Interviews

- 6.27 Real estate agents based in Pokeno were interviewed to provide an outline of local market characteristics. The key points to note are:
- (a) The main demographic groups buying in Pokeno are young families (80%) and retirees (20%).
 - (b) 65-70% of buyers are first or second home buyers.
 - (c) The number one reason people are choosing Pokeno is affordability.
 - (d) Buyers work in varied locations, with most working in Manukau or Papakura and some working in Auckland CBD.
 - (e) Pukekohe is considered the strongest alternative location for potential buyers.
 - (f) Terraced dwellings were considered viable at the right price point.

Recent Sales

- 6.28 The following figures show the lot and dwelling sales for Pokeno. The key points to note are:
- (a) The majority of dwelling sales in Pokeno in 2020 have been in the \$700,000 - \$800,000 price range.
 - (b) In 2019 26% of dwellings were sold in the \$600,000 – \$700,000 price range. In 2020, the proportion of properties sold in this bracket fell to 8%. This reflects an increasing price of new dwellings.
 - (c) The majority of lot sales in Pokeno have been in the \$200,000 - \$300,000 price range.

³ Waikato 2070: Waikato District Council, Growth & Economic Development Strategy

Figure 16: Dwelling Sales in Pokeno, 2018 – 2020

Year	Sale Price Bracket (\$000)	Count	Average Land Area (sqm)	Average Floor Area (sqm)
2018	\$0 - \$99	1	620	220
	\$200 - \$299	14	590	160
	\$300 - \$399	2	600	150
	\$600 - \$699	11	580	170
	\$700 - \$799	18	670	190
	\$800 - \$899	1	710	220
	Subtotal	47	630	180
2019	\$0 - \$99	1	630	190
	\$100 - \$199	1	540	190
	\$200 - \$299	21	530	160
	\$300 - \$399	2	580	170
	\$500 - \$599	3	430	150
	\$600 - \$699	41	620	160
	\$700 - \$799	75	660	190
	\$800 - \$899	10	800	200
	\$900 - \$999	1	1,270	250
	\$1,000 +	2	2,400	210
	Subtotal	157	990	180
2020	\$500 - \$599	1	200	140
	\$600 - \$699	5	560	160
	\$700 - \$799	42	610	190
	\$800 - \$899	11	630	210
	\$900 - \$999	1	900	250
	Subtotal	60	580	190
Total		264	820	180

Source: Corelogic

Figure 17: Lot Sales in Pokeno, 2018 – 2020

Year	Sale Price Bracket (\$000)	Count	Average Land Area (sqm)
2018	\$200 - \$299	8	750
	Subtotal	8	750
2019	\$200 - \$299	57	590
	\$300 - \$399	4	1,070
	\$400 - \$499	1	600
	Subtotal	62	620
2020	\$200 - \$299	57	730
	\$300 - \$399	10	850
	Subtotal	67	750
Total		137	690

Source: Corelogic

Trademe Listings

6.29 As at 20/12/2020, there were 3 vacant lots and 29 house-and-land packages listed for sale on Trademe in Pokeno. These are presented in Figures 18 & 19 by price bracket.

6.30 The key points to note are:

- (a) Lots are listed for \$200,000 - \$300,000.
- (b) The majority of house and land packages (93%) are listed for \$650,000 - \$850,000.
- (c) There are relatively few dwellings listing within the \$550,000 - \$650,000 range (7%).

Figure 18: Pokeno Lot Listings

Price	Average Lot Size (m ²)	Count	%
\$200,000 - \$300,000	600	2	67%
\$300,000 - \$400,000	3,090	1	33%
Total	1,843	3	100%

Source: TradeMe

Figure 19: Pokeno House and Land Package Listings

Price	Average Lot Size (m ²)	Average Floor Area (m ²)	Count	%
\$550,000 - \$650,000	550	140	2	7%
\$650,000 - \$750,000	630	170	15	52%
\$750,000 - \$850,000	600	190	12	41%
Total	592	167	29	100%

Source: TradeMe

Achievable Price Points in Pokeno by Typology & Size

- 6.31 Figure 20 provides an estimate of the price of dwellings that are in demand in Pokeno. This is based on current prices being achieved for larger stand-alone houses in Pokeno, and the relative price differences seen within other developments across the different housing types.
- 6.32 At present the majority of dwellings that are being sold in Pokeno are stand alone within the \$650,000 - \$800,000 range. This means that a large proportion of demand, for small-medium size stand alone and terraced houses, are not being provided for. If a wider range of dwelling type and price were supplied to the market, a greater share of total demand would be met, and total construction would increase to 400-500 dwellings per annum.

Figure 20: Demand by Size, Price and Type in Pokeno

Stand Alone									
Dwelling Size	80sqm	100sqm	120sqm	140sqm	160sqm	180sqm	200sqm	220sqm	240sqm
Dwelling Price (\$000)	\$440	\$490	\$540	\$590	\$620	\$660	\$700	\$730	\$760
Dwelling Price per Sqm	\$5,500	\$4,900	\$4,500	\$4,210	\$3,880	\$3,670	\$3,500	\$3,320	\$3,170
Lot Price (\$000)	\$190	\$210	\$230	\$250	\$260	\$270	\$280	\$280	\$280
Lot Size (Sqm)	300	350	400	450	500	550	600	650	700
Terrace									
Dwelling Size	80sqm	100sqm	120sqm	140sqm	160sqm				
Dwelling Price (\$000)	\$370	\$410	\$460	\$490	\$530				
Dwelling Price per Sqm	\$4,630	\$4,100	\$3,830	\$3,500	\$3,310				
Lot Price (\$000)	\$140	\$160	\$180	\$190	\$200				
Lot Size (Sqm)	140	170	210	240	270				

Source: Urban Economics

7. HOUSING CAPACITY

Operative Waikato District Plan Capacity Waikato District

7.1 The capacity for additional dwellings under the OWDP has been evaluated in the Housing Development Capacity Assessment 2017 report undertaken by Market Economics Consulting on behalf of the Waikato District Council. The following figure summarizes these results. The main points to note are:

- (a) There is demand for 7,100 additional dwellings by 2026.
- (b) 5,000 (71%) of these dwellings need to be below \$440,000 and 6,200 (87%) of these dwellings below \$580,000 to align with market demand.
- (c) The OWDP has an estimated potential supply of 210 dwellings under \$440,000 and 700 dwellings under \$580,000. This falls short of demand by 4,800 and 5,500 respectively.
- (d) The OWDP has an estimated potential supply of 1,590 dwellings across all price ranges, when demand (i.e. ability to purchase houses within different price ranges) is accounted for. This falls short of the total demand for 7,100 dwellings by 5,500 dwellings.
- (e) The Council's capacity analysis has concluded that only 5-10% of plan enabled supply is for housing of less than \$580,000, however the large majority of demand (87%) is for housing in this price range.

Figure 21: Capacity for Growth Under the OWDP (2017-2026)

Price (\$000)	Commercially Feasible Capacity	Demand	Demand %	Demand That Can Be Met	Demand That Can't Be Met
\$0 - \$440	250	5,030	71%	210	4,820
\$440 - \$580	500	1,150	16%	500	650
\$580 - \$730	650	550	8%	550	0
\$730 - \$880	520	140	2%	140	0
\$880 - \$1,020	1,140	70	1%	70	0
\$1,20 - \$1,170	3,800	50	1%	50	0
\$1,170 - \$1,310	2,030	40	1%	40	0
\$1,310 - \$1,450	620	20	0%	20	0
\$1,450 - \$1,750	0	20	0%	0	20
\$1,750 - \$2,050	0	10	0%	0	10
\$2,050 Plus	0	10	0%	0	10
Total	9,510	7,090	100%	1,580	5,510

Source: ME Consulting

7.2 This shortage is confirmed by Council's economists as follows:

However, all three supply scenarios show shortfalls of capacity within the lower price brackets (up to \$580,000; and the cheapest dwelling scenario up to \$440,000). Net sufficiency within these price brackets is projected to be at between 75 per cent to 90 per cent in the medium-term. (page 110, Housing Development Capacity Assessment 2017, Market Economics Consulting, emphasis added)

Net surpluses in capacity are projected to occur in the mid to higher price brackets across all three supply scenarios in the medium-term. The largest surpluses are projected for the \$1.02m to \$1.17m price bracket in the Maximum Profit and Maximum Dwellings supply scenarios. However, it is unlikely that surpluses within this price bracket will be able to play any significant role in meeting demand elsewhere in the price spectrum. With the largest deficits projected to occur in the much lower price brackets. (page 110, Housing Development Capacity Assessment 2017, Market Economics Consulting, emphasis added).

Proposed Waikato District Plan Capacity Waikato District

- 7.3 The Council provides the following estimate of new dwelling capacity on greenfield Residential Zone land:

“The Residential Zone covers approximately 618ha of land currently in agricultural uses. Approximately 567ha of these are in parcels that qualify for subdivision. Future development will mean loss of rural production. A density of 12-15 dwellings per ha implies that the area of Residential Zone currently in rural uses (and qualifying for subdivision) has capacity for approximately 6,800 to 8,500 dwellings.” (page 5, Waikato District s32 residential Zone Minimum Lot Sizes Topic, Market Economics Consulting).

- 7.4 The location of this land is shown in Figure 22 below⁴. It is not specified whether any of this land is within the OWDP, and therefore the extent that it reflects additional capacity under the PWDP. If it is assumed that this is all additional land, then as stated it would enable an additional capacity for around 6,800 – 8,500 dwellings.
- 7.5 This is however plan enabled capacity rather than commercially feasible capacity, and no analysis has been completed by the Council on whether it is commercially feasible or the extent to which it enables dwellings at prices that align with demand as required by NPS-UD. With regard to greenfield land, it is reasonable to assume that the majority would be commercially feasible. However, with regard to Pokeno and Tuakau, where around two thirds of this additional land is located, the analysis in Section 5 of this report indicates that the majority of new dwellings would be in the \$700,000 plus price range (as estimated by Urban Economics) however the Housing Development Capacity Assessment 2017, report identified that the majority of demand is in the up to \$580,000 price range (as estimated by the Council and agreed by Urban Economics). The proposal for rezoning the CSL/Top End site meets this demand, and taps into this segment of market.
- 7.6 It is therefore reasonable to conclude, given the information available, that under the provision of the Residential Zone demand would not be met in the Waikato District, and in particular in Pokeno and Tuakau, unless first, the additional Residential Zone land proposed in these two towns are included in the new District Plan, and second, the Residential Zone is amended to include provisions that enable a range of lot sizes, including smaller lots.

⁴ It appears in Figure 17 that the additional Residential Zone land incorrectly includes some of the existing Residential 2 zone land.

[illegible]

Operative and Proposed District Plan Capacity Pokeno

7.7 The Council has estimated capacity under the OWDP and PWDP plans as follows:

Pokeno currently has greenfield capacity for an additional 2,200 dwellings (excluding Country Living), and a further 500 infill dwellings. The proposed growth areas add a further capacity of 3,500 dwellings, bringing the total greenfield capacity to 5,700 dwellings. This compares to a medium-series long-

term demand for 2,300 dwellings. (page 27, Waikato District s32 Growth Areas Topic, Market Economics Consulting)

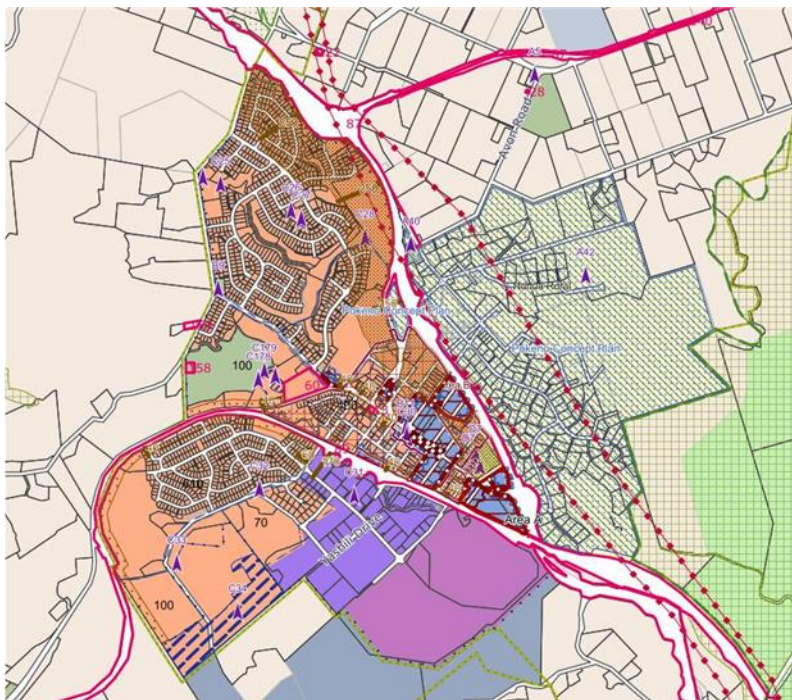
7.8 Urban Economics has estimated capacity under both the OWDP and PWDP. The following figures are taken from the Waikato District Council Planning Maps. Figure 23 illustrates the OWDP and Figure 24 the PWDP. There are three changes to residential land supply that occur under the PWDP, as follows:

- a. 159 hectares of rural zoned land in Pokeno West is converted to Residential Zone.
- b. A small parcel in Pokeno East is converted from Rural zoned land to Village zoned land.
- c. All existing Residential Two zoned land is converted to Residential zoned land. This has no effect on the minimum lot size available.

7.9 The key points from this section are as follows:

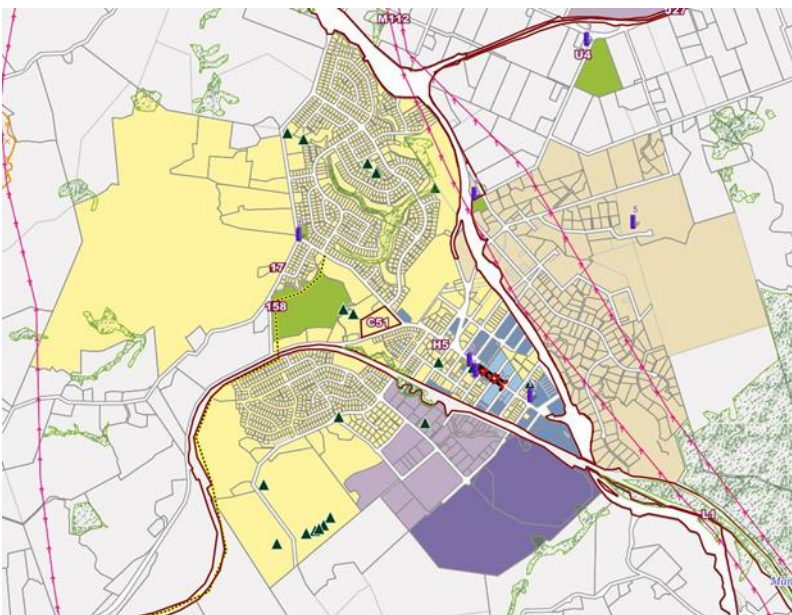
- a) Plan enabled capacity is estimated at between 855 and 1,365 dwellings under the OWDP and 2,355 - 3,775 dwellings under the PWDP.
- b) Given the annual demand of 400 - 500 dwellings, this indicates that Pokeno has only 2-3 years of supply remaining, and that additional Residential Zone land is required under the PWDP to ensure that Pokeno continues to have an efficient housing market.
- c) There is between 1,500 and 2,410 additional dwellings enabled under the PWDP. This suggests that Market Economics estimates of 3,500 dwellings are too high.
- d) Examination of Figure 22 appears to show that existing residential areas are classified as additional Residential Zoned land in Market Economics report. This may be the reason the Market Economics estimate of 3,500 dwellings is too high.

Figure 23: Operative Waikato District Plan



Source: Waikato District Council

Figure 24: Proposed Waikato District Plan



Source: Waikato District Council

Figure 25: Existing and Proposed Capacity Map, Residential (2) Zone, Operative and Proposed District Plans



Key

Green field Capacity, OW DP

Brown field Capacity, OW DP

Additional Capacity, PW DP

Proposed Capacity



- 7.10 Blocks A-G make up areas of brownfield capacity under the OWDP. This includes properties that currently have an existing structure on them. Brownfield capacity is estimated at 24ha of land comprised of 48 titles.
- 7.11 Blocks H-M make up areas of greenfield capacity under the OWDP. This includes properties that do not have an existing structure on them. Greenfield capacity is estimated at 92ha of land comprised of 27 titles.
- 7.12 Block N contains 159 hectares of Residential Zoned land comprised of 8 titles.

7.13 Block O encompasses the CSL/Top End Block area and contains 46ha of proposed Country Living zoned land and 49ha of proposed Residential zoned land.

7.14 Three development scenarios are tested to analyse likely development outcomes, as follows:

- a) Scenario 1: Assumes development in all areas analysed follows established development patterns in Pokeno. The dwelling yield per hectare assumed in this section is found by analysing current developments in the Hitchens and Helenslee blocks by Pokeno Village Estate for the Residential zone. This is found in Appendix 1. Proposed Country Living zone development occurs at the densities indicated previously.
- b) Scenario 2: Assumes development in Residential zone areas analysed consists of an average lot size of 450m². This is consistent with a development outcome where stand alone dwellings are built on the minimum permitted section size allowed under the Residential Zone. Proposed Country Living zone development occurs at the densities indicated previously.
- c) Scenario 3: Assumes development in areas identified as a continuation of Pokeno Village Estate (Blocks K and L) are developed in line with the density currently produced in the Hitchens block. The remaining Residential zone development areas are assumed to develop to a 'Medium Density' with an average lot size of 300m². This represents a scenario where development of a number of townhouse or terraced dwellings on sections smaller than 300m² occurs alongside development of stand alone dwellings primarily on sections larger than 300m² and a small number on sections smaller than 300m², this represents the likely development outcome with regards to the smaller minimum lot size as a restricted discretionary activity. This development scenario also includes the provision of additional green space. Proposed Country Living zone development occurs at the densities indicated previously.
- d) Plan enabled capacity is estimated at between 855 and 1,365 dwellings under the OWDP and 2,355 - 3,775 dwellings under the PWDP. The addition of the CSL/Top End land brings plan enabled capacity up to between 3,090 and 4,915 dwellings. This capacity estimate would enable 6 - 12 years of supply to be brought to the market.

Figure 26: Existing and Proposed Capacity Estimates

Area	Block	Type	Number of Properties	Land Area (ha)	Number of Dwellings		
					Scenario 1	Scenario 2	Scenario 3
OW DP	A	Brownfield	5	3	25	35	40
	B	Brownfield	1	0	5	0	5
	C	Brownfield	5	1	10	15	15
	D	Brownfield	8	11	100	150	160
	E	Brownfield	17	6	45	70	80
	F	Brownfield	6	2	15	20	25
	G	Brownfield	6	2	10	20	20
	H	Greenfield	1	0	5	0	5
	I	Greenfield	7	21	210	305	330
	J	Greenfield	1	1	10	15	20
	K	Greenfield	5	33	210	305	330
	L	Greenfield	5	35	210	305	335
	M	Reserve	1	2	NA	NA	NA
	Subtotal Brownfield		48	26	210	310	345
	Subtotal Greenfield		19	91	645	930	1,020
	Total -		68	118	855	1,240	1,365
OW DP + PW DP	N	Greenfield	8	159	1,500	1,950	2,410
	Subtotal Brownfield		48	26	210	310	345
	Subtotal Greenfield		27	250	2,145	2,880	3,430
	Total -		75	276	2,355	3,190	3,775
OW DP +	O	Greenfield	5	95	525	735	795
PW DP +	Subtotal Brownfield		48	26	210	310	345
CSL/Top	Subtotal Greenfield		32	345	2,880	3,925	4,570
End	Total -		80	371	3,090	4,235	4,915

Source: Corelogic, Waikato District Council, Urban Economics

Population, Household and Land Supply Capacity Report Review

7.15 I have reviewed the report prepared by Dr Davey entitled Population, Household and Land Supply Capacity Report – December 2020 (the “capacity report”). The following table displays areas identified as capacity in the short (1 – 3 years), medium (3 – 10 years) and long (10 – 30 years).

7.16 As displayed in figure 27, both the west

7.17 Village and Pokeno East areas are identified in the Waikato 2070 document but not the operative or proposed district plans. They should therefore only be included as long-term capacity in regard to the NPS-UD requirements.

Figure 27: Pokeno Key Development Blocks and Estimated Capacity

Area	Source	Timing	Timing Identified in S42a Report	Type	Quantity of Dwellings, S42a Report	Quantity of Dwellings, UE
Hillpark Drive	Operative District Plan	Short Term (1-3 Years)	Short Term (1-3 Years)	Greenfield	460	350
Hitchens Block	Operative District Plan	Short Term (1-3 Years)	Short Term (1-3 Years)	Greenfield	670	630
Town Centre	Operative District Plan	Short Term (1-3 Years)	Medium Term (3-10 Years)	Infill	700	320
Munro Block	Proposed District Plan	Medium Term (3-10 Years)	Medium Term (3-10 Years)	Greenfield	1,590	1,950
Pokeno East	Waikato 2070	Long Term (10-30 Years)	Medium Term (3-10 Years)	Greenfield	920	670
Havelock Village	Waikato 2070	Long Term (10-30 Years)	Medium Term (3-10 Years)	Greenfield	1,060	1,190
Short Term Supply					1,130	980
Medium Term Supply					4,270	2,270
Long Term Supply					0	1,860
Total					5,400	5,110

Source: Urban Economics, Waikato District Council

7.18 The last column in figure 27 above displays the quantity of dwellings estimated in each of the areas analysed by Urban Economics (UE). While the overall quantity of dwellings able to be supplied to the market is similar (5,400 vs 5,110), the areas in which this capacity exists varies. This is due primarily to differences in expected density achievable. Areas with substantially different capacity estimates are addressed as follows.

- a) Dr Davey estimates there is capacity for 460 additional dwellings in the Hillpark Drive area. Urban Economics estimates there is capacity for 350 dwellings in this area. An average lot size of 300m² has been used to estimate this capacity. This average lot size is representative of a number of terrace dwellings between 200m² – 300m² and a small number of stand alone dwellings on sections of 450m². Higher density dwellings are not considered feasible in this location.
- b) Dr Davey estimates there is capacity for 700 additional dwellings in the Town Centre area. Urban Economics estimates there is capacity for 320 dwellings⁵ in this area. An average lot size of 300m² has been used to estimate this capacity. 30% of the portion of the town centre zone earmarked as 'mixed use' in the Waikato 2070 plan has been allocated to medium density townhouses in this capacity estimate, with the remainder set aside for retail or commercial use. This average lot size is representative of a number of terrace dwellings between 200m² – 300m² and a small number of stand-alone dwellings on sections of 450m². The yield of 700 dwellings in this area⁶ requires 45 dwellings per hectare, indicating either

⁵ This is slightly larger than the capacity identified in areas E – G in section 6.3 would imply. This is because this estimate also includes infill capacity in the existing urban area.

⁶ Assuming that 1/3 of the mixed use area is used for dwellings

small terrace houses or 2-3 level apartments. This type of housing is not considered feasible in large quantity in this location.

- c) Dr Davey estimates there is capacity for 1,590 additional dwellings in the Munro Block area. Urban Economics estimates there is capacity for 1,950 dwellings in this area. An average lot size of 450m² has been used to estimate this capacity. This is representative of a primarily stand-alone development outcome with sections between 450m² – 600m² and a small number of terrace dwellings.
- d) Dr Davey estimates there is capacity for 920 additional dwellings in the Pokeno East area. Urban Economics estimates there is capacity for 670 dwellings in this area. An average lot size of 450m² has been used to estimate this capacity. This is representative of a primarily stand-alone development outcome with sections between 450 – 600m² and a small number of terrace dwellings.

7.19 The following table displays supply and demand estimates from the section 42a report authored by Dr Davey and the UE supply and medium projection demand estimates. The key points to note are:

- a) Dr Davey estimates there is total greenfield capacity for 920, 2,510 and 4,270 new dwellings by 2023, 2030 and 2050 respectfully in the Proposed Waikato District Plan and Waikato 2070 long term plan.
- b) UE estimates there is total greenfield capacity for 1,100, 3,050 and 5,100 new dwellings by 2023, 2030 and 2050 respectfully in the Proposed Waikato District Plan and Waikato 2070 long term plan.
- c) Dr Mark Davey in '*Population, Household and Land Supply Capacity Report – December 2020*' noted that of this capacity, up to 50% is likely to be unavailable to the market due to land banking, larger than minimum section sizes, market feasibility, infrastructure servicing and site suitability. I agree with this conclusion and have included scenarios for 50%, 75% and 100% greenfield land availability, for each time period.
- d) Taking into account the constraints outlined above, total greenfield dwelling capacity under the WDC scenario may fall to between 570 – 850 by 2023 (short term), 1,360 – 2,040 by 2030 (medium term) and 2,350 – 3,530 by 2050 (long term).

- e) Total greenfield capacity under the UE scenario may fall to between 550 – 830 by 2023 (short term), 1,530 – 2,290 by 2030 (medium term) and 2,550 – 3,830 by 2050 (long term).
- f) There is total infill capacity for 700 additional dwellings under the WDC scenario and 240 additional dwellings under the UE scenario. Dr Davey concludes that only 10% of this capacity is likely to be realised. This is agreed with, as small towns tend to have very little infill development. There is therefore likely infill capacity for 20 - 70 dwellings.
- g) The Waikato District Council (WDC) estimates 730 dwellings (240 per annum) are demanded over the 2020 – 2023 period (short term), 2,600 dwellings (270 per annum) are demanded over the 2023 – 2030 period (medium term) and 5,380 dwellings (140 per annum) are demanded over the 2030 – 2050 period (long term).
- h) Urban Economics estimates 1,440 dwellings are demanded over the 2020 – 2023 period (short term), 4,800 dwellings are demanded over the 2023 – 2030 period (medium term) and 14,400 dwellings are demanded over the 2030 – 2050 period (long term).
- i) Over the medium term, which is most relevant to a district plan review, there is a shortage under both the WDC and UE demand projections, with the only exception being the 100% Greenfield update scenario, which would result in a small surplus (0.7 – 1.7 years) as at 2030.
- j) When the medium term is considered against the Urban Economics demand projections, there is a notable shortage over the medium term, of 2,490 dwellings or 5.2 years of supply (under the 75% greenfield scenario). Under the 50% greenfield scenario, this shortage increases to 3,250 dwellings or 6.8 years of capacity. Based on this assessment, additional capacity of 2,490 – 3,250 dwellings is required in Pokeno for it to meet the medium term requirements of the NPS-UD.

Figure 28: Supply and Demand Estimates, Waikato District Council and Urban Economics

				2023		2030		2050		
				W DC	UE	W DC	UE	W DC	UE	
Supply	Green field	Block	Hitchens	670	600	670	600	670	600	
			Hillpark Drive	460	350	460	350	460	350	
			Munro Block	0	0	1,590	1,950	1,590	1,950	
			Town Centre	0	150	0	150	0	150	
			Pokeno East	0	0	0	0	920	630	
			Havelock Village	0	0	0	0	1,060	1,420	
		Total	1,130	1,100	2,720	3,050	4,700	5,100		
		Green field Supply Uptake	50 %	570	550	1,360	1,530	2,350	2,550	
			75 %	850	830	2,040	2,290	3,530	3,830	
			100 %	1,130	1,100	2,720	3,050	4,700	5,100	
		In fill	Block	Hitchens	0	30	0	30	0	30
				Town Centre	0	170	700	170	700	170
	Pokeno East			0	0	0	0	0	40	
	Total		0	200	700	200	700	240		
	Uptake	10 %	0	20	70	20	70	20		
	Total Supply	50 % Green field, 10 % In fill	570	570	1,430	1,550	2,420	2,570		
		75 % Green field, 10 % In fill	850	850	2,110	2,310	3,600	3,850		
		100 % Green field, 10 % In fill	1,130	1,120	2,790	3,070	4,770	5,120		
Dem and	Waikato District Council, Medium Projections	Total Dem and	730	730	2,600	2,600	5,380	5,380		
		Per Annum	240	240	270	270	140	140		
		Total Dem and	1,440	1,440	4,800	4,800	14,400	14,400		
		Per Annum	480	480	480	480	480	480		
Capacity (Supply - Dem and)	Waikato District Council, Medium Projections	Supply Surplus/ Shortfall	50 % Green field, 10 % In fill	-160	-160	-1,170	-1,050	-2,960	-2,810	
			75 % Green field, 10 % In fill	120	120	-490	-290	-1,780	-1,530	
			100 % Green field, 10 % In fill	400	390	190	470	-610	-260	
		Supply Surplus/ Shortfall (Years)	50 % Green field, 10 % In fill	-0.7	-0.7	-4.3	-3.9	-21.1	-20.1	
			75 % Green field, 10 % In fill	0.5	0.5	-1.8	-1.1	-12.7	-10.9	
			100 % Green field, 10 % In fill	1.7	1.6	0.7	1.7	-4.4	-1.9	
	Urban Economics, Medium Projections	Supply Surplus/ Shortfall	50 % Green field, 10 % In fill	-870	-870	-3,370	-3,250	-11,980	-11,830	
			75 % Green field, 10 % In fill	-590	-590	-2,690	-2,490	-10,800	-10,550	
			100 % Green field, 10 % In fill	-310	-320	-2,010	-1,730	-9,630	-9,280	
		Supply Surplus/ Shortfall (Years)	50 % Green field, 10 % In fill	-1.8	-1.8	-7.0	-6.8	-25.0	-24.6	
			75 % Green field, 10 % In fill	-1.2	-1.2	-5.6	-5.2	-22.5	-22.0	
			100 % Green field, 10 % In fill	-0.6	-0.7	-4.2	-3.6	-20.1	-19.3	

Source: Urban Economics, Waikato District Council

Efficient Housing Market

- 7.20 As quoted in section 6, Council estimates the long-term demand for housing in Pokeno is 2,300 dwellings, an average of around 80 per annum. However, as outlined in Section 6, the underlying demand for dwellings in Pokeno is 400 - 500 per annum. The main implication of this is that as Pokeno has capacity for only 1,100 additional dwellings under the OWDP, and a further 1,500 – 1,950 dwellings under the PWDP (a total of 2,600 - 3,540 dwellings). This indicates that Pokeno has only 6-8 years of supply remaining. This would not meet the basic test of 7-10 years 'zoned and serviced' land to enable an efficient housing market as required by the NPS-UD. It should be noted that even if this test is met, this is not in itself sufficient to ensure an efficient housing market over the ten-year life of the new District Plan.
- 7.21 Having multiple developers is considered essential for an efficient land market. In the same way that having many years of capacity increases efficiency by providing choice, having multiple different developers competing increases efficiency by providing choice over location, dwelling type and price.
- 7.22 The Herfindahl-Hirschman (HH) index is a commonly used measure of market concentration. Values between 2,500 and 10,000 are considered highly concentrated markets, values between 1,500 and 2,500 are considered to be moderately concentrated markets and values below 1,500 are considered to be competitive markets.
- 7.23 The following figures display key areas identified for residential growth in the PWDP or the Waikato 2070 document and the proposed CSL/Top End block. The key points to note are:
- a) The current market contains only one developer, it therefore has an HH index of 10,000. This is a highly concentrated market.
 - b) The PWDP has a HH value of 4,310. While enabling additional developers to enter the market does lead to a substantial increase in competition, this is still a highly concentrated market.
 - c) The PWDP + CSL/Top End scenario has a HH index value of 2,920. While this is still considered a highly concentrated market, it is a significant improvement when compared to the PWDP scenario.
 - d) The PWDP + Waikato 2070 scenario has a HH index values of 2,250. This represents a moderately concentrated market.

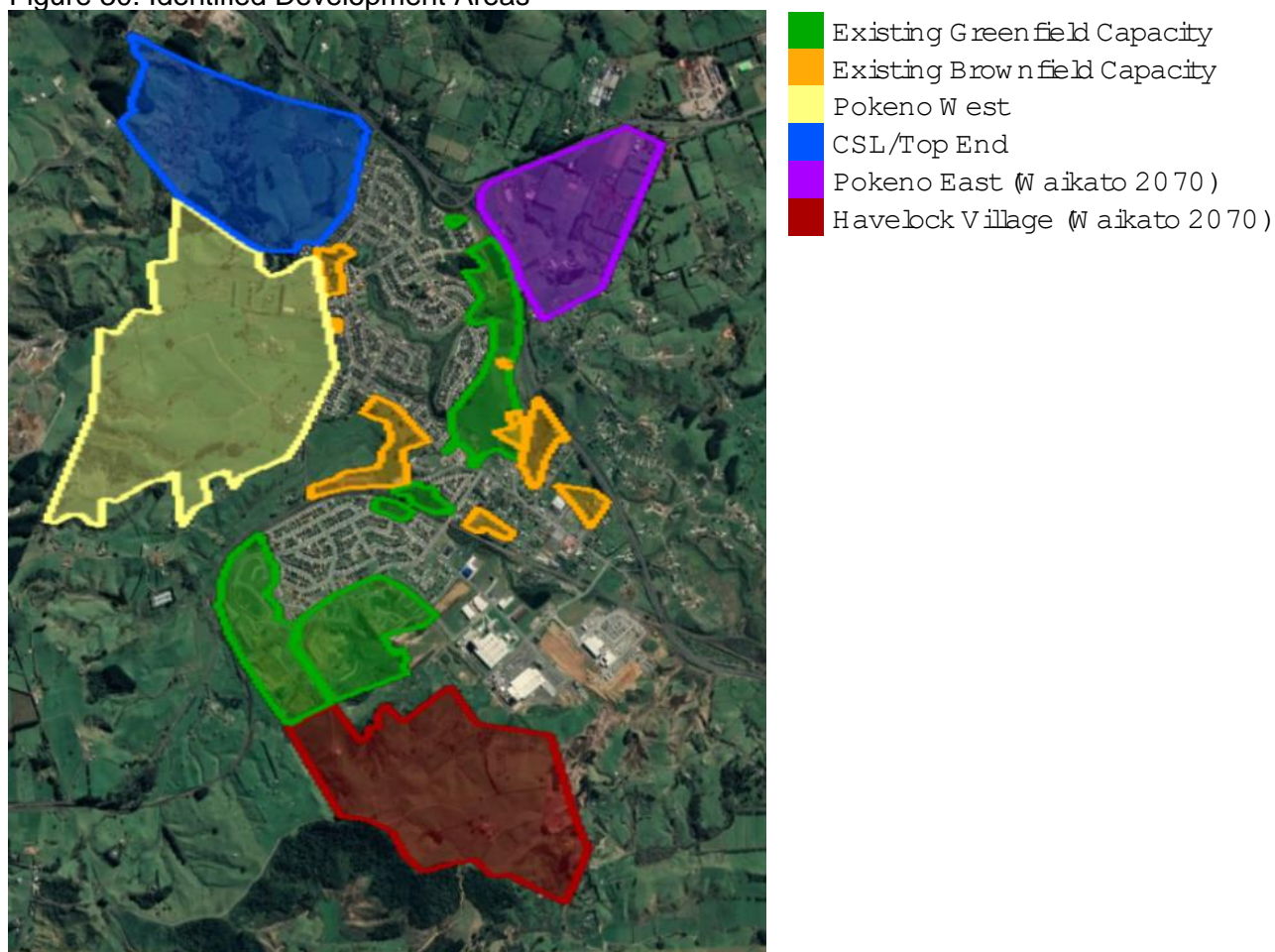
- e) Enabling the proposal, the PWDP and the Waikato 2070 land produces the best results for market concentration purposes receiving an HH index value of 1,780. This is because the most land, spread over the largest number of potential developers is enabled.
- f) Producing a competitive marketplace requires both enabling sufficient supply to reach the market and ensuring that that supply is not highly concentrated. Outcomes that decrease market concentration are good for market efficiency.

Figure 29: Market Concentration under Various Development Scenarios

Scenario	Number of Developers	Total Net Development Land (Ha)	Herfindahl-Hirschman Index
OW DP	1	40	10,000
PW DP	9	150	4,310
PW DP + CSL/Top End	11	210	2,920
PW DP + W a i k a t o 2 0 7 0	28	220	2,250
PW DP + CSL/Top End + W a i k a t o 2 0 7 0	30	280	1,780

Source: Urban Economics, PW DP, OW DP, W a i k a t o 2 0 7 0, Corelogic

Figure 30: Identified Development Areas



Regional Infrastructure Constraints

- 7.24 Pokeno is serviced for water treatment by Watercare's Pukekohe water treatment plant. \$144m is planned to be spent by Watercare over the next twenty years to increase the capacity of the plant and its network. It is worth noting that Watercare has identified its existing infrastructure has capacity for only 55,000 dwellings, of which only some will be 'commercially feasible' for development. Over the next decade, Watercare's Asset Management Plan identifies \$5.5b in expenditure, which will add further capacity for 155,000 dwellings. This existing capacity is likely to be insufficient to meet the latent unmet demand for the Auckland Region, which the Auckland Plan states to be 35,000 dwellings in 2017. It is also worth noting that the Auckland Plan states "The current level of feasible development capacity exceeds demand in the medium term (1-10 years)" (page 220) however this does not account for the Watercare infrastructure constraint, which at 55,000 dwellings is significantly less than the 326,000 dwellings that are estimated to be 'commercially feasible' in the Auckland Plan (page 207). For the purpose of the PWDP, it is worth noting that there is a significant regional shortage of Watercare infrastructure, and that any new investment in the region should therefore be utilized as efficiently as possible.

8. CONVENIENCE RETAIL MARKET

- 8.1 The CSL/Top End proposal contains a neighbourhood centre. The centres within four large masterplanned developments have been evaluated to provide a benchmark for the demand for this centre. These include the Long Bay, Millwater, Hobsonville Point and Stonefields centres. An appendix displays further details on assessed centres.
- 8.2 Figure 31 provides a summary table of centre GFA, centre land area and the population within each development. The main points to note are:
- a) Centres in comparable developments support between 0.5m² and 5.2m² of centre GFA per capita.
 - b) Millwater and Stonefields are considered to be the most relevant benchmarks for the CSL & Top End block, as these centres primarily service the needs of the immediate population, rather than a wider area (due to the centre location).

- c) This indicates that the proposed centre will support between 0.5m² and 0.9m² of centre GFA per capita. This is consistent with (or slightly above) the regional average of 0.5m² per capita of convenience retail floorspace.

Figure 31: Large Masterplanned Development Centre Summary

	Hobsonville Point	Millwater	Long Bay	Stonefields
Retail GFA	7,200	3,200	6,000	2,800
Office GFA	600		200	
Other GFA	200		900	700
Total GFA	8,000	3,200	7,100	3,500
Centre Land Area (Ha)	2.8	1.2	3.9	2.6
Census 2018 Population	3,770	6,000	1,370	3,790
Centre GFA per Capita	2.1	0.5	5.2	0.9

Source: Corelogic, Auckland Council, Development Websites

Demand for Centre Floorspace

- 8.3 Figure 32 displays the estimates of supportable centre GFA at the CSL & TOP End Neighbourhood Centre using the development benchmarks of 0.5m² – 0.9m² of centre floorspace per person for centres focused on serving the immediate area.

Figure 32: Centre Supportable Floorspace

	0.5m ² per Capita	0.9m ² per Capita
Supportable Floorspace (m ²)	620	1,120
Land Use Requirements (m ²)	1,550	2,800

Source: Statistics NZ, Urban Economics

- 8.4 The main points to note from Figure 32 are:

- A total of 620m² – 1,120m² of centre GFA is estimated to be supportable for a centre focused on serving the immediate area.
- A total land requirement of 1,550m² – 2,800m² is required to support this quantity of centre GFA, if all GFA is at grade and a 40% site coverage is achieved.

9. EMPLOYMENT OPPORTUNITIES AND IMPACT

- 9.1 Figure 33 outlines the employment opportunities accessible by residents of Pokeno. A map of drive times for employment opportunities in Pokeno is shown in Figure 34. The key points to note are:

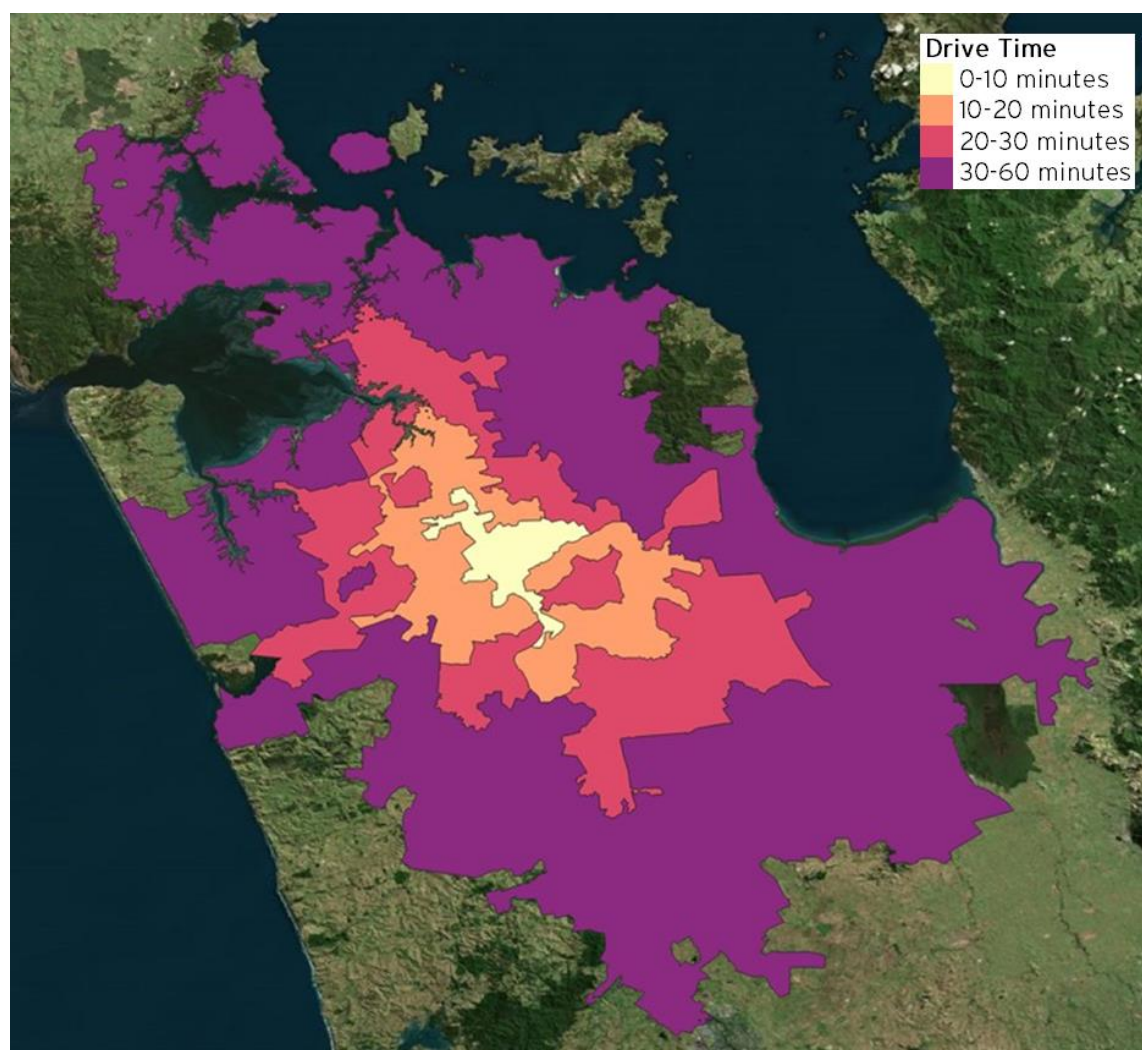
- a) Pokeno is 15-minutes' drive to the Pukekohe employment hub (9,200 jobs) and Drury's future employment hub (12,000 jobs), and 30 minutes' drive from Papakura's employment hub (14,800 jobs) during peak morning hours.
- b) Three major dairy companies have invested or plan to invest in Pokeno's Gateway Business Park (Yashili, Winston Nutritional and Synlait Milk). Pokeno Whiskey Company has been granted consent to build a distillery at Pokeno's Gateway Business Park.

Figure 33: Drive time to Employment Hubs

Drive Time	Area	Employees (2019)	Employers (2019)
15min	Pukekohe	9,220	2,480
15min	Drury	1,790	360
30min	Papakura	14,770	3,560
45min	Highbrook Business Park	36,720	3,080
45min	Manukau	35,360	2,440
60min	Airport	28,760	1,060
75min	Panmure - Mt Wellington	98,640	9,980
90min	CBD	188,820	24,940
Total		414,080	47,900

Source: Statistics NZ, Google

Figure 34: Average Drive Time Map for Pokeno



Source: Bing, OSRM, Statistics NZ, Urban Economics

9.2 Figure 35 displays the employment impact of the construction of new dwellings and retail floorspace under the proposal. The key points to note are:

- a) The construction of new dwellings and retail floorspace is estimated to create 245 - 255 FTE jobs in the construction sector over the life of the project. As the project is expected to have a construction period of 4 years, this translates to 105-115 FTE jobs per annum.
- b) The proposed site contains 87 hectares of land classified by Corelogic as dairy farmland. The opportunity cost of the proposal is therefore the jobs in the dairy industry that may be displaced by the conversion of dairy farmland to housing. The proposal is estimated to displace approximately 1 FTE jobs in the dairy industry⁷.
- c) The proposal therefore represents a net addition of 104-114 FTE jobs per annum over the life of the project, and an additional 10-30 FTE jobs on an ongoing basis. This is an economic benefit.

Figure 35: Employment Impact

	PerAnnum
Construction Sector	105 - 115
Retail	10 - 30
Dairying	1

Source: Statistics NZ, Urban Economics, Market Economics

10. LOCAL ECONOMY IMPACT

10.1 The following figure displays the estimated impact of the proposal on the local economy. The key points to note are:

- a) The proposal would result in the construction of 413 dwellings over eight years, at an estimated total cost of \$250.9 million. This translates to a value-added figure per annum figure of \$13.1 million to the construction industry or a present value (PV) of \$34.5 million.

⁷ This figure is an estimate based on employment and land use numbers in Market Economics report Economic Aspects of Rural Subdivision, dated 24 August 2020.

- b) After dwellings have been constructed, they provide accommodation services to new residents⁸. Based on a rental yield of 4% per annum, this is valued at \$6.7 million per annum once all dwellings are built, or a PV of \$77.8 million over the next thirty years.
- c) The proposal would result in the construction of between 620 – 1,120 square metres of retail floorspace at an estimated total cost of \$1.2 - \$3.1 million. This translates to a total value added figure of \$0.4 – \$0.9 million to the construction industry or a PV of \$0.3 - \$0.7 million.
- d) After retail floorspace has been constructed it provides value over time to the businesses that choose to occupy that floorspace. Based on a rental yield of 5% per annum, this is valued at \$0.1 - \$0.3 million per annum once all floorspace is built, or a PV of \$2 - \$4.9 million over the next thirty years.
- e) New residents spend money across a wide array of sectors including but not limited to: retail trade, recreation, health services, utilities and education. The value added to these sectors as a result of the proposal is \$10.2 million per annum or a PV of \$115.4 million over the course of thirty years.
- f) The proposal displaces 87 ha of dairy farmland, this carries an estimated value added of \$207,800 per annum, or a NPV over 30 years of \$3.3 million.
- g) The PV of the benefits of the proposal is \$230.0 - \$233.3 million and the PV of the costs of the proposal is \$3.3 million. The Net Present Value (NPV) of the proposal is \$226.7 - \$230.0 million. The economic benefits in other sectors of the economy significantly outweigh the cost to the dairy industry.

Figure 36: Economic Impact of the Proposal

			Value Added per Annum (\$M)	Present Value (\$M)	Time Period
Proposal Benefits	Construction	House Construction	\$13.1	\$34.5	3
	Period	Retail Floorspace Construction	\$0.4 – \$0.9	\$0.3 – \$0.7	1
	Ongoing	Household Expenditure	\$10.2	\$115.4	30
	Benefits	Accommodation Services	\$6.7	\$77.8	30
		Retail Floorspace Provision	\$0.1 – \$0.3	\$2 – \$4.9	30
Proposal Costs	Agricultural	Dairy Farming	\$0.2	\$3.3	30
Net Present Value			–	\$226.7 – \$230.0	–

Source: Statistics NZ, Urban Economics

⁸ Only the proportion of growth applicable to migration from other areas is included in estimates on the value of accommodation services and household expenditure in order to avoid double counting existing residents. This has been determined through examination of census migration data and reinforced through real estate agent interview answers on buyer origin.

11. OPPORTUNITIES FOR MASTERPLANNED DEVELOPMENTS IN POKENO

- 11.1 One of the most notable benefits of large masterplanned developments is that they enable a diverse range of housing, in particular medium-density terrace and town houses. This is due to the quality of the environment that can be created with good urban design. Consequently, many buyers choose a terrace or town house in a large masterplanned development, rather than a conventional stand alone house in a smaller development, even if the price is similar.
- 11.2 This trend is evident in Auckland with a third of terrace houses being built in masterplanned greenfield developments since the AUP became operative, which is perhaps one of the most interesting housing market trends to note at present. This is shown in the figure below, with 3,010 or (40%) of terraced dwellings being built in greenfield areas post AUP and 1,320 or approximately a third of terraced dwellings being built in greenfield locations pre-AUP.

Figure 37: Building Consents for 2009-2019 by Infill and Greenfield

Typology	2016 - 2019			2009 - 2015		
	Greenfield	Infill	Total	Greenfield	Infill	Total
Stand Alone	9,160	9,600	18,760	11,230	14,450	25,680
Terrace	3,010	5,420	8,430	1,320	2,230	3,550
Apartment	900	6,820	7,720	2,260	5,490	7,750
Total	13,070	21,840	34,910	14,810	22,170	36,980
Stand Alone	70%	44%	54%	76%	65%	69%
Terrace	23%	25%	24%	9%	10%	10%
Apartment	7%	31%	22%	15%	25%	21%
Total	100%	100%	100%	100%	100%	100%

Source: Auckland Council

- 11.3 The proposal is on a large site, of 87 hectares, and would enable around 400 dwellings. At this scale it would be a notable development, though of a smaller scale than the other well-known masterplanned developments. It is anticipated that a moderate proportion, in the order of 10% or 40 dwellings in the proposal would be terrace and town houses. These would be on smaller lots of around 100-300m² which would in itself make a significant contribution to the compact city objective. It would also enable dwellings in the \$400,000 - \$500,000 price range, which has wider social and economic benefits.
- 11.4 The following figure shows the quantities of stand alone, terrace and apartment dwellings for Auckland's large masterplanned developments. This provides an insight into how large masterplanned developments operate in the marketplace.

Figure 38: Large Masterplanned Development Dwelling Mix & Strategy

	Karaka			Stonefields			Hobsonville Point			Addison			Long Bay		
Year	SA	TCE	APT	SA	TCE	APT	SA	TCE	APT	SA	TCE	APT	SA	TCE	APT
2008	50	0	0	64	28	0	1	0	0	9	17	0	1	0	0
2009	72	0	0	57	18	0	0	0	0	57	4	0	1	0	0
2010	94	0	10	118	31	0	2	0	0	63	10	0	2	0	0
2011	99	0	0	173	17	0	53	1	0	23	0	0	1	0	0
2012	134	2	0	121	44	44	64	0	0	117	6	3	3	0	0
2013	193	0	0	69	84	109	111	22	0	127	9	0	49	2	0
2014	143	2	0	75	16	0	114	37	77	242	25	1	113	5	0
2015	158	5	0	60	15	140	172	164	32	101	4	0	139	0	0
2016	174	2	0	39	0	8	140	233	9	240	35	0	132	53	0
2017	30	0	0	0	0	11	234	354	217	150	43	0	47	28	38
2018	67	12	0	5	4	36	354	302	10	437	56	0	64	44	26
2019	110	42	0	21	0	86	276	354	84	448	168	44	74	34	0
2020	63	24	0	0	0	0	164	211	83	190	219	17	26	3	0
10-Yr Total	1,171	89	0	563	180	434	1,682	1,678	512	2,075	565	65	648	169	64
%	93%	7%	0%	48%	15%	37%	43%	43%	13%	77%	21%	2%	74%	19%	7%

Source: Statistics NZ

11.5 The main points to note from Figure 38 are:

- a) As highlighted in red, there is a tendency for stand alone houses to be built first, then terrace houses and then apartments to occur once the development has established a favourable market perception. While the shift towards terrace houses and apartments over the last decade reflects a long term (2-3 decades) structural change that is occurring in the Auckland region, it has occurred at a faster rate in large masterplanned developments, indicating that this is mostly to do with the market acceptance/demand for higher density housing in large masterplanned developments (or more specifically, many buyers will accept a higher density house in order to live within a high quality masterplanned development).
- b) Higher density housing represents in the order of 20-50% of large masterplanned developments.

11.6 The main implications for Pokeno and other similar towns in Waikato is that large masterplanned developments are a fundamental requirement to achieving a diverse range of housing, in terms of type, size and price. This is because developers of masterplanned developments are able to integrate higher density housing into their masterplan in a manner that is more attractive to new home buyers than smaller 5-10 unit developments on existing 'quarter acre' (for example) lots in existing suburbs, or in smaller 20-100 lot developments which tend to focus entirely on conventional 500-700m² lots. Large developments are also better placed to access development

finance, because they can create economies of scale through design and construction that creates additional value. They also have an incentive to produce a high-quality development in order to maintain sales for the life of the project (e.g. 10 years).

- 11.7 It is therefore the large masterplanned developments that will offer housing across a range of price points and will support strong demand for new housing in Pokeno and other locations in the Waikato. Most notably, new masterplanned developments are well placed to supply smaller town and terrace in the \$400,000 - \$600,000 price range, which is an attractive nominal price point within the regional market, particular for younger singles and couples and families looking to purchase their first property, and for empty nesters and retirees that are looking to down size and access equity for retirement.
- 11.8 It is also worth noting that large masterplanned developments in Auckland tend to sell 200-300 dwellings per annum, reflecting their ability to offer a high quality lifestyle and to attract buyers from a wide geographic area.

Indicative Lot & Dwellings Mix on CSL & Top End Block

- 11.9 This section provides development scenarios for the CSL/Top End area under the Residential and Country Living zones in the PWDP and under the proposed zoning which enables smaller lot sizes as a restricted discretionary activity, and terraced dwellings. The implications in terms of lot size, dwelling type and dwelling price are given.
- 11.10 The following figure shows that the CSL/Top End block would yield around 355 dwellings under the PWDP and 415 dwellings if a lower lot size is permitted (the Proposal in this figure).
- 11.11 A detailed estimate of the distribution of lot sizes under each scenario is provided in Figure 40. It is worth noting that the lot sizes from 150-450 would account for 28% of all dwellings if the proposal were to be accepted.
- 11.12 As highlighted in red, the supply of lower priced dwellings, of around \$580,000, is only possible with smaller lot sizes (i.e. the Proposed District Plan + Proposal scenario). This is the most important consideration for enabling lower priced dwellings in the District.

Figure 39: Estimated Distribution of Lot Sizes and Dwelling Types in CSL & Top End Block

Lot Size (m ²)	Lot Price	Dwelling Price	Dwelling Type	Lot Count	
				Proposed District Plan	Proposed District Plan + Proposal
150 - 200	\$170,000	\$450,000	Terrace	0	10
200 - 250	\$190,000	\$510,000	Terrace	0	25
250 - 300	\$200,000	\$530,000	Terrace	0	55
Subtotal				0	90

Figure 40: Estimated Distribution of Lot Sizes in CSL & Top End Block

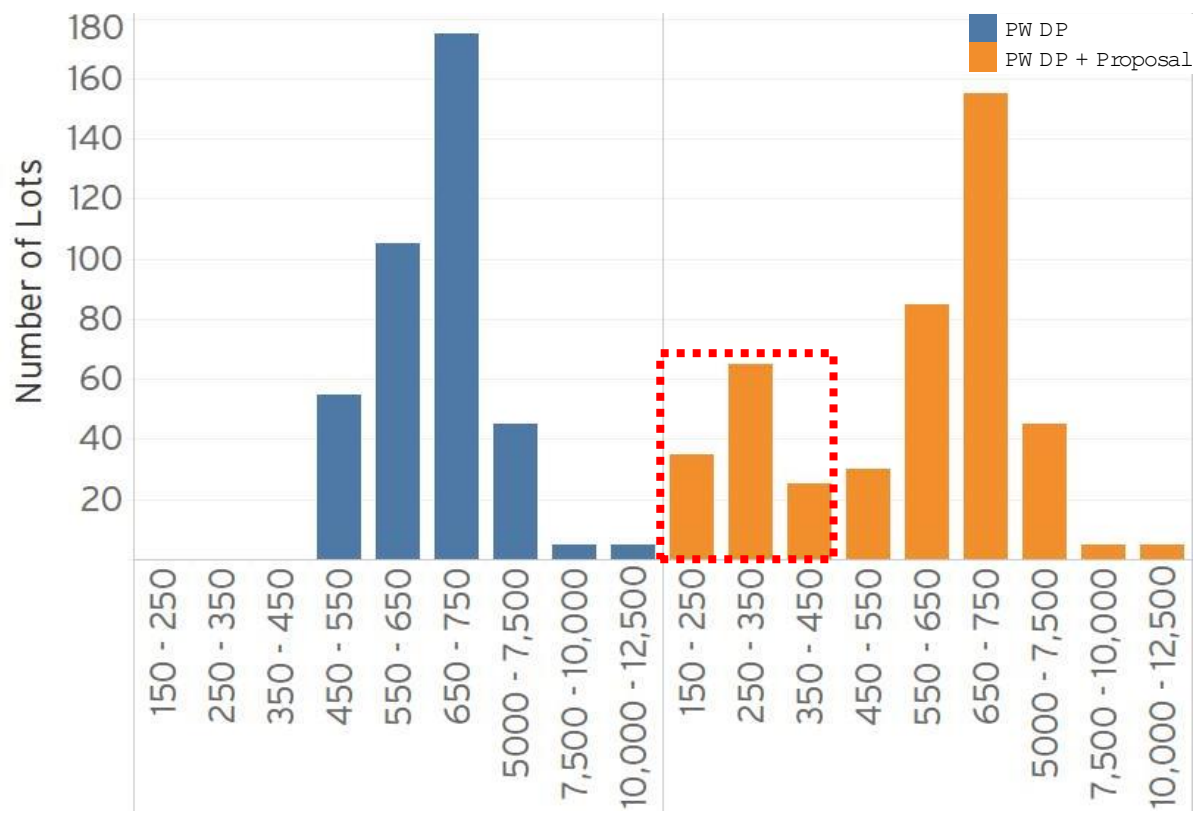
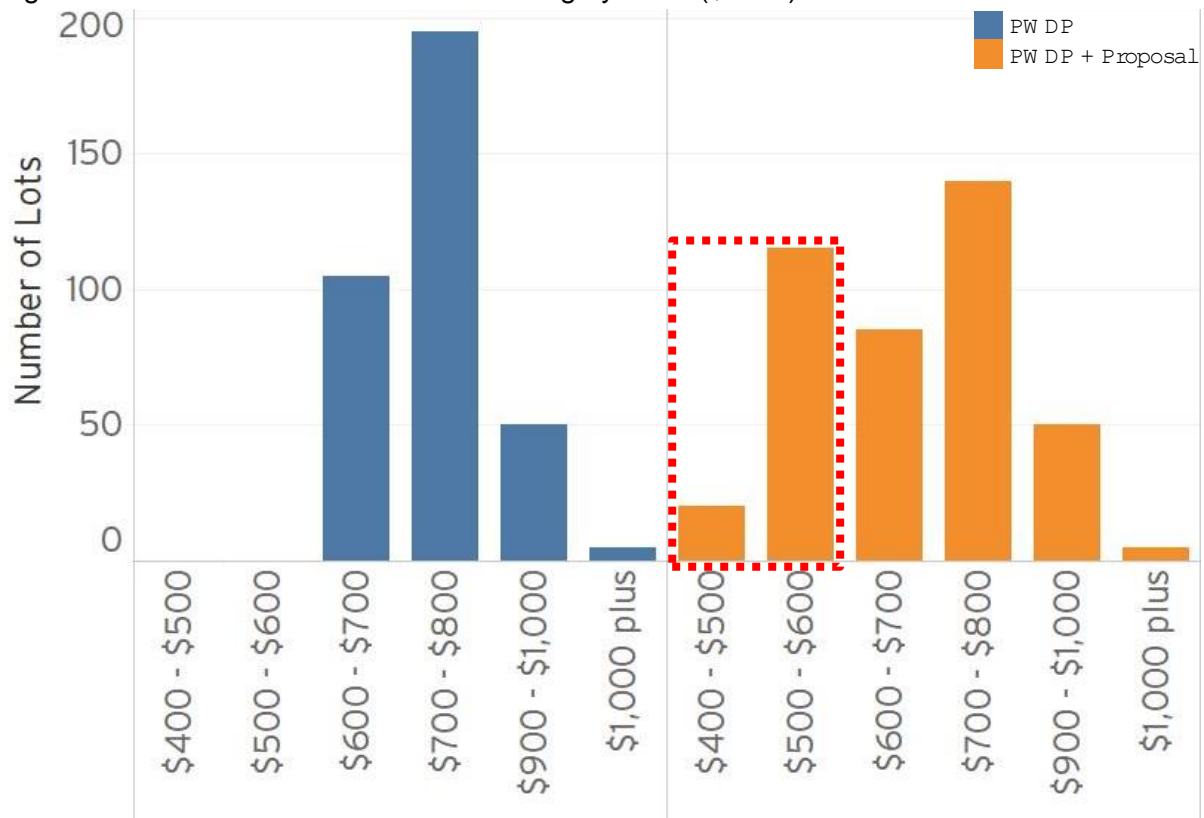


Figure 41: Estimated Distribution of Dwelling by Price (\$000s)



Source: Urban Economics

12. FUTURE HOUSING SCENARIOS IN POKENO

- 12.1 The following figures examine future housing scenarios for Pokeno based on dwelling price and lot size.
- 12.2 Under the current scenario (existing housing stock) there are only 60 dwellings less than \$600,000, with most dwellings being priced between \$600,000 to \$800,000.
- 12.3 If 'reasonably expected' capacity enabled under the OWDP was taken up, most dwellings would still be priced between \$600,000 to \$800,000, with no capacity for additional dwellings less than \$600,000.
- 12.4 The PWDP also provides no capacity for additional dwellings less than \$600,000.
- 12.5 The Council's economists have identified a shortage of 6,200 dwellings below \$580,000 across the Waikato District under the PWDP. The proposal enables a notable 1,370 dwellings priced below \$600,000 of which 135 are on the CSL/Top End site. The smaller lot sizes enabled under the proposal are crucial to providing housing below this price point.

Figure 42: Future Housing Scenarios by Price

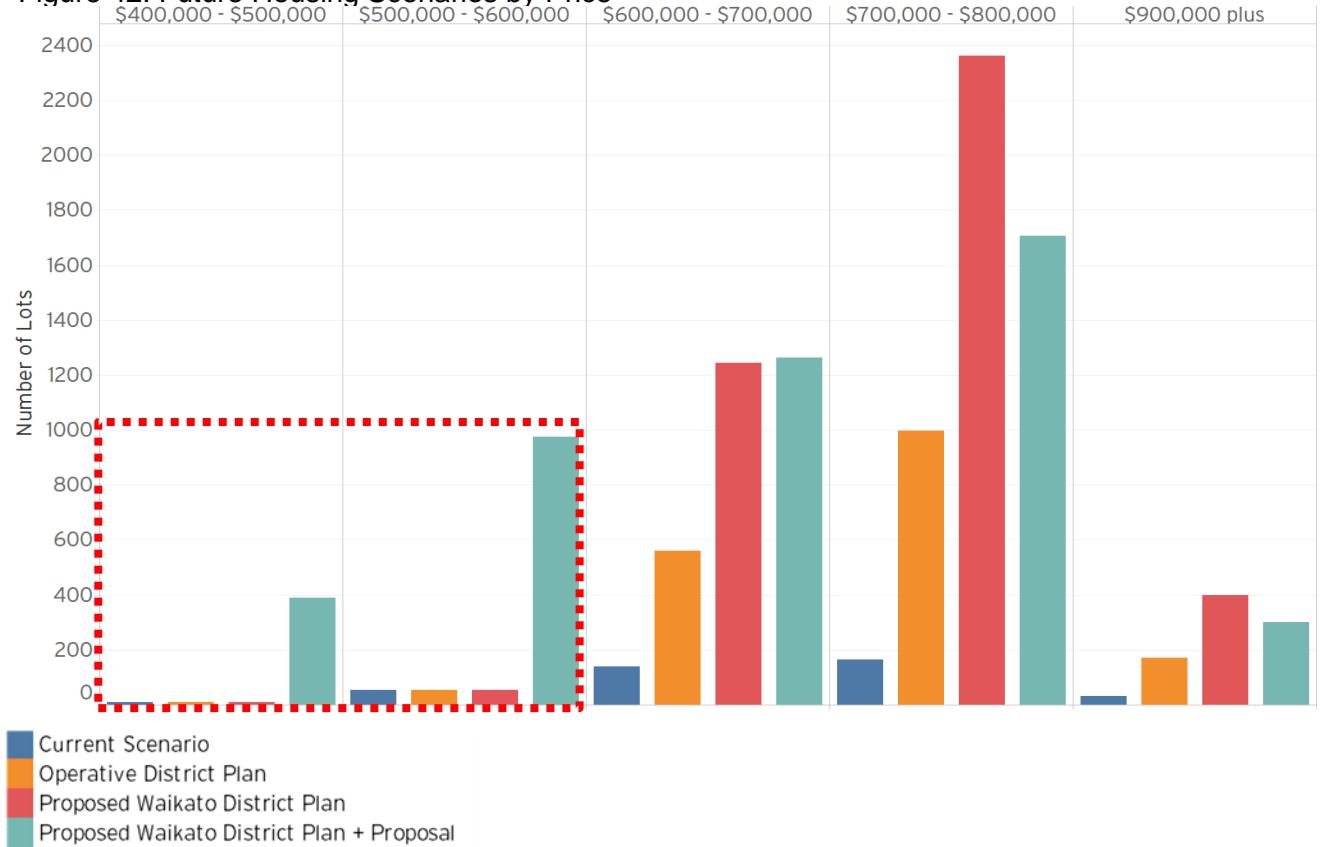
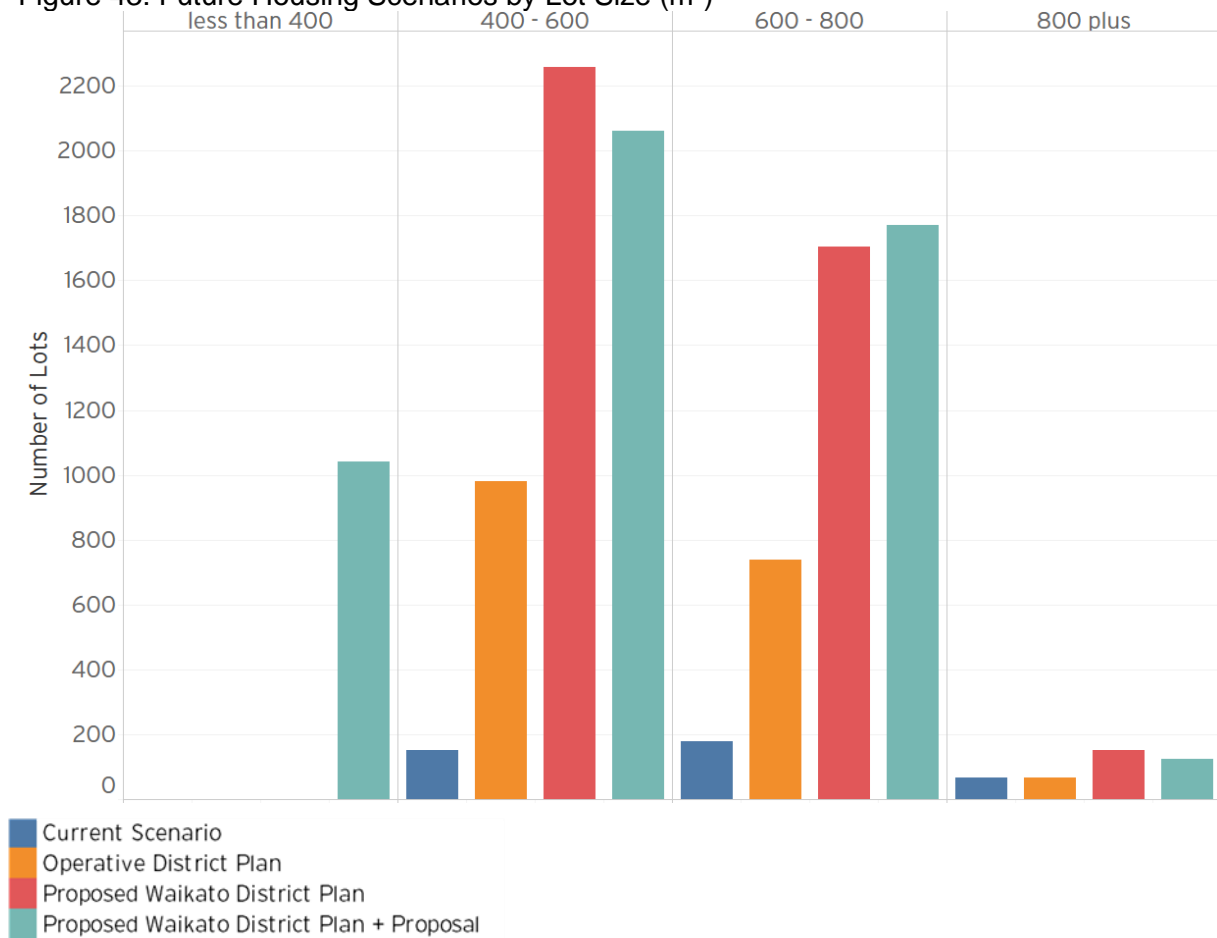


Figure 43: Future Housing Scenarios by Lot Size (m²)



13. RURAL TOWN SELF-SUFFICIENCY

- 13.1 Access to schools and a supermarket enable self-sufficiency within rural towns. In New Zealand there is one primary school for every 4,000 people, one secondary school for every 12,000 people, and one supermarket for every 14,000 people.
- 13.2 Pokeno has a Countdown supermarket currently under construction and one primary school at present.
- 13.3 Waikato District Council's 'Pokeno Local Area Blueprint' estimates that the 2016 Pokeno population of 2,100 will increase to 12,000 by 2045. This is an optimal size for a small town as it would support 2-3 primary schools, one secondary school and one supermarket.
- 13.4 Ensuring a fast rate of growth is supported in Pokeno would ensure that a high degree of self-sufficiency is achieved within the medium rather than long term, which has a significant economic benefit.

14. RATE OF GROWTH

- 14.1 Developments that offer a wider mix of dwellings in terms of type and price typically achieve a faster overall sell down rate. This is because they can attract a wider cross section of the housing market.
- 14.2 Two scenarios have been tested for the CSL/Top End site to provide an indication of the overall sale rate. These are:
- a) Stand Alone Lots 85% and Lifestyle Lots 15%
 - b) Stand Alone Lots 65%, Terrace Lots 20% and Lifestyle Lots 15%
- 14.3 The results are presented in Figure 44, and show that a wider range of dwelling types, would result in a faster sale rate, of 4 rather than 5 years.

Figure 44: Sale Rate Analysis

Scenario	Lot Count			Total	Annual Demand	Sell Down Period
	Stand Alone	Terrace	Lifestyle			
Stand Alone 85%, Lifestyle 15%	300	0	55	355	60	6
Stand Alone 65%, Terrace 20%, Lifestyle 15%	270	90	55	415	100	4

Source: Urban Economics

- 14.4 A shorter sale timeframe has several important economic benefits, most notably:
- a) The capital investment in infrastructure upgrades would be more efficiently utilized, as new dwellings would be able to pay for this infrastructure in the short-medium term.
 - b) The new greenfield development planned at the Pokeno township would occur over the medium term rather than over the long term. This would reduce the transition time frame from the existing to future township.

15. S32 REPORT

- 15.1 The Strategic Direction and Management of Growth s32 report identifies seven key issues. None of these relate to the ability of the District to supply housing at prices that meet demand, rather focus on the value of having a strategy, dwelling type, accommodating growth, the benefits of a compact urban form, local character, density and impacts on the rural area.
- 15.2 Similarly, the Residential Zone s32 report identified seven key issues and none of these relate to the ability of the District to supply housing at prices that meet demand. Rather, they focus on amenity, dwelling type, earthworks, noise and subdivision layout.
- 15.3 Neither of the s32 reports reflect the central findings of the Council's analysis on capacity that relate to the shortage of lower priced houses. This is a significant oversight because the *Housing Development Capacity Assessment 2017* report concludes that the District will face a significant shortage of housing in the lower price ranges, as follows:

However, all three supply scenarios show shortfalls of capacity within the lower price brackets (up to \$580,000; and the cheapest dwelling scenario up to \$440,000). Net sufficiency within these price brackets is projected to be at between 75 per cent to 90 per cent in the medium-term. (page 110, Housing Development Capacity Assessment 2017, Market Economics Consulting, emphasis added)

Net surpluses in capacity are projected to occur in the mid to higher price brackets across all three supply scenarios in the medium-term. The largest surpluses are projected for the \$1.02m to \$1.17m price bracket in the Maximum Profit and Maximum Dwellings supply scenarios. However, it is unlikely that surpluses within this price bracket will be able to play any significant role in meeting demand elsewhere in the price spectrum. With the largest deficits projected to occur in the

much lower price brackets. (page 110, Housing Development Capacity Assessment 2017, Market Economics Consulting, emphasis added)

- 15.4 A second significant oversight is that the Council's conclusions that smaller lot sizes would enable more affordable housing is not reflected in the policy recommendations. This is outlined as follows (from the report Waikato District s32 Residential Zone Minimum Lot Sizes Topic, Assessment Framework, 20 June 2018 – Final, ME Consulting'):

Dwelling buyers will benefit from having a range of dwellings types and prices available with multi-unit developments (defined by the report as meaningful to critical) (page 39)

Infrastructure costs per unit will be lower for multi-unit developments relative to lower density development (defined by the report as meaningful to critical) (page 39)

Greater dwelling supply will be encouraged in the lower more affordable end of the rental market through increased smaller dwellings. (page 29)

Housing affordability will increase through a greater range of smaller dwelling types available through higher density multi-unit dwellings (page 30)

16. S42 REPORT

- 16.1 The s42 report provides some recommendations relating to the minimum lot size in the Residential Zone. The report recommends that the minimum lot size should be 450m² as a Permitted activity and 300m² as a Restricted Discretionary activity, as follows:

589. As discussed in Section 33.3.2 of this s42A report, the minimum lot size has been derived from a balance of providing for infill subdivision, new greenfield subdivision and for higher density subdivision where directed by objectives and policies. The flexibility to provide for different-sized lots is provided through the discretionary activity status resource consent process. Accordingly, it is recommended that minimum net site area of 450m² be retained.

- 16.2 The basis for the recommended minimum 450m² lot size as stated in the s42 report is to enable existing 1,000m² lots to be subdivided into two lots, as follows:

576. The first part of the submission seeks a reduction in the minimum site area from 450m² to 200m². This matter is addressed later in this s42A report. The

450m² minimum area for proposed lots has been arrived at through a consideration of enabling the subdivision of existing 'quarter acre' lots into two, a general lot size suitable for the Residential Zone, with smaller lot sizes enabled in accordance with the objective and policy direction summarised above, particularly for subdivision of multi-unit development. Accordingly, a reduction in the minimum site area is not supported.

- 16.3 This approach does not appear to consider the findings of the Housing Development Capacity Assessment 2017 report and Waikato District s32 Residential Zone Minimum Lot Sizes Topic report when determining the optimal lot size within the Residential Zone. This is a substantial oversight because these two reports provide the analytical basis for decisions regarding optimal minimum lot size and residential land use policy in general. In particular, these reports identify the quantity of land, the size of lots and price of houses that need to be enabled in order to ensure housing demand is able to be met. This approach is required by both the NPS-UDC and Objective 4.1.1(b) of the PWDP.

- 16.4 The s42 report claims that there has not been a s32 analysis of the optimal minimum lot size:

258. The minimum net site area of 300m² was chosen by Waikato District Council as this was the density included as part of the plan change to provide for Medium Density housing in Pokeno and therefore appropriate for the Waikato situation and to assist with the provision of good urban amenity. I note that the complete removal of a minimum site area could provide greater design flexibility and could contribute to better housing outcomes by developers. This would also provide for greater intensification within the Residential Zone throughout the district.

715: The submission does not include detailed background information and research (such as infrastructure availability and costs) or Section 32A analysis to support the detail in the submission. I note that the introduction of the Medium Density Housing provisions were specifically introduced to apply to Pokeno by means of a plan change, following detailed background information gathering and analysis, s32A analysis, consultation, submissions and hearing. (emphasis added)

- 16.5 The Council has however completed a thorough s32 analysis on this topic, namely 'Waikato District s32 Residential Zone Minimum Lot Sizes Topic, Assessment Framework, 20 June 2018 – Final, ME Consulting'. This report provides an evidential

basis for considering the optimal minimum lot size, and identifies the important economic benefits of smaller lot sizes, as follows:

- a) Dwelling buyers will benefit from having a range of dwellings types and prices available with multi-unit developments (defined by the report as meaningful to critical) (page 39)
- b) Infrastructure costs per unit will be lower for multi-unit developments relative to lower density development (defined by the report as meaningful to critical) (page 39)
- c) Greater dwelling supply will be encouraged in the more affordable end of the rental market through increased smaller dwellings. (page 29)
- d) Housing affordability will increase through a greater range of smaller dwelling types available through higher density multi-unit dwellings (page 30)

16.6 These are commonly agreed benefits that arise from dwellings on smaller lot sizes and are a central consideration for this plan review, as highlighted by the detailed analysis Council completed on this topic.

16.7 The report states:

The core estimate of the sufficiency of housing capacity is direct comparison of projected demand with assessed supply in total and in each value band. (p77)

16.8 In other words, the potential supply enabled by the District Plan needs to be considered in terms of not just quantity but equally importantly its price, and the prices that houses can be built for need to be cross referenced with demand across the different price ranges. I agree with this comment. It is fundamental to the NPS-UDC that demand is able to be met across all house price ranges.

16.9 The Council Housing Development Capacity Assessment 2017 report concludes that there is a significant shortage of housing in the lower price ranges, as follows:

However, all three supply scenarios show shortfalls of capacity within the lower price brackets (up to \$580,000; and the cheapest dwelling scenario up to \$440,000). Net sufficiency within these price brackets is projected to be at between 75 per cent to 90 per cent in the medium-term. (page 110, Housing Development Capacity Assessment 2017, Market Economics Consulting, emphasis added)

Net surpluses in capacity are projected to occur in the mid to higher price brackets across all three supply scenarios in the medium-term. The largest surpluses are projected for the \$1.02m to \$1.17m price bracket in the Maximum Profit and Maximum Dwellings supply scenarios. However, it is unlikely that surpluses within this price bracket will be able to play any significant role in meeting demand elsewhere in the price spectrum. With the largest deficits projected to occur in the much lower price brackets. (page 110, Housing Development Capacity Assessment 2017, Market Economics Consulting, emphasis added)

- 16.10 This is the most important land use and economic issue facing the Waikato District. It is evident from the Council Housing Development Capacity Assessment 2017 report that the OWDC has a potential supply of only 1,590 dwellings that align with demand, because the majority of new dwellings that are enabled are above \$580,000 (90-95%) however the majority of houses demanded are below \$580,000 (86%). This is outlined in more detail in Section 5. This is clearly insufficient to meet demand for 7,100 dwellings and would only enable two years of additional supply. In my opinion, in the order of 7-10 years' worth of supply, in terms of serviced and zoned land, is required to enable an efficient housing market. As a benchmark the Auckland Unitary Plan has a requirement in the RPS to have 7 years of zoned and serviced land available at any point in time, as shown below:

B2.2.2. Policies

Development capacity and supply of land for urban development

(1) Include sufficient land within the Rural Urban Boundary that is appropriately zoned to accommodate at any one time a minimum of seven years' projected growth in terms of residential, commercial and industrial demand and corresponding requirements for social facilities, after allowing for any constraints on subdivision, use and development of land. (emphasis added)

- 16.11 Having 7-10 years of zoned and serviced land to ensure an efficient housing market is broadly equivalent to the requirements of the NPS-UDC.
- 16.12 For Waikato District to have an efficient housing market over the next decade would require that at the start of each year, there is potential to supply 5,000 dwellings across the key price ranges (i.e. particularly housing for less than \$580,000). Under the OWDP there are only 1,590 dwellings based on Councils estimates that can be

supplied to the market at prices that align with demand, indicating the housing market has a substantial shortage and does not meet the requirements of the NPS-UDC.

- 16.13 The Council assessment of the benefits of smaller lot sizes is comprehensive and identifies 12 'critical' economic benefits, mostly related to lower housing prices and greater choice, and only one 'critical' economic cost, namely the cost of infrastructure. This highlights that there is a clear net benefit from lower lot sizes. This is the main findings from this report however it is not reflected in the proposed minimum lot size of 450m² and not addressed in the Council's s32 or s42 report.
- 16.14 With regard to the high infrastructure cost (i.e. the only 'critical' economic cost identified in the Council Waikato District s32 Residential Zone Minimum Lot Sizes Topic report), this cost is incurred directly by the individual house buyers in their purchase of a house, and therefore does not have a wider adverse economic cost on the community (i.e. they are not external costs or externalities). Conversely the benefits of lower house prices and a wider range of housing types has significant wider economic benefits for the community, as it attracts and retains more residents, supporting economic growth. It also ensures lower and middle income households do not face economic hardship, which has a wider economic cost.
- 16.15 The Council *Housing Development Capacity Assessment 2017* report estimates the price of dwellings that are in demand and the capacity to provide dwellings in the lower price ranges under the OWDP. As outlined in Section 5 of this report, the Council *Housing Development Capacity Assessment 2017* report identifies a significant shortage of affordable housing is expected under the provisions of the PWDP. In summary:
- a) The WDC requires 7,100 additional dwellings by 2026.
 - b) 5,000 (71%) of these dwellings need to be below \$440,000 and 6,100 (86%) of these dwellings below \$580,000 to align with market demand.
 - c) The WDC has an estimated potential supply of 200 dwellings under \$440,000 and 710 dwellings under \$580,000). This falls short of the demand for 5,000 and 6,100 respectively. These figures relate to the OWDP provisions.
 - d) The WDC has an estimated potential supply of 1,590 dwellings across all price ranges, when demand (i.e. ability to purchase houses within different

price ranges) is accounted for. This falls short of the total demand for 7,100 dwellings. These figures relate to the OWDP provisions.

- e) The Councils capacity analysis has concluded that only 5-10% of plan enabled supply is for housing of less than \$580,000, under the OWDP.

16.16 While there are no estimates of capacity under the PWDP, given that (a) the majority of this supply is in Pokeno and Tuakau, and (b) that the cost of a house and land package on a 450m² site with a large greenfield development in Pokeno is around \$600,000, and a similar price can be expected in Tuakau, there will be very little housing within the Waikato District supplied within the new greenfield areas that have a Residential Zone.

16.17 In summary, the s42 report does not raise or consider the implications of the background research undertaken by the Council. Namely, it does not consider the shortage of housing priced up to \$580,000 and the potential for smaller minimum lot sizes to address this shortage. It therefore does not meet the fundamental role of the PWDP to provide affordable housing, which is highlighted in the s42 report as follows:

As discussed elsewhere within this s42A report, the role of the district plan is to ensure that there is enough development capacity that is commercially feasible, to meet the housing demand. The objective is to provide the community with more choice and at lower prices. The provisions of the PWDP seek to provide this range of housing options. However, the factors that need to be addressed to produce affordable housing are multiple and complex including (costs of construction, cost of new infrastructure being provided to higher standards, repair and replacement of existing infrastructure, interest rates, household incomes, cost of living). (paragraph 704, emphasis added)

16.18 The s42 report states that the factors that need to be addressed to produce affordable housing are 'complex' and refers to a range of factors that are external to the District Plan (interest rates, incomes, etc.). This approach seeks to downplay the importance of District Plan providing sufficient zoned and serviced land which is fundamental to the provision of affordable housing.

17. RESIDENTIAL ZONE OPTIONS

17.1 The PWDP has three broad zoning options. These are evaluated in the following table. The preferred option is to retain the Residential Zone as Notified (as per the PWDP)

however to reduce the minimum Restricted Discretionary lot size to 200m². This would enable new houses for less than \$440,000, to align with 71% of the demand.

Figure 46: Residential Zone Option Evaluation

	Benefits	Costs	Recommendation
Residential Zone as Notified	Would enable a small amount of subdivision of existing lots (around 1,870 according to WDC). Around 30-40% of these would be commercially feasible (650). Would enable a large amount of greenfield development (around 6,600).	The majority of the infill and greenfield houses enabled would be over \$580,000 and therefore would not meet demand. This would present significant economic and social costs to the community and is the most important issue to address under the PWDP review.	This approach enables sufficient supply in terms of quantity however not in terms of price. Consequently the District would not produce enough low priced housing and would not meet its requirements under the NPS-UDC. This conclusion is also reached by the Council's consulting economists. This is the least preferred option.
Residential Zone as Notified + Medium Density Zone as proposed by HNZ	Would increase the number of infill lots, from 1,870 to around 3,000-4,000. Around 30-40% of these would be commercially feasible (1,200). This would approximately double the potential infill dwellings under the Residential Zone as Notified option.	This enables greater supply, and in efficient locations near commercial centres. However, the majority of the infill and greenfield houses enabled would also be over \$580,000 and therefore would not meet demand.	This approach enables sufficient supply in terms of quantity however not in terms of price. Consequently the District would not produce enough low priced housing and would not meet its requirements under the NPS-UDC. This conclusion is also reached by the Council's consulting economists. This is the second most preferred option.
Residential Zone as Notified + Lower Minimum Restricted Discretionary Lot Size (200sqm)	The majority of new housing enabled by the PWDP would be on new greenfield land, particularly in large masterplanned developments around Pokeno and Tuakau. The 300sqm minimum lot size (RD) will enable a significant quantity of town houses, which would enable dwellings of less than \$580,000 however not less than \$440,000. The 200sqm minimum lot size (RD) would enable a significant quantity of dwellings of less than \$440,000. This is where the majority of demand needs to be met. It is this smaller lot size that would enable the District to meet its housing needs.	There may be some infill subdivision that creates visual and amenity impacts. This could potentially be managed with design guides/manuals in addition to the RD consenting process (a topic for other experts). Within new greenfield masterplanned subdivisions, visual and amenity impacts could be addressed by the designers and anticipated by purchasers.	This is the most preferred option as it allows flexibility for masterplanned developments to respond to demand across a range of housing types and prices, particularly over the next 5-10 years as the housing market continues to increase in price across Auckland and smaller dwellings become commercially feasible. This is the only option that meets the requirements of the NPS-UDC.

Source: Urban Economics

18. NPS-UD CONSIDERATIONS

18.1 The key provisions of the NPS-UD that relates to efficient residential land markets is as follows:

NPS-UD: *“Objective 2: Planning decisions improve housing affordability by supporting competitive land and development markets.”*

“Policy 1: Planning decisions contribute to well-functioning urban environments, which are urban environments that, as a minimum: have or enable a variety of homes that:

(i) meet the needs, in terms of type, price, and location, of different households...”

“Policy 2: Tier 1, 2, and 3 local authorities, at all times, provide at least sufficient development capacity to meet expected demand for housing and for business land over the short term [1 to 3 years], medium term [3 to 10 years], and long term. [11 to 30 years]”

“Policy 8: Local authority decisions affecting urban environments are responsive to plan changes that would add significantly to development capacity and contribute to well functioning urban environments”

18.2 The following figure compares the estimated capacity for housing with the estimated demand for housing across the short, medium and long term. The key points to note are:

- a) There is currently ‘reasonably expected’ development capacity for 1,040 dwellings under the OWDP. With demand of 400 – 500 dwellings per annum, this is 2 - 3 years of supply.
- b) There is currently ‘reasonably expected’ development capacity for 2,500 dwellings under the PWDP. With demand of 400 – 500 dwellings per annum, this is 5 - 6 years of supply.
- c) The NPS-UD requirements for the short term are met under the PWDP.
- d) The NPS-UD requirements for the medium term and long term are not met under the PWDP.
- e) The Waikato 2070 blueprint identifies two additional areas for residential development not identified in the PWDP, Havelock Village and an additional area in Pokeno East. These areas between them have an estimated ‘reasonably expected’ development yield under PWDP provisions of 1,540 dwellings.
- f) This brings total supply under the PWDP for the long term to 4,040 dwellings or 8 - 10 years. Under this scenario the NPS-UD requirements for the long and medium term are not met.
- g) The proposal will bring an additional 415 dwellings to the market as well as increase capacity in other greenfield areas. This would increase short to medium term capacity to 10.2 years and long-term capacity to 13.4 years. While the NPS-UD requirements in the long term are still not met, the proposal represents a considerable improvement.

- h) It is the responsibility of the Regional Council to define 'significant development capacity' as at the date of this report's publication. The Waikato Regional Council has not yet done this.
- i) The proposal represents a 'significant development'. If an area is unable to meet the requirements of policy 1 then developments that enable this policy to be met should be considered significant. The proposal would result in the provision of considerable affordable housing in the \$500,000 - \$600,000 range, which is currently undersupplied. Under the PWDP as it stands, these brackets will remain undersupplied.
- j) Objective Two of the NPS-UD requires planning decisions to support competitive land and development markets. Markets operating with a small number of suppliers can quickly become anti-competitive resulting in higher prices and lower quality goods and services supplied.
- k) Under the OWDP there is only one developer of greenfield land in Pokeno. This produces an HH value of 10,000 – a completely concentrated marketplace.
- l) Under the PWDP the HH value drops to 4,310. This is a great improvement though it is still a highly concentrated marketplace.
- m) Under the PWDP plus the proposal the HH value drops to 2,920. While this marketplace is still considered highly concentrated, this is a considerably more competitive environment than the OWDP and PWDP outcomes. It therefore represents a considerable improvement for the purposes of Objective 2 of the NPS-UD.

Figure 47: NPS-UD Considerations

		OW DP	PW DP	PW DP + Proposal
Dwelling Capacity	Brown field	210	210	345
	Green field	830	2,290	4,570
	Short and Medium Subtotal	1,040	2,500	4,915
	Waikato 2070 Green field	1,540	1,540	1,540
	Total Capacity	2,580	4,040	6,455
Years Supply	Dem and per Annum	480	480	480
	Short and Medium	2.2	5.2	10.2
	Long (10-30 years)	5.4	8.4	13.4
Land Provision Requirements	Short (0-3 years)	Met	Met	Met
	Medium (3-10 years)	Not Met	Not Met	Met
	Long (10-30 years)	Not Met	Not Met	Not Met
Concentrated Land Market	Herfindahl-Hirschman Index	10,000	4,310	2,920

Source: Corelogic, OW DP, PW DP, Urban Economics, MfE

19. SUMMARY OF COSTS AND BENEFITS

19.1 The following costs and benefits have been assessed in this report:

- a) The proposal would enable an efficient housing market. Currently Pokeno has a shortage of land to meet residential demand. The proposal would enable sufficient years supply to meet the market. The proposal would also introduce competition into the market. This increases market efficiency. This is an economic benefit.
- b) The proposal would enable affordable housing. By enabling smaller lots, more affordable housing is available. As outlined by the council's economists, the current and PWDP fail to provide sufficient housing within the \$0 - \$440,000 and \$440,000 - \$580,000 price ranges. By enabling dwellings to be constructed in this price range, supply can meet demand, the market is more efficient, and affordable housing that suits people's preferences can be supplied. This is a significant economic benefit.
- c) The proposal would enable additional housing diversity. By enabling more diversity in housing choices, the market is more easily able to meet people's individual preferences for housing. This is an economic benefit.
- d) The proposal would produce additional employment opportunities. The proposal produces approximately 105 - 115 FTE jobs per annum over the life of the project and an additional 10 – 30 FTE jobs per annum in the retail and hospitality sector upon completion. This is a significant economic benefit.
- e) The proposal would have a positive impact on the local economy. The proposal has a net present value of \$226.8 - \$230.2 million with regards to the impact of the proposal on the value added portion of local GDP. This is a significant economic benefit.
- f) The proposal would displace a small amount of Dairy farming activity.

Figure 48: Cost-Benefit Summary Table

	Description	Detail
Benefits	Enabling Affordable Housing	The proposal would enable the provision of 135 dwellings priced below \$600,000. The Council's economists have identified a shortage of 6,200 dwellings below \$580,000 across the Waikato district under the PWDP. Enabling supply to meet demand at this price point is a significant economic benefit.
	Efficient Use of Infrastructure	Pokeno is serviced for water treatment by Watercare's Pukekohe water treatment plant. \$14.4m is planned to be spent by Watercare over the next twenty years to increase the capacity of the plant and its network. It is worth noting that Watercare has identified its existing infrastructure has capacity for only 55,000 dwellings, of which only some will be 'commercially feasible' for development. For the purpose of the PWDP, it is worth noting that there is a significant regional shortage of Watercare infrastructure, and that any new investment in the region should therefore be utilized as efficiently as possible.
	Employment	The proposal would create 105 – 115 FTE per annum in the construction sector over the construction period and an additional 10 – 30 FTE jobs per annum in the retail and hospitality sector upon completion.
	Increasing Competition in the Land Development Market	The proposal would decrease the Herfindahl-Hirschman index from 4,310 under the PWDP to 2,920. While this is still considered a highly concentrated market, it is a considerable improvement in the competitive environment. This may lead to lower lot prices for purchasers.
	Construction Sector Value Added	The proposal would add a PV of \$34.8 – \$35.2 million to GDP in the construction sector . This is a significant economic benefit.
	Accommodation Services	The proposal would provide accommodation services with a PV of \$77.8 million over the next 30 years. This is a significant economic benefit.
	Retail Floorspace Provision	The proposal would provide retail floorspace with a PV of \$2 – \$4.9 million over the next 30 years. This is a significant economic benefit.
	Household Expenditure	The proposal would result in additional household expenditure across a range of sectors in the Waikato District. This is a significant increase in economic activity and thus a significant economic benefit. The PV of this expenditure over the next 30 years is \$115.4 million .
Costs	Displacement of Dairy Farming Value Added	The proposal would displace 87 hectares of farm land classified by Corelogic as dairy farm land. This has a PV of \$3.3 million over the next 30 years.
	Displacement of Dairy Farming Employment	The proposal would displace approximately 1 FTE job in the dairy farming industry.
	Visual and Amenity Impacts	The proposal enables a lower minimum lot size as a restricted discretionary activity. There may be some infill subdivision that creates visual and amenity impacts. This could potentially be managed with design guides/manuals in addition to the RD consenting experts. With new greenfield masterplanned subdivisions, visual and amenity impacts could be addressed by developers and anticipated by purchasers.

Source: Urban Economics

20. CONCLUSION

20.1 The proposal has many economic benefits and no additional economic costs that are not already encompassed by the PWDP and is therefore recommended for approval.

Adam Thompson

17.02.2021

APPENDIX 1: POKENO VILLAGE ESTATE DEVELOPMENT DENSITY

Figure 49: Current Development, Helenslee Block



Source: Pokeno Village

The Helenslee block contains 764 dwellings across 79.2 hectares. A river system runs through the development reducing the developable land area. The average density in this area is 9.6 dwellings per hectare.

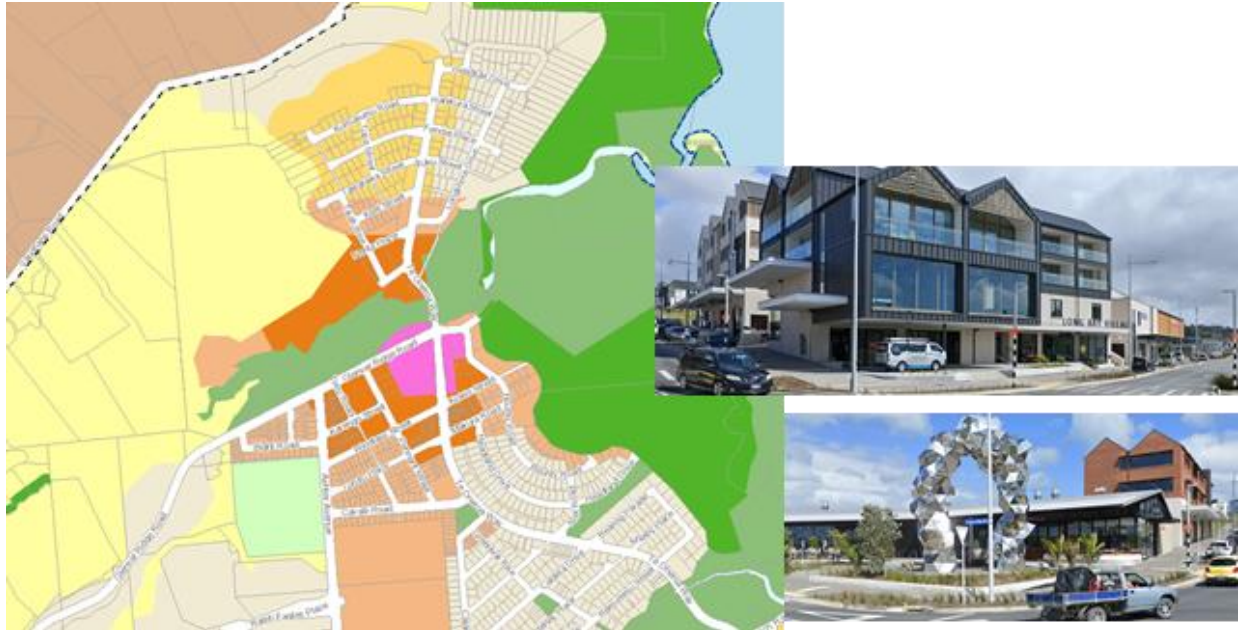
Figure 50: Current Development, Hitchens Block



The Hitchens block currently contains 550 dwellings across 41 hectares. The average density in this area is 13.4 dwellings per hectare. Current densities achieved in Pokeno therefore range from 9.5 - 13.4 dwellings per hectare.

APPENDIX 2: CENTRES IN RECENT GREENFIELD DEVELOPMENTS

Figure 51: Long Bay, North Shore



Land Area: 3.9 hectares

Occupied GFA: 7,100m²

Tenants: New World (supermarket), Liquor Store, 2 Restaurant, Sushi, 3 Café, Pub, Fish and Chip, Gym, Medical Centre, Real Estate Agent, Bakery, Pharmacy, Hair and Beauty.

Figure 52: Hobsonville Point



Land Area: 2.8 hectares

Occupied GFA: 8,000m²

Tenants: Pharmacy, Hair and Beauty, Dentist, Medical Centre, 5 Cafés, 4 Restaurants, Bakery, Real Estate Agent, 2 Specialty Retail Stores, Convenience Store, Sushi, Travel Agent, Pub (Brewery), Sports Club.

Figure 53: Stonefields

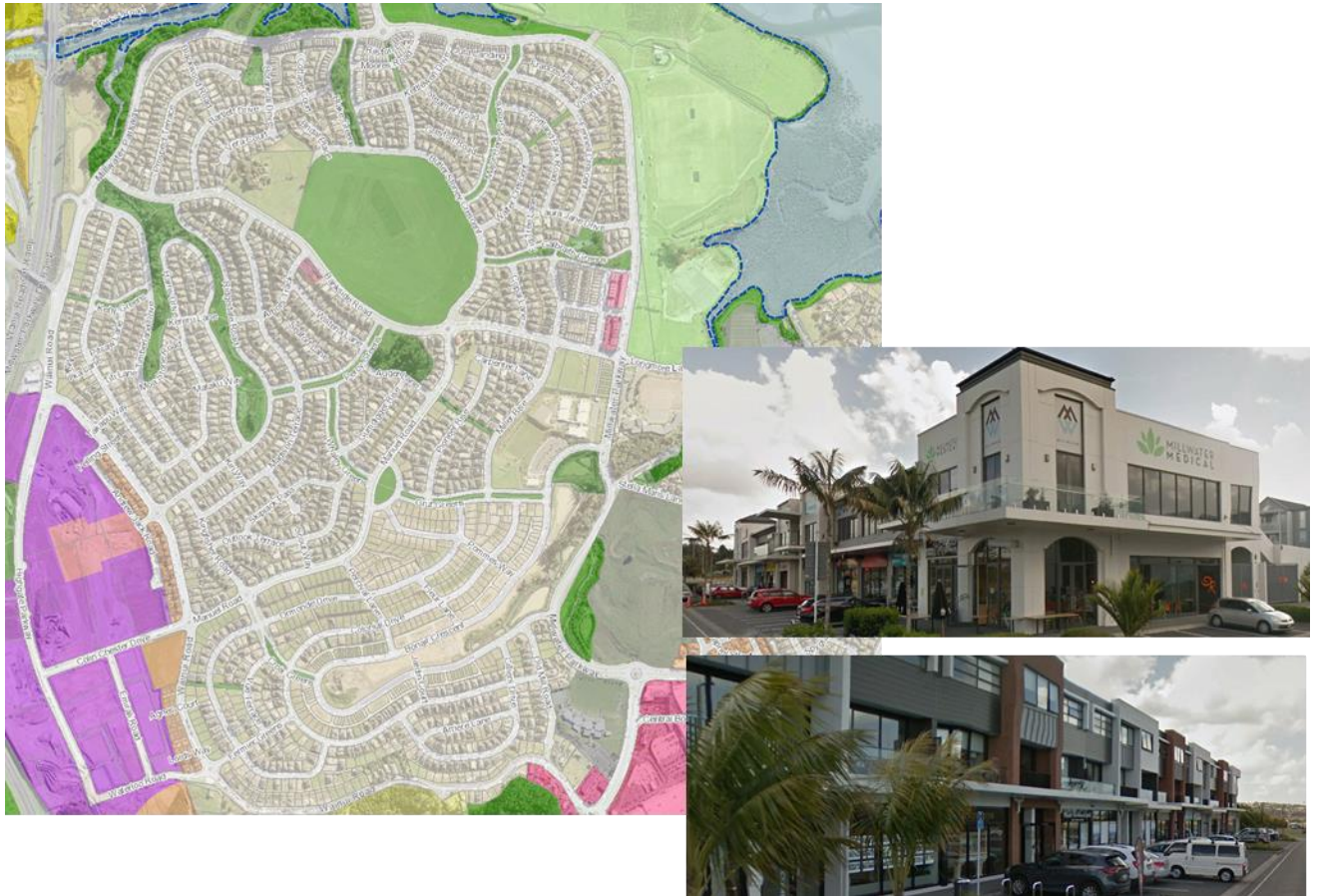


Land Area: 2.6 hectares

Occupied GFA: 3,500m²

Tenants: Medical Centre, 2 Restaurants, Yoga Studio, Gym, Café, Pub, Financial Consultant, Specialty Retail, 2 Real Estate Agents, Hair and Beauty

Figure 54 Millwater



Land Area: 1.2 hectares

Occupied GFA: 3,200m²

Tenants: Vet, Gym, 3 Real Estate Agents, Convenience Store, 2 Bakeries, Physio, Pub, Sushi, Optometrist, Pharmacy, 3 Takeaways, 4 Hair and Beauty Stores, Liquor Store, Specialty Retail, 3 Cafés, Travel Agent, 2 Dentists, Showhome.