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 HAVELOCK VILLAGE LIMITED

19 February 2021



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 Havelock Village Ltd (HVL)¹ of land at 5 Yashili Drive, 88 Bluff Road, 242 (in part) and 278 Bluff Road, Pokeno (Site). My evidence includes an assessment of housing demand and supply for Pokeno and an assessment of potential costs and benefits of the proposed rezoning.
- 1.3 I have prepared similar assessments for other submitters, so to assist the Panel the key points of my evidence relating to HVL's submission and the Site are as follows:
 - (a) I have undertaken assessments of housing demand within Pokeno and housing supply provided by the Operative Waikato District Plan and the notified Proposed Waikato District Plan (PWDP) within Pokeno;
 - I have also reviewed and considered the latest assessments undertaken by
 Dr Mark Davey on behalf of the Waikato District Council;
 - (c) Current building consent data indicates an annual growth rate of 200 dwellings per year. This is consistent with WDC's assessment. However, I consider this is a conservative assessment and fundamental demand is higher at 400-500 dwellings;
 - (d) Dr Davey's conclusion is that the PWDP does not provide sufficient housing supply within the medium term (3-10 years) under the National Policy Statement on Urban Development 2020 (NPS-UD) and so additional land in Pokeno should be rezoned for residential:
 - I have assessed a number of different scenarios for housing supply. In all realistic scenarios there is a shortage of housing in the medium term in Pokeno.
 That shortage is greater under my assessment of demand, compared to WDC's;
 - (f) Rezoning the Site for residential will provide additional housing supply and is necessary to ensure that the PWDP meets the requirements of the NPS-UD in relation to housing supply in the medium term. However, even if the Site was rezoned I consider the PWDP would still not meet the relevant requirements;

¹ Submitter 862 and further submitter 1291.

- (g) Rezoning the Site will also increase competition in the residential land development market. This will result in more choice for purchasers and may result in lower prices. This is also an important aspect of the requirements of the NPS-UD;
- (h) Finally, there are substantial potential economic benefits to the rezoning. The proposal has a net present value (NPV) of \$350.7 - \$353.7 million over the course of thirty years.
- 1.4 The main findings of my economic assessment are outlined as follows:
 - (a) The Council economists' estimate the Waikato District requires 7,100 additional dwellings over the 2017 2026 period.
 - (b) 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.
 - (c) 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.
 - (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.
 - (e) 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 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 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 under the proposed Residential Zone.
 - (f) The PWDP's Residential Zone provisions are based on an evaluation of commercially feasible capacity under the OWDP. There is no assessment of commercially feasible capacity under the PWDP. This is a significant oversight and does not meet the requirements of the NPS-UD.

- (g) 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 size.² 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.
- (h) 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.
- (i) 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.
- (j) These two towns are part of the Auckland metropolitan housing market. This is confirmed by interviews with real estate agents that confirm most buyers come from south and east Auckland. This conclusion is also reached in the Council's economic reports.
- (k) 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.
- (I) 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

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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).

less than \$580,000 based on Councils estimates). Tuakau will have a similar price profile to Pokeno so will perform similarly.

Tat Cina (m 2)	LotPrice	Dwelling	Dwelling	Lot
LotSize (m²)	LOCFILE	Price	Туре	Count
400 -450	\$250 , 000	\$590 , 000	Stand Albne	160
450 -500	\$260 , 000	\$620 , 000	Stand Albne	10 0
500 -550	\$270 , 000	\$660 , 000	Stand Albne	80
550 -600	\$280 , 000	\$700 , 000	Stand Albne	30
600 -650	\$280 , 000	\$730 , 000	Stand Albne	30
650 -700	\$280 , 000	\$760 , 000	Stand Albne	30
700 -750	\$300,000	\$800,000	Stand Albne	30
750 -800	\$300,000	\$820 , 000	Stand Albne	30
800 -850	\$310 , 000	\$840 , 000	Stand Albne	30
850 -900	\$310 , 000	\$850 , 000	Stand Albne	25
Subtotal				545
3,000	\$400 , 000	\$890 , 000	Lifestyle	15
4,000	\$410,000	\$910 , 000	Lifestyle	15
5 , 000	\$420,000	\$920 , 000	Lifestyle	25
Subtotal				55
Total				600

Source: Urban Economics

- (m) 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.
- (n) The PWDP additional Residential Zone land is in large part applied to land surrounding Pokeno and Tuakau. These blocks of land are of a size that will enable masterplanned developments. Similar large-scale developments in Auckland are providing a large proportion of terrace housing, in large part because the developer can masterplan the site and provide a high level of amenity for purchasers. For example, terrace housing and other more compact housing, can be located near to parks or bush areas. New large-scale development areas should be enabled to provide high density housing to ensure lower prices and a range of housing options.

- (o) The PWDP allocation of additional residential greenfield land in Pokeno is supported. This is the key growth location in Waikato and would benefit from additional competition to ensure an efficient housing market.
- (p) Plan enabled capacity is estimated at between 855 and 1,365 dwellings under the OWDP and 2,355 3,775 dwellings under the PWDP.
- (q) There are 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.
- (r) Current building consent data indicates an annual growth rate of approximately 200 dwellings, which could be considered as the baseline demand, and this evidence estimates a demand of 400 500 dwellings, which could be considered as the high growth demand scenario. This indicates that Pokeno has only 4-6 years of demand remaining under the baseline demand scenario, and 2-3 years of supply remaining under the high growth demand scenario. Consequently, additional Residential Zone land is required under the PWDP to ensure that Pokeno continues to have an efficient housing market.
- (s) 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. This is due to the current offer being limited to conventional suburban lots and dwellings, and other parts of the market (e.g. smaller town houses, affordable dwellings and retirement housing), not currently being provided. In addition, Pokeno has the recent addition of a supermarket which will increase the attractiveness of the town to new residents, and Auckland's increasing house prices are continuing to make Pokeno more attractive to many buyers, particular younger families purchasing their first home.
- (t) 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 (i.e. the baseline of 200 dwellings per annum and the high growth scenario of 400 dwellings per annum), 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.
- (u) 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 are required in Pokeno for it to meet the medium term requirements of the NPS-UD.

- (v) 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. This underpins Pokeno's demand as a town.
- (w) The proposal would enable an estimated 170 FTE employees over the course of the construction period and an additional 40 – 70 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 Beef farming process which is considered the second-best land use to residential development.
- (x) The proposal would result in an estimated net increase in Waikato District household expenditure with a PV of \$162.2 million over the next 30 years. This is a significant economic benefit to the local economy.
- (y) The proposal would add a PV of \$62.9 \$63.6 million to GDP in the construction sector. This is a significant economic benefit. It is worth noting that support of the construction sector in the short term will provide employment opportunities, and this will help offset the economic impact of Covid-19. I understand that the owner of this property is able to begin work immediately, and this would ensure their time and financial resources are utilised for the benefit of the wider economy in the immediate future.
- (z) The proposal would provide accommodation services with a PV of \$124.6 million over the next 30 years. This is a significant economic benefit.
- (aa) The proposal would provide retail floorspace with a PV of \$2.8 \$5.1 million over the next 30 years. This is a significant economic benefit.
- (bb) The proposal has a net present value (NPV) of \$350.7 \$353.7 million over the course of thirty years. This represents a significant boost to the Waikato District economy.

- (cc) 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.
- (dd) 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 4.
- 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 HVL since 2020. This has included a site visit and preparation of an economic assessment.

Scope of evidence

2.7 My evidence evaluates the demographics and growth projections, and economic costs and benefits of the proposed rezoning sought by HVL.³

³ Submitter 862 and further submitter 1291.

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 Site has an estimated net yield of 600 lots,⁴ comprised of predominantly stand-alone and a small proportion of rural lifestyle dwelling types.
- 4.2 Pokeno is a small 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 in February 2021.

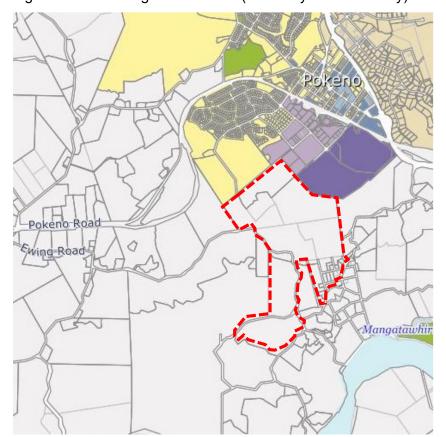


Figure 1: Site Zoning and Location (boundary indicative only)

Source: Waikato District Council

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⁴ Refer evidence of Mr Munro.

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.

Primary Secondary Sub-Region

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:
 - (a) Statistics New Zealand forecast a population growth rate of 230 per annum in the Primary catchment for the last two years (2018-2020).
 - (b) Population growth over this period was substantially faster, with 680 additional people residing in the Primary catchment each year.
 - (c) Pokeno has grown at three times the projected growth rate over the past two years.
 - (d) Pokeno currently has a population of 5,750. This population was not expected until 2028, indicting Pokeno has greatly exceeded its growth projections.

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

			Historic		Current	Proje	ction	Growth			
	Catchment	2006	2013	2018	2020	2028	2038	2018 -	Per	2018 -	Per
	cateminent	2000	LOIS	2010	LOLO	LOLO	2000	2028	Annum	2038	Annum
	Primary	1,710	1,780	4,390	5,750	5,800	7,060	2,340	230	3,600	360
Donulation	Secondary	22,520	26,530	31,770	33,590	38,770	46,690	5,700	570	13,620	1,360
Population	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
	Primary	620	680	1,420	1,860	2,020	2,460	600	80	1,040	120
Households	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)

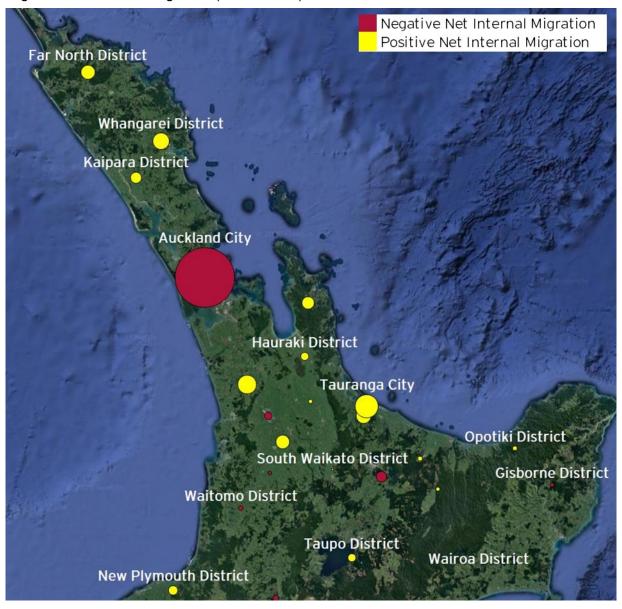


Figure 5: Net Internal Migration for Key Districts 2018 – 2020

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

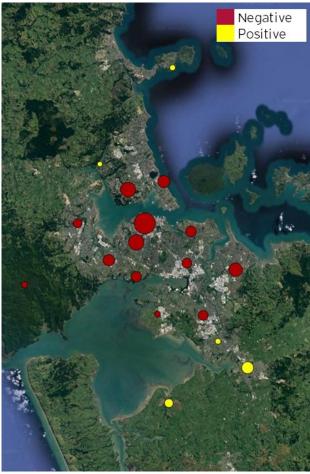
Source: Statistics NZ

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 the 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



Negative Positive Hobsonville Point Flat Bush Papakura Pukekohe Pokeno

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

		Pokeno		Pukekohe			Tuakau				
Year	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

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

	Waikato Region				Hamil	ton City			Waikat	o District	t	
Year	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	2982	576	533	87	1196	430	24	5	458

Source: Statistics NZ

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

^{*}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.

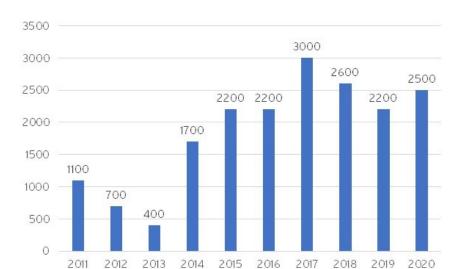


Figure 11: Historic Population Growth Waikato District

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

D istrict	2019	2020
Selw yn	1900	2100
Tauranga	1,800	1 , 900
W aikato	1,200	1 , 200
W aim akariri	1,100	1,100
W hangarei	960	920
Queenstown-Lakes	800	8 10
Western Bay of Plenty	750	790
FarNorth	630	740
Tasm an	580	590
Wa i pa	710	580
KapitiCoast	5 10	580
Tham es-€orom andel	500	560
Horow henua	530	560
Dunedin	340	530
CentralOtago	440	440
Auckland	-11 , 800	-12 , 600

Source: Statistics N Z

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
	NaturalIncrease	580
2018 -	Net Internal Migration	1 , 200
2016 -	Net International Migration	370
2019	NetM igration	1 , 570
	TotalChange	2 , 150
Jun-19	Population	80 , 400
	NaturalIncrease	590
2019 -	Net Internal Migration	1 , 200
2020	Net International Migration	690
2020	NetMigration	1 , 890
	TotalChange	2 , 480
Jun-20	Population	82 , 900

Source: Statistics N Z

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

	M ∈	dian House I				
Location	Dec-19	Dec-20	Increase			
	Dec 15	Dec 20	2019 -2020			
Auckland	\$886 , 000	\$1 , 040 , 000	\$154 , 000			
W aikato	\$555 , 000	\$650 , 000	\$95 , 000			
Ham ilton City	\$605 , 000	\$730 , 000	\$125 , 000			

Source: RENZ

- 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%, with a large proportion of these under projections due to the rapid growth in Pokeno. 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
		Total Population	65 , 700	66,200	66,600	67,100	67 , 600	68,000	
C W D	Low	Growth P.A.	_	500	400	500	500	400	2 , 300
Cam eron, M.P.,	M edium	Total Population	66 , 500	67 , 400	68 , 200	69 , 100	70 , 10 0	71 , 000	4,500
and Cochrane, W . (2014)	меашп	Growth P.A.	-	900	800	900	1 , 000	900	4,000
W . (2014)	H iqh	Total Population	67 , 300	68 , 600	69 , 900	71 , 300	72 , 700	74 , 100	6 9 0 0
	u r ðii	Growth P.A.	-	1 , 300	1 , 300	1,400	1,400	1,400	6 , 800
	Low	Total Population	68 , 200	69 , 000	69 , 900	70 , 800	71 , 700	72 , 600	4,400
Cam aman M D	TOM	Growth P.A.	-	800	900	900	900	900	4,400
Cam eron, M.P., and Cochrane,	M edium	Total Population	68 , 600	69 , 700	70 , 800	72 , 000	73 , 100	74 , 300	5 , 700
W . (2016)	меашп	Growth P.A.	-	1 , 10 0	1 , 10 0	1,200	1 , 10 0	1 , 200	3,700
W . (2010)	H igh	Total Population	69 , 100	70 , 400	71 , 700	73 , 100	74 , 600	76 , 000	7,000
	пъл	Growth P.A.	-	1 , 300	1 , 300	1,400	1 , 500	1 , 400	7,000
StatsNZ	Actual	Total Population	70 , 400	72 , 600	75 , 600	78 , 200	80 , 400	82 , 900	12,500
S LA LO IN L	ACMAI	Growth P.A.	-	2 , 200	3 , 000	2 , 600	200	2 , 500	12,000

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 competition in Pokeno, 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. This is an average of 60 dwellings per annum less than building consent data for the last 5 years.

Waikato 2070 Plan

6.26 The Waikato 2070 Growth and Economic Development Strategy ("Waikato 2070") 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. I am aware that HVL provided evidence during the hearings on the Waikato 2070 that the actual rate of development based on building consent data was at least 200 dwellings per annum. The Council did not update its growth figures in Waikato 2070 to match this, resulting in a growth strategy based on reducing the annual supply of housing by 45% (90 dwellings on average over 5 years) rather than increasing land supply to meet actual annual growth rates and not addressing potential increase in demand given the popularity of Pokeno in the housing market. The issue for the Commissioners is the reliance it can place of any limits to urban expansion in Pokeno where the Waikato 2070 contains such a significant under-prediction of demand. This is further exacerbated by my assessment of the high growth demand scenario, for 400 dwellings per annum, which I consider a likely outcome.

Real Estate Agent Interviews

- 6.27 Five real estate agents based in Pokeno were interviewed in late 2020 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, all of which are conventional detailed suburban dwellings on larger 500 – 1,000m² lots.
- (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.

Figure 16: Dwelling Sales in Pokeno, 2018 – 2020

	Sale Price		Average Land	Average Floor
Year	Bracket (\$000)	Count	Area (sqm)	Area (sqm)
	\$0 - \$99	1	620	220
	\$200 - \$299	14	590	160
	\$300 - \$399	2	600	150
2018	\$600 - \$699	11	580	170
	\$700 - \$799	18	670	190
	\$800 - \$899	1	710	220
	Subtotal	47	630	180
	\$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
2019	\$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
	\$500 - \$599	1	200	140
	\$600 - \$699	5	560	160
2020	\$700 - \$799	42	610	190
2020	\$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
2018	Subtotal	8	750
2019	\$200 - \$299	57	590
	\$300 - \$399	4	1,070
2019	\$400 - \$499	1	600
	Subtotal	62	620
	\$200 - \$299	57	730
2020	\$300 - \$399	10	850
	Subtotal	67	750
Total		137	690

Source: Corelogic

- 6.29 There are 3 vacant lots and 29 house-and-land packages currently 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 (m²)	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 (m²)	Average Floor Area (m²)	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, is not being provided for. If a wider range of dwelling type, lots size and price was supplied to the market, a greater share of total demand would be met, and total construction would increase to approximately 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 ("OWDP")

- 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	Ο
\$730 - \$880	30		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 ("PWDP")

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 below⁵. 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 is 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 meets this, and taps into this segment of market demand.
- 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.

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⁵ It appears in Figure 17 that the additional Residential Zone land incorrectly includes some of the existing Residential 2 zone land.

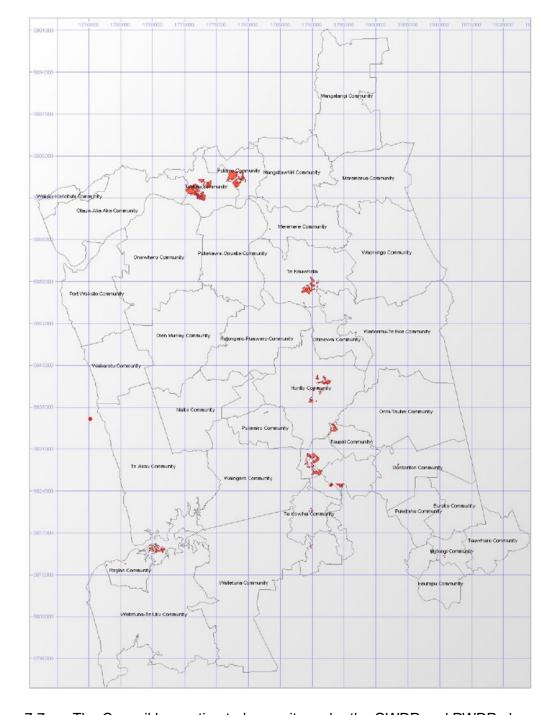


Figure 22: Location of Additional Residential Zone Land under PWDP

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

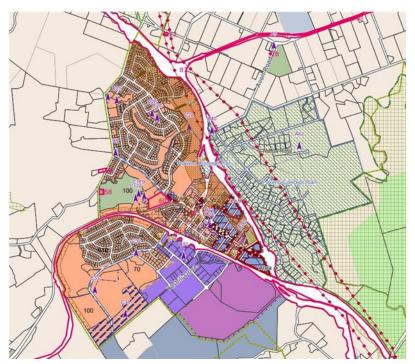
Pokeno currently has greenfield capacity for an additional 2,200 dwellings (excluding Country Living), and a further 500 infill dwellings. The proposed growth areas add a further capacity of 3,500 dwellings, bringing the total greenfield capacity to 5,700 dwellings. This compares to a medium-series long-term 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 (Munro Block) 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 2 zoned land in the OWDP is converted to Residential zoned land in the PWDP. 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 baseline demand of 200 dwellings per annum, and the high growth scenario demand of 400-500 dwellings per annum (which I consider is more likely) this indicates that Pokeno has only 4-6 years of demand remaining under the baseline demand scenario, and 2-3 years of supply remaining under this high growth demand scenario. Consequently, 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



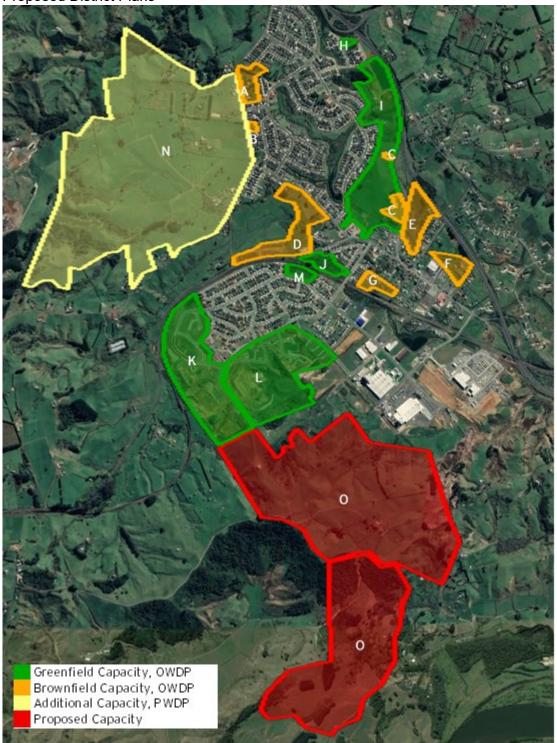
Source: Waikato District Council

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



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 Havelock Block area and contains 130ha 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 Hitchen 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 Hitchen 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 on sections larger than 300m². 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 Havelock Site brings plan enabled capacity up to between 2,705 and 4,435

dwellings. This capacity estimate would enable 5 - 11 years of supply to be brought to the market.

Figure 26: Existing and Proposed Capacity Estimates

					NumberofDwellings				
Area	Block	Туре	Number of Properties	Land Area (ha)	Scenario 1	Scenario 2	Scenario 3		
	A	Brownfield	5	3	25	35	40		
	В	Brownfield	1	0	5	0	5		
	С	Brownfield	5	1	10	15	15		
	D	Brownfield	8	11	10 0	150	160		
	E	Brownfield	17	6	45	70	80		
	F	Brownfield	6	2	15	20	25		
	G	Brownfield	6	2	10	20	20		
OWDP	H	Greenfield	1	0	5	0	5		
OWDP	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		
	N	Greenfield	8	159	1 , 500	1 , 950	2 , 4 10		
OWDP+	Subtotal	Brownfield	48	26	2 10	310	345		
PWDP	Subtotal	Greenfield	27	250	2 , 14 5	2 , 880	3 , 430		
	Total	_	75	276	2 ,355	3 ,19 0	3 ,775		
OWDP+	0	Greenfield	12	129	350	500	650		
PWDP+	Subtotal	Brownfield	48	26	2 10	320	355		
Havebck	Subtotal	Greenfield	39	379	2 , 495	3 , 380	4,080		
Village	Total	-	87	405	2,705	3,700	4 <i>A</i> 35		

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 Havelock and Pokeno East areas are identified in Waikato 2070 but not the OWDP or PWDP. 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

A rea	Source	T in ing	Tim ing Identified in S42a Report	Туре	Quantity of Dwellings, S42a Report	Quantity of Dwellings, UE
Hillpark Drive	Operative District Plan	ShortTerm (1-3 Years)	ShortTerm (1-3 Years)	Green field	460	350
Hitchens Block	Operative District Plan	ShortTerm (1-3 Years)	ShortTerm (1-3 Years)	Greenfield	670	630
Town Centre	Operative District Plan	ShortTerm (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	W aikato 2070	Long Term (10 -30 Years)	Medium Term (3-10 Years)	Green field	920	670
Havelock Village*	W aikato 2070	Long Term (10 -30 Years)	Medium Term (3-10 Years)	Green field	1,060	1 , 190
Short Term Supply					1 , 130	1 , 300
Medium Term Supply					4,270	1 , 950
Long Term Supply					0	1 , 860
Total					5 , 400	5 , 110

Source: Urban Economics, Waikato District Council

- 7.17 The last column in figure 27 above displays the quantity of dwellings estimated in each of the areas analysed by Urban Economics (UE). (As noted below the current capacity for HVL is approximately 600 dwellings.) 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 dwellings⁶ 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 Waikato 2070 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 area⁷ requires 45 dwellings per hectare, indicating either small terrace houses or 2-3 level apartments. This type of housing is not considered feasible in large quantity in this location.

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^{*}Indicative yield in this area is approxim ately 500 dwellings according to the latest plans

⁶ 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.

⁷ Assuming that 1/3 of the mixed use area is used for dwellings

- (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.
- (e) Dr Davey estimates there is capacity for 1,060 additional dwellings in the Havelock Site. Urban Economics estimates there is capacity for 1,190 dwellings in this area. This was done using a broad estimate of greenfield capacity. A more detailed capacity estimate undertaken by HVL taking into account the terrain of the Site has yielded approximately 600 dwellings across this area. If Multi-Unit Housing opportunities were utilised an additional 100 dwellings could be available. As this value is more rigorous it has been adopted for the following analysis.
- 7.18 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 respectively in the PWDP and Waikato 2070.
 - (b) UE estimates there is total greenfield capacity for 1,100, 3,050 and 5,100 new dwellings by 2023, 2030 and 2050 respectively in the PWDP and Waikato 2070.
 - (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 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). No explanation for the rapid decrease in demand beyond 2030 if provided, and this appears to be contrary to the mid-long term growth projections in the Waikato and Auckland regions.
- (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

				20	23	2030		2050	
				WDC	UE	WDC	UE	WDC	UE
			Hitchens	670	600	670	600	670	600
			Hillpark Drive	460	350	460	350	460	350
		D la ala	Munro Block	0	0	1 , 590	1 , 950	1 , 590	1 , 950
		Block	Town Centre	0	150	0	150	0	150
	C		Pokeno East	0	0	0	0	920	630
	Greenfield		Havelock Village	0	0	0	0	1 , 060	500
		Total		1 , 130	1 , 10 0	2 , 720	3 , 050	4 , 700	4 , 18 0
		G (1.3.1	50%	570	550	1 , 360	1 , 530	2 , 350	2 , 090
0		Green field	75%	850	830	2,040	2,290	3 , 530	3 , 140
Supply		Supply Uptake	10 0 %	1 , 130	1 , 10 0	2 , 720	3 , 050	4 , 700	4 , 18 0
			Hitchens	0	30	0	30	0	30
		Block	Town Centre	0	170	700	170	700	170
	In fill		Pokeno East	0	0	0	0	0	40
		Total		0	200	700	200	700	240
		Uptake	10 %	0	20	70	20	70	20
	TotalSupply		50% Greenfield, 10% Infill	570	570	1 , 430	1 , 550	2 , 420	2 , 110
			75% Greenfield, 10% Infill	850	850	2 , 110	2,310	3 , 600	3 , 160
			100% Greenfield, 10% Infill	1 , 130	1 , 120	2 , 790	3 , 070	4 , 770	4,200
	W aikato District Council,		TotalDem and	730	730	2 , 600	2 , 600	5 , 380	5,380
	Medium Projections		PerAnnum	240	240	270	270	140	140
Dem and	Urban Economics, Medium		TotalDem and	1 , 440	1,440	4,800	4,800	14,400	14 , 4 0 0
	Projections		PerAnnum	480	480	480	480	460 1,590 1 0 920 1,060 4,700 4 2,350 2 3,530 3,530 4,700 0 700 700 2,420 3,600 3,600 4,770 4 5,380 5 140 14,400 14,400 14,400 14,400 15,380 12,760 11,780 12,7780 12,780 11,780	480
	Waikato Supply Surplu:		50% Greenfield, 10% Infill	- 160	- 160	-1, 170	-1, 050	-2 , 960	-3 , 270
	District	Shortfall	75% Greenfield, 10% Infill	120	120	-4 90	- 290	-1, 780	- 2 , 220
	Council	SHOLUMIL	100% Greenfield, 10% Infill	400	390	190	470	-610	-1, 18 0
	M edium	Supply Surplus/	50% Greenfield, 10% Infill	-0 .7	-0 . 7	-4.3	-3.9	-21,1	-23.4
Capacity		Shortfall	75% Greenfield, 10% Infill	0.5	0.5	-1.8	-1.1		-15.9
(Supply - Demand)		(Years)	100% Greenfield, 10% Infill	1.7	1.6	0.7	1.7	-	-8.4
		Supply Surplus/	50% Greenfield, 10% Infill	-8 70	-8 70	-3, 370	-3 , 250		-12 , 290
	Urban	Shortfall	75% Greenfield, 10% Infill	- 590	- 590	-2,690	- 2,490		-11, 240
	Economics,		100% Greenfield, 10% Infill	-310	-320	-2 , 0 10	-1, 730		<u>-10,200</u>
	M edium		50% Greenfield, 10% Infill	-1.8	-1.8	-7.0	-6.8		-25.6
	Projections		75% Greenfield, 10% Infill	-12	-1.2	-5.6	-5.2		-23.4
		(Years)	100% Greenfield, 10% Infill	-0 .6	-0 .7	-4.2	-3.6	-20.1	-21.3

Source: Urban Economics, Waikato District Council

Efficient Housing Market

7.19 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 current building consent data indicates an annual growth rate of approximately 200 dwellings, and this evidence estimates an 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 or 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.

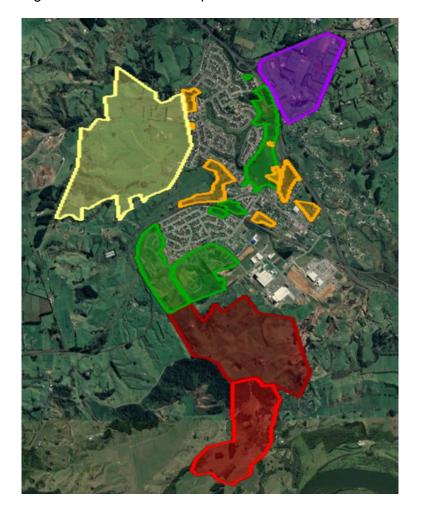
- 7.20 Having multiple developers is considered essential for an efficient land market. In the same way that having many years of capacity increases efficiency by providing choice, having multiple different developers competing increases efficiency by providing choice over location, dwelling type and price.
- 7.21 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.
- 7.22 The following figures display key areas identified for residential growth in the PWDP or Waikato 2070 and the proposed Havelock Site. The key points to note are:
 - (a) The current market contains effectively only one major 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 + Havelock 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 Havelock, the PWDP and the Waikato 2070 land produces the best results for market concentration purposes receiving an HH index value of 2,220. 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	Total Net Development	Herfindahl-
Scendilo	Developers	Land (Ha)	Hirschman Index
OWDP	1	40	10,000
PWDP	9	150	4,310
PWDP + Havelock North	10	220	3,020
PWDP + Waikato 2070	28	220	2,250
PWDP + Havelock North + Waikato 2070	28	260	2,220

Source: Urban Economics, PWDP, OWDP, Waikato 2070, Corelogic

Figure 30: Identified Development Areas



Existing Greenfield Capacity
Existing Brownfield Capacity
Pokeno West
Pokeno East (Waikato 2070)
Havelock Village (Waikato 2070)
Havelock Village (Proposal)

7.23 In respect of the Havelock site, it should be noted that the additional of several new large developments in Pokeno, as identified in the PWDP and the Waikato 2070, will result in a significant increase in competition between developers, and this will lead to greater product diversification and a wider range of housing prices. Some developments may include a greater proportion of smaller lower priced units, and some developments may include a greater proportion of higher priced houses, as a result of developers targeting a different market position. Overall, this will place downward pressure on prices and ensure the housing needs of the community are fully met. The

important point to note is that it is the combination of the competition across several developments and the opportunity to have some smaller lots and dwellings that will enable this outcome, rather than the likely development of a single development. This is also important in regard to the question of the capacity, which needs to be considered not only in terms of the total estimated yield, but equally importantly in terms of whether there are several developers that are incentivised to compete in the market at all points in time over the next decade.

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 that 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 utilised as efficiently as possible.

8. CONVENIENCE RETAIL MARKET

- 8.1 The Havelock proposal contains a neighbourhood centre (Business Zone). The centres within four large masterplanned developments have been evaluated to provide a benchmark for the demand for this neighbourhood centre. These include the Long Bay, Millwater, Hobsonville Point and Stonefields centres. Appendix 2 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 Havelock, 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 Havelock 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 Havelock neighbourhood centre using the development benchmarks of $0.5\text{m}^2 - 0.9\text{m}^2$ of centre floorspace per person for centres focused on serving the immediate area.

Figure 32: Centre Supportable Floorspace

	$0.5 \mathrm{m}^2\mathrm{per}$	$0.9 \mathrm{m}^2 \mathrm{per}$
	Capita	Capita
Supportable Floorspace (m²)	750	1 , 350
Land Use Requirem ents (m ²)	1 , 875	3 , 375

Source: Statistics NZ, Urban Economics

- 8.4 The main points to note from Figure 32 are:
 - (a) A total of 750m2 1,350m2 of centre GFA is estimated to be supportable for a centre focused on serving the immediate area.
 - (b) A total land requirement of 1,875m2 3,375m2 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

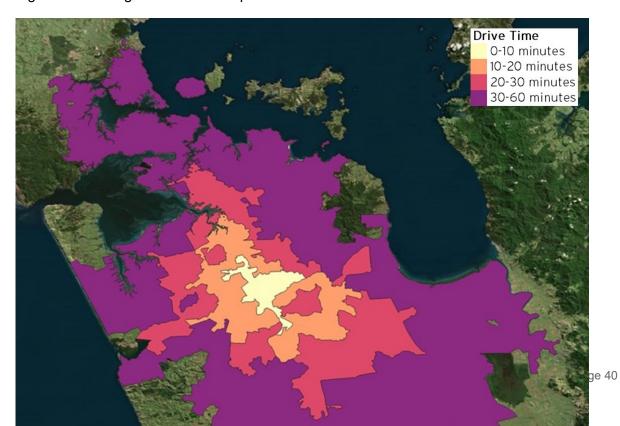
- 9.1 Figure 33 outlines the employment opportunities accessible by residents of Pokeno. A map of drive times for employment opportunities in Pokeno is shown in Figure 34. The key points to note are:
 - (a) Pokeno is 15-minutes' drive to the Pukekohe employment hub (9,200 jobs) and Drury's future employment 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 560 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 140-150 FTE jobs per annum.
 - (b) The Site contains 80 hectares of land classified by Corelogic as beef farmland. The opportunity cost of the proposal is therefore the jobs in the beef industry that may be displaced by the conversion of beef farmland to housing. The proposal is estimated to displace approximately 1 FTE jobs in the beef industry⁸.
 - (c) The proposal therefore represents a net addition of 139-149 FTE jobs per annum over the life of the project, and an additional 14-24 FTE jobs on an ongoing basis. This is an economic benefit.

Figure 35: Employment Impact

	PerAnnum			
Construction Sector	140 -150			
Retail	15 -25			
BeefFarm ing	1			
Source: Statistics NZ, Urban				
Economics, Market Economics				

⁸ 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.

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 600 dwellings over four years, at an estimated total cost of \$249.5 million. This translates to a total value added figure of \$73.2 million to the construction industry or a present value (PV) of \$62.0 million.
 - (b) After dwellings have been constructed, they provide accommodation services to new residents.⁹ Based on a rental yield of 4% per annum, this is valued at \$11.3 million per annum once all dwellings are built, or a PV of \$124.6 million over the next thirty years.
 - (c) The proposal would result in the construction of between 750 and 1,350 square metres of retail floorspace at an estimated total cost of \$1.5 \$2.7 million. This translates to a total value added figure of \$1 \$1.8 million to the construction industry or a net present value of \$0.9 \$1.6 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 \$0.2 \$0.3 million per annum once all floorspace is built, or a PV of \$2.8 \$5.1 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 \$14.9 million per annum or a PV of \$162.2 million over the course of thirty years.
 - (f) The proposal displaces 80 ha of beef farmland, this carries an estimated value added of \$103,800 per annum, or a NPV over 30 years of \$1.7 million.
 - (g) The PV of the benefits of the proposal is \$352.4 \$355.4 million and the PV of the costs of the proposal is \$1.7 million. The Net Present Value of the proposal is \$350.7 - \$353.7 million. The economic benefits in other sectors of the economy significantly outweigh the cost to the beef industry.

Figure 36: Economic Impact of the Proposal

			Value Added per	PresentValue	Tim e
			Annum (\$M)	(\$M)	Period
	Construction	House Construction	\$18.3	\$62.0	4
Dannagal	Period	Retail Floorspace Construction	\$1-\$1.8	\$0.9 -\$1.6	1
-	Proposal Benefits Ongoing	Household Expenditure	\$14.9	\$162 <i>2</i>	30
венешь		Accom odation Services	\$11.3	\$124.6	30
Benefits	репеція	Retail Floorspace Provision	\$02-\$03	\$2.8 -\$5.1	30
Proposal Costs	Agricultural	BeefFam ing	\$0.1	\$1.7	30

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

	20	16 -2019	9	2009 - 2015			
Typology	Greenfield	In fill	Total	Greenfield	In fill	Total	
Stand Albne	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	
Apartm ent	900	6 , 820	7 , 720	2 , 260	5 , 490	7 , 750	
Total	13 , 070	21 , 840	34 , 910	14 , 8 10	22 , 170	36 , 980	
Stand Alone	70%	44%	54%	76%	65%	69%	
Terrace	23%	25%	24%	9%	10 %	10 %	
Apartm ent	7%	31%	22%	15%	25%	2 1%	
Total	100%	10 0 %	100%	100%	10 0 %	10 0 %	

Source: Auckland Council

11.3 The proposal is on a large site, of 148 hectares and based on current design is expected to yield approximately 600 dwellings. At this scale it would be a notable development, of a similar scale to the other well-known masterplanned developments.

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It is anticipated for modelling purposes that a moderate proportion, in the order of 20% in the proposal could be terrace and town houses. (Although a detailed assessment has not been undertaken for Havelock to confirm this). These would be on smaller lots of around 100-300m² which would in itself make a significant contribution to meeting supply shortages identified by Council's economists. It could 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	l	St	onefiel	ds	Hobs	onville	Point	F	Addisor	1	L	ong Ba	У
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	O	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	O	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	O	86	276	354	84	448	168	44	74	34	0
2020	63	24	0	0	O	O	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 decade) 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 could offer housing across a range of price points and could 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, due to their marketing and on-site amenities.

Indicative Lot & Dwellings Mix at Havelock

- 11.9 This section provides one potential development scenario for the Havelock Site under the PWDP provisions. The implications in terms of lot size, dwelling type and dwelling price are given.
- 11.10 I note that this is a theoretical assessment as the exact lot number, lot size and mix will not be known until further design has advanced. Likewise the exact lot price for Havelock will depend on a range of factors including development costs. The current indicative design undertaken by HVL and its experts is that Havelock Site would yield around 600 dwellings under the proposal.

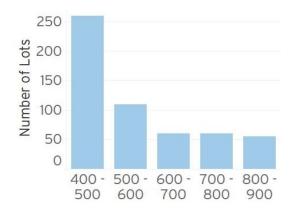
- 11.11 A detailed estimate of the distribution of lot sizes under each scenario is provided in Figure 40. It is worth noting that lot sizes from 400-500 would account for 43% of all development land if the proposal were to be accepted.
- 11.12 As highlighted in red, the supply of lower priced dwellings, 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 Havelock

LotSize (m²)	LotPrice	Dwelling Price	Dwelling Type	Lot Count
400 -450	\$250 , 000	\$590,000	Stand A lone	160
450 -500	\$260,000	\$620,000	Stand A lone	<u> 10 0</u>
500 -550	\$270 , 000	\$660 , 000	Stand Albne	80
550 -600	\$280 , 000	\$700 , 000	Stand Alone	30
600 -650	\$280 , 000	\$730 , 000	Stand Albne	30
650 -700	\$280 , 000	\$760 , 000	Stand Albne	30
700 -750	\$300,000	\$800 , 000	Stand Albne	30
750 -800	\$300,000	\$820 , 000	Stand Albne	30
800 -850	\$310,000	\$840 , 000	Stand Albne	30
850 -900	\$310 , 000	\$850 , 000	Stand Albne	25
Subtotal				545
3,000	\$400 , 000	\$890 , 000	Lifestyle	15
4,000	\$410,000	\$910 , 000	Lifestyle	15
5 , 000	\$420 , 000	\$920 , 000	Lifestyle	25
Subtotal				55
Total				600

Source: Urban Economics

Figure 40: Estimated Distribution of Lot Sizes in Havelock



Source: Urban Economics

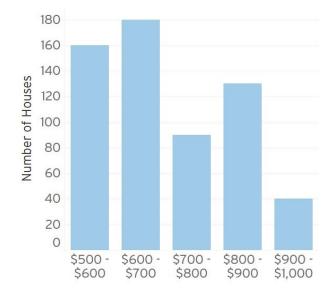


Figure 41: Estimated Distribution of Dwelling by Price (\$000s)

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 260 dwellings priced below or near to \$600,000 on the Site. The smaller lot sizes enabled under the proposal are crucial to providing housing at this price point.

Figure 42: Future Housing Scenarios by Price

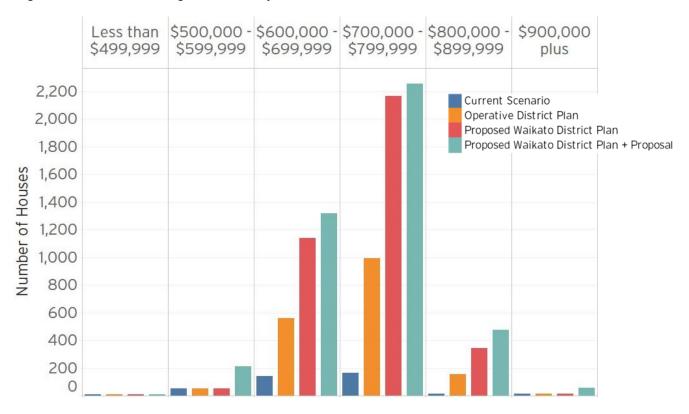
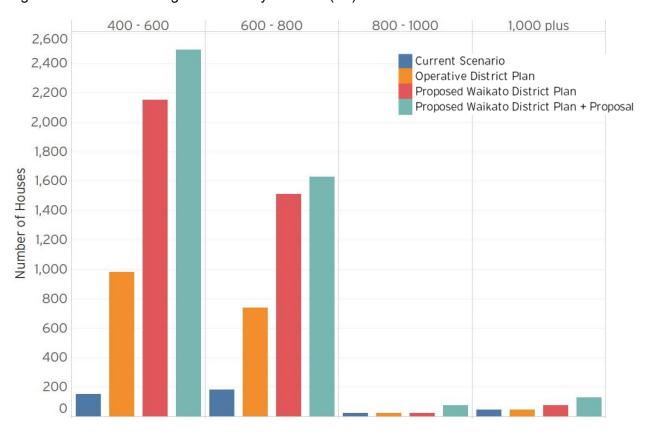


Figure 43: Future Housing Scenarios by Lot Size (m²)



13. TOWN SELF-SUFFICIENCY

- 13.1 Access to schools and a supermarket enable self-sufficiency within 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 which has just opened.
- 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 Site to provide an indication of the overall sale rate. These are:
 - (a) Stand Alone Lots 95% and Lifestyle Lots 5%
 - (b) STAND Alone Lots 90% and Lifestyle Lots 10%
- 14.3 The results are presented in Figure 44, and show that a wider range of dwelling types, including lifestyle blocks, would result in a faster sale rate, of 6 rather than 7 years.

Figure 44: Sale Rate Analysis

	Lot	Count		
Scenario	Stand Alone	Lifestyle	Total	Sell Down Rate (years)
Stand Alone 95%, Lifestyle 5%	560	40	600	7
Stand Alone 90%, Lifestyle 10%	485	55	540	6

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:
 - (a) 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)
 - (b) 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 the that 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 HVL is not seeking any changes to the minimum lot size via the PWDP process but below for completeness I record my independent expert opinion on the minimum lot sizes, which I have expressed on behalf of other submitters.
- 16.2 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 restricted discretionary activity and 300m² as a 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.
- 16.3 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

BF\61004009\2 Page 52

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.

- 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.
- 16.5 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)
- 16.6 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).
- 16.7 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.
- 16.8 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)

- 16.9 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 meet across all house price ranges.
- 16.10 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)

16.11 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)
- 16.12 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.
- 16.13 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.
- 16.14 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.
- 16.15 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.
- 16.16 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.
- 16.17 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

BF\61004009\2 Page 56

the Waikato District supplied within the new greenfield areas that have a Residential Zone.

16.18 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)

16.19 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. NPS-UD CONSIDERATIONS

- 17.1 This section analyses the supply and demand for land in Pokeno with regards to the NPS-UD. A second assessment with a more conservative demand assessment is attached in Appendix 3.
- 17.2 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"

- 17.3 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. Current building consent data indicates an annual growth rate of approximately 200 dwellings, and this evidence estimates a demand of 400 500 dwellings per annum, this is 2 3 years of supply on the higher growth scenario or 4-6 on the baseline growth scenario
 - (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 and an additional area in Pokeno East. These areas between them have an estimated 'reasonably expected' development yield under PWDP provisions of 955 dwellings.
 - (f) This brings total supply for the long term to 3,455 dwellings or 7 9 years.

 Under this scenario the NPS-UD requirements for the long term are not met.
 - (g) The proposal will bring an additional 600 dwellings to the market. This would increase short to medium term capacity to 3,150 dwellings or 6-8 years and long term supply to 3,505 dwellings or 7 9 years. While the NPS-UD requirements in the long term are still not met, the proposal represents a notable 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 could under a theoretical development scenario 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.
- (I) 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 3,020. 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

		מת שמ	PW DP +
	OWDE	FW DE	Proposal
Brownfield	210	210	210
Greenfield	8 30	2 , 290	2 , 940
Shortand Medium Subtotal	1,0 4 0	2,500	3 ,150
Waikato 2070 Greenfield	955	955	355
TotalCapacity	1,995	3 A 55	3,505
Dem and perAnnum	480	480	480
Short and Medium	2.2	5.2	6 . 6
Long (10-30 years)	4.2	7.2	7.3
Short (0 –3 years)	Met	Met	Met
Medium (3-10 years)	${\tt NotMet}$	NotMet	NotMet
Long (10-30 years)	NotMet	NotMet	NotMet
Herfindah lHirschm an Index	10 , 0 0 0	4 , 310	3 , 020
	Green field Short and Medium Subtotal Waikato 2070 Green field TotalCapacity Dem and per Annum Short and Medium Long (10-30 years) Short (0-3 years) Medium (3-10 years) Long (10-30 years)	Green field 8 30 Short and Medium Subtotal 1,0 40 W aikato 2070 Green field 955 Total Capacity 1,995 Dem and per Annum 480 Short and Medium 2 2 Long (10-30 years) 4 2 Short (0-3 years) Met Medium (3-10 years) Not Met Long (10-30 years) Not Met	Brown field 210 210 Green field 830 2,290 Short and Medium Subtotal 1,040 2,500 Waikato 2070 Green field 955 955 Total Capacity 1,995 3,455 Dem and per Annum 480 480 Short and Medium 22 52 Long (10-30 years) 42 72 Short (0-3 years) Met Met Medium (3-10 years) NotMet NotMet Long (10-30 years) NotMet NotMet

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

18. SUMMARY OF COSTS AND BENEFITS

- 18.1 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 could (under certain development scenarios) 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. The current proposal, however, has not been sufficiently designed to know if the Site will deliver housing in this price range, however ensuring there is competition with a number of competing developments in Pokeno, is an important precondition for ensuring there are affordable dwellings supplied to the market.
 - (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 170 FTE jobs per annum over the life of the project. 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 \$320 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 Beef farming activity.

Figure 48: Cost-Benefit Summary Table

		Description
	Enabling Affordable Housing	The proposalwould enable the provision of 135 dwellings priced below \$600,000. The Council's econom ists 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 treatm ent by Watercare's Pukekohe water treatm ent 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. 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.
Benefits	Em ploym ent	The proposal would create 170 - 190 FTE per annum in the construction sector over the construction period and an additional 70 - 120 FTE jobs per annum in the retail and hospitality sector upon completion.
	Increasing Com petition in the Land Developm ent Market	The proposalwould decrease the HerfindahlHirschm an index for Pokeno's residential and development market from 4,310 under the PW DP to 3,020. While this is still considered a highly concentrated market, it is a considerable in provement in the competitive environment. This may lead to lower lot prices for purchasers.
	Construction Sector	The proposal would add a PV of \$62.9 - \$63.6 m illion to GDP in the construction sector. This is a significant econom ic benefit.
	Accom odation Services	The proposal would provide accommodation services with a PV of \$124.6 million over the next 30 years. This is a significant economic benefit.
	RetailFloorspace Provision	The proposal would provide retail floorspace with a PV of \$2.8 - \$5.1 million over the next 30 years. This is a sign ficant econom ic benefit.
	Household Expenditure	The proposal would result in additional household expenditure across a range of sectors in the W aikato D istrict. This is a significant increase in econom ic activity and thus a significant econom ic benefit. The PV of this expenditure over the next 30 years is \$162.2 m illion.
Coate	Displacem ent of Beef Farming Value Added	The proposal would displace 80 hectares of farm land classified by Corelogic as beef farm land. This has a PV of \$1.7 m illion over the next 30 years.
Costs	Displacem ent of Beef Farming Employment	The proposal would displace approximately 1FTE job in the beef farming industry.
Costs	Household Expenditure Displacem ent of Beef Farming Value Added Displacem ent of Beef	The proposal would result in additional household expenditure across a range of sectors in the W aikato D istrict. This is a significant increase in econom is activity and thus a significant econom is benefit. The PV of this expenditure over the next 30 years is \$1622 m illion. The proposal would displace 80 hectares of farm land classified by Corelogic as beef farm land. This has a PV of \$1.7 m illion over the next 30 years. The proposal would displace approximately 1FTE job in the beef farming

Source: Urban Economics

19. CONCLUSION

19.1 The proposal has many economic benefits and no additional economic costs that are not already encompassed by the PWDP. Most notably, the proposal would contribute to a competitive housing market, by ensuring a range of housing is offered to the market by multiple developers.

19.2 The proposal is recommended for approval.

Adam Thompson

19.02.2021

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, Hitchen Block



The Hitchen 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, Hairy 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

BF\61004009\2 Page 66

Figure 54 Millwater



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.

BF\61004009\2 Page 67

APPENDIX 3: NPS-UD CONSIDERATIONS, CONSERVATIVE DEMAND PROJECTION

- 1. This appendix analyses the supply and demand for land in Pokeno with regards to the NPS-UD. This appendix uses a conservative demand projection.
- 2. 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"
- 3. 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 200 dwellings per annum, this is 5 years of supply.
 - (b) There is currently 'reasonably expected' development capacity for 2,500 dwellings under the PWDP. With demand of 200 dwellings per annum, this is 12.5 years of supply.
 - (c) The NPS-UD requirements for the short and medium term are met under the PWDP.
 - (d) The NPS-UD requirements for the long term are not met under the PWDP.
 - (e) The Waikato 2070 identifies two additional areas for residential development not identified in the PWDP, Havelock and an additional area in Pokeno East. These

- areas between them have an estimated 'reasonably expected' development yield under PWDP provisions of 955 dwellings.
- (f) This brings total supply for the long term to 3,455 dwellings or 17 years. Under this scenario the NPS-UD requirements for the long term are not met.
- (g) The proposal will bring an additional 600 dwellings to the market. This would increase short to medium term capacity to 16 years. While the NPS-UD requirements in the long term are still not met, the proposal represents a notable improvement.

Figure 47: NPS-UD Considerations

		OWDP	PW DP	PW DP +
		OWDP		Proposal
Dwelling Capacity	Brownfield	210	210	2 10
	Green field	8 30	2 , 290	2 , 940
	Short and Medium Subtotal	1,040	2,500	3 ,150
	Waikato 2070 Greenfield	955	955	355
	TotalCapacity	1,995	3 <i>A</i> 55	3 ,505
	Dem and per Annum	240	240	240
Years Supply	Short and Medium	4.3	10.4	13.1
	Long (10-30 years)	8.3	14.4	14 . 6
Land Provision Requirem ents	Short (0 –3 years)	Met	Met	Met
	Medium (3-10 years)	NotMet	Met	Met
	Long (10-30 years)	NotMet	NotMet	NotMet
Concentrated Land Market	Herfindah lHirschm an Index	10 , 000	4 , 310	3 , 020

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



APPENDIX 4: RESUME



Selected Experience

Project: Ormiston Mixed-Use High-Density Development

Client: James Kirkpatrick Group Limited

Market demand and activity-mix optimisation strategy for large mixed-use development in Ormiston/Flatbush. This included $150,000 - 200,000m^2$ of residential and commercial space.

Project: Ormiston Mixed-Use High-Density Development Plan Change

Client: James Kirkpatrick Group Limited

Proposed Plan Change for large mixed use development. This included 150,000 – 200,000m² of residential and commercial space.

Project: Warkworth Structure Plan Change

Client: Civil Trust

Market research and economic evidence in support of a proposed Plan Change.

Project: Residential Development Pukekohe

Client: Golden Meadows Development Ltd & Alexandra Park

Market research and economic evidence in support of a proposed Plan Change.

Project: Proposed 3,000 Apartment Development Auckland

Client: Confidential

Market research and economic evidence in support of product mix and market positioning.

Project: Proposed 3,000 Apartment Development Auckland Plan Change

Client: Confidential

Market research and economic evidence in support of a proposed Plan Change.

Project: Mixed Use Development and Retirement Village Silverdale

Client: Matvin Group

Market research and economic evidence in support of product mix and market positioning.

Project: Mixed Use Development and Retirement Village Silverdale Plan Change

Market research and economic evidence in support of a proposed Plan Change.

Project: Mixed Use Development Albany Centre

Client: Kingsman Development No.2 Ltd C/- Campbell Brown Ltd

Market research and economic evidence in support of a proposed Plan Change.

Project: Kahikatea Drive Resource Consent

Client: Scott Wilkinson Planning

Economic Impact Assessment in support of allowing an additional 350m2 of retail activities on industrial zoned land.

Project: Hobsonville Point Market Research & Positioning

Client: Hobsonville Land Company

Assessment of housing market demand for a 2,500-3,000 dwelling development. Including unit type, price, buyer profiles and staging recommendations.

Project: 3,000 New Housing Development at Karaka Market Research & Positioning

Client: Hugh Green Group

Assessment of housing market potential and market positioning strategy for a 3,000 dwelling development. Included unit type, price, buyer profiles and staging recommendations.

Project: 1,000 New Housing Development at Flat Bush Market Research & Positioning

Client: Hugh Green Group

Assessment of housing market potential and market positioning strategy for a 1,000 dwelling development. Included unit type, price, buyer profiles and staging recommendations.

Project: 4,000 New Housing Development at Westgate Market Research & Positioning

Client: Hugh Green Group

Assessment of housing market potential and market positioning strategy for a 4,000 dwelling development. Included unit type, price, buyer profiles and staging recommendations.

Project: 500 New Housing Development at Clevedon Market Research & Positioning

Client: Karaka Harbourside

Assessment of housing market potential and market positioning strategy for a 500 dwelling development. Included unit type, price, buyer profiles and staging recommendations.

Project: 800 New Housing Development Research & Positioning

Client: Fletcher Living

Assessment of housing market potential and market positioning strategy for an 800 dwelling development. Included unit type, price, buyer profiles and staging recommendations.

Project: 1,500 Lot Subdivision & Commercial Development Warkworth

Client: Civil Ltd

Assessment of housing market potential and market positioning strategy for a 1,500 dwelling and mixed use commercial development. Included unit type, price, buyer profiles and staging recommendations.

Project: 2,500 Lot Subdivision & Commercial Development Pukekohe

Client: Auckland Trotting Club & Partners

Assessment of housing market potential and market positioning strategy for a 2,500 dwelling and mixed use commercial development. Included unit type, price, buyer profiles and staging recommendations.

Project: Counties Racing Club Pukekohe Redevelopment Advisory & Plan Change Evidence

Client: Counties Racing Club

Advice on redevelopment potential and economic evidence in support of a proposed Plan Change.

Project: New Housing Development Research & Positioning

Client: New South Developments Limited

Assessment of housing market potential and market positioning strategy for a 93 dwelling development. Included unit type, price, buyer profiles and staging recommendations.

Project: 1,500 New Housing Development at Pukekohe Proposed Plan Change

Client: Golden Meadows Development Ltd & Alexandra Park

Economic assessment for a proposed Plan Change for new housing in Pukekohe.

Project: Housing Market Research, Five Sites

Client: Winton

Assessment of housing market potential and market positioning strategy for five development sites. Included unit type, price, buyer profiles and staging recommendations.

Project: 3,000 New Housing Development at Westgate Market Research & Positioning

Client: Universal Homes

Assessment of housing market potential and market positioning strategy for a 3,000 dwelling development. Included unit type, price, buyer profiles and staging recommendations.

Project: 500 New Housing Development at Clevedon Private Plan Change

Client: Karaka Harbourside

 $\label{lem:conomic assessment for a proposed Plan Change for new housing at Clevedon. \\$

Project: 68 New Housing Development at Clevedon

Client: Clevedon North Limited

Economic Assessment for a proposed increase in density for a new housing development in Clevedon.

Project: 28 New Housing Development at Beachlands

BF\61004009\2 Page 73



Economic Assessment for a proposed increase in density for a new townhouse development in Beachlands.

Project: Retirement Village Market Demand Assessment Ten Sites Across NZ

Client: Various Iwi

Supply and demand assessments for proposed retirement villages across New Zealand.

Project: High Density Mixed Use Development In Ahuriri, Napier

Client: Laneway Ahuriri Limited

Evaluation of market potential for a 'Vinegar Lane' style development in Napier.

Project: Housing and Population Growth Forecasts

Client: The Warehouse Group

Review national housing market trends and planning regulations to improve the accuracy of Statistics NZ's population and housing growth forecasts.

Project: Economic Impact Assessment Redhills Township and Retail Centre

Client: Hugh Green Limited

Economic impact assessment of a proposed township of 11,500 dwellings and associated retail centre for the Proposed Auckland Unitary Plan. Ongoing work regarding the commercial activity provisions.

Project: Economic Impact Assessment Clevedon Waterways

Client: Southside Group Management (Haines Planning)

Economic impact assessment of a proposed 300 dwelling canal development in Clevedon.

Project: Retirement Village Demand Analysis

Client: Metlifecare

20+ demand assessments for proposed retirement villages across New Zealand.

Project: Retirement Village Demand Analysis

Client: Porter Group

Market assessment for a new Retirement Village in Queenstown

Project: Retirement Village Demand Analysis

Client: Central Government, Clearmont Group, Various Iwi, and Various other Clients

20+ demand assessments for proposed retirement villages across New Zealand.

Project: Retirement Village Demand Analysis

Client: Winton

Assessment of retirement village market potential and market positioning strategy for three development sites. Included unit type, price, buyer profiles and staging recommendations.

Project: Retirement Village Demand Analysis

Client: Remarkables Park

Market assessment for a new Retirement Village in Queenstown

Project: Retirement Village Demand Analysis

Client: Elizabeth Knox Retirement Village Group

Market assessment for a new Retirement Village in Queenstown

Project: Economic Assessment Pukaki Crater, Puhinui

Client: Self Family Trust

Economic cost benefit analysis of rezoning 63 hectares of rural land in Puhinui for current and future residential development.

Project: Auckland Council Development Capacity Model

Client: Property Council of New Zealand

Primary developer of housing capacity model for the Proposed Auckland Unitary Plan. This provides in depth knowledge of the future housing market capacity under the Auckland Unitary Plan.

Project: Analysis of Housing Capacity Model Methodologies

Client: MBIE

Research and analysis of best practice in developing housing capacity models.

Project: Housing Infill Capacity Model, Hamilton

Client: Colin Jones

Development of housing infill capacity model for Hamilton City.

Project: Stratford District Land Capacity Assessment

Client: Stratford District Council

Assessment of the demand and supply of residential and commercial land in Stratford including detailed capacity assessment using our bespoke DCM. The analysis aligns with Policies PB1 & PB2 of the NPS-UDC.

Project: Development Options and Feasibility Analysis, Seven Sites across Auckland and Whangarei

Client: Wendy's Ltd

Development feasibility analysis and advice on development options for a range of residential and commercial sites owned by Wendy's.

Project: Saint Kentigern Demand Analysis



Assessment of future private school demand across Auckland using detailed market segmentation and profiling, including Mosaic categories.

Project: Auckland Unitary Plan

Client: Various

Completed 40 briefs (1,200 pages) of evidence for the Proposed Auckland Unitary Plan hearings process.

Project: Greater Christchurch Settlement Pattern 'Our Space'

Client: Suburban Estates, Sovereign Palms Limited, Doncaster Developments Limited, GFR Rhodes Estate and Larson and Marshall Group.

Completed 4 briefs (100 pages) of evidence for the greater Christchurch 2018-2048 planning process.

Project: Proposed Dunedin City District Plan Submission

Client: Harvey Norman Properties (NZ) Limited

Economic and property market evidence for the Proposed Second Generation Dunedin City District Plan including an analysis of commercial land supply and demand, and an overview of land use economic theory.

Project: Economic Assessment of Residential Development Capacity in Rural Zones

Client: Rahopara Farms Ltd & Cabra Rural Developments

Assessment of the capacity for residential subdivision in the Rural zones under the AUP.

Project: Economic Assessment of Residential Development Supply and Demand, Langs Beach

Client: Blue Moon Limited

Assessment of the demand and supply of residential land in Langs Beach and Waipu Cove for a submission on proposed Plan Changes to the Whangarei District Plan.

Project: Economic Significance of the Property Industry

Client: Property Council New Zealand

Assessment of the Economic Significance of the Property Industry to New Zealand's Regional and National economy.

Project: Addington Mixed Use Development

Client: KI Commercial

Rezoning of a mixed use development in Addington from industrial zoning.

Project: Assessment of Economic Effects of Overland Flow Path, Takanini

Client: Sabatier Family Trust

Economic assessment of the impact of a proposed overland flow path on potential development lot yield and



Project: Auckland Residential Market Research

Client: Augusta Funds Management Ltd

Economic Assessment of the Auckland Residential Market including demographic trends, housing preferences, construction rates, sales data, rental market trends, greenfield and brownfield supply capacity, kiwibuild policy impact and strategic opportunities present.



Adam Thompson

Urban Economist & Property Researcher

Qualifications

Adam Thompson is an expert on land-use issues and specialises in the economic and spatial aspects of urban planning and property development. His main interests include bridging the gap between land-use planning and urban economics, and providing property research to support investment decisions of developers and retailers.



Adam has prepared and reviewed the economic and property market research that underpins urban policy for the past 15 years. This has involved the preparation of expert evidence for Resource Consent, Environment Court and High Court hearings. This experience has provided an insight into the link between research and urban policy.

Adam has been at the forefront of Urban Development Capacity (UDC) modelling in New Zealand. He developed the Auckland Council UDC model that was used for the Auckland Unitary Plan. More recently, Adam has overseen the development of Urban Economics' bespoke UDC modelling software (UrbanIQ Development Calculator) which is a pioneering GIS based application that is aimed at an international market. In addition, Adam was commissioned to prepare research into UDC modelling by MBIE, prior to the development of the NPS-UDC.

Professional History

Adam Thompson has fifteen years' experience as an urban economist and property market analyst, with twelve years as a managing director of independent economic and research consultancy firms. During this time Adam has completed over 400 projects for a wide range of public and private sector clients.

Education

Lincoln University: Bachelor Resource Studies (including papers in Environmental Economics)

Auckland University: Master of Planning (including papers in Urban Economics)

London School of Economics: Dissertation (Urban Economics, Determinants of Efficient Retail Markets)

Adam is supported by a small team of three urban economists and market analysts.