

PROPERTY **E**CONOMICS



BEACHLANDS SOUTH

PRIVATE PLAN CHANGE

ECONOMIC ASSESSMENT

Client: Beachlands South LP

Project No: 51940

Date: March 2022



SCHEDULE

Code	Date	Information / Comments	Project Leader
51940.11	March 2022	Report	Tim Heath / Phil Osborne

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1. INTRODUCTION

Property Economics has been engaged by Beachlands South Limited Partnership (**BSLP**) to undertake an economic assessment for a Private Plan Change (**PPC**) that seeks to rezone a circa 307ha land holding that will enable the development of 3,800 dwellings (2,900 live zoned and 900 in Future Urban Zone) across a range of residential typologies, retail and commercial services activities, office space and light industrial land uses that will urbanise the current Formosa golf course and immediately surrounding rural land. The PPC also includes 151.3ha of land adjacent to the sites not owned by BSLP that will be additional to the capacity assessed in this report.

Over the last decade, the Beachlands / Maraetai area has experienced robust residential development that has propelled its residential population base to levels higher than anticipated in the growth projections illustrating an area in demand based on its unique coastal setting, environment and a lifestyle afforded to residents that is not easily replicable in other parts of the region.

The purpose of the plan change is to enable the expansion of this coastal town through a comprehensively designed masterplan. It seeks to rezone the land from its existing use, primarily a golf course and countryside living area, to a mixture of urban zones including residential, employment and community. Part of the land will be zoned Future Urban to facilitate the staging of the project.

The vision for Beachlands South is grounded in a holistic approach of improving the quality of life for residents, visitors, employees and marina users and the natural environment, with a sustainable development philosophy. This is proposed to be achieved through the following outcomes:

- Character of the individual precincts
- Opportunities for community activities
- The proposed local commercial centre and associated employment opportunities
- A variety of residential typologies
- Recreational opportunities
- Environmental and ecological enhancements

The proposed development (as provided for in the Beachlands South Structure Plan) is also focused on not simply replicating 'like' residential masterplan developments currently underway across Auckland, but with a strong emphasis on the future and how people are transitioning in terms of living and employment patterns (particularly post COVID-19) with people reengaging with their local area / community more, being more environmentally minded and conscious of carbon footprints, more lifestyle and location driven, seeking flexible work hours and work locations, having new standards for local services, schools and amenities, etc., all attributes people are placing increased weightings on in their home purchasing decisions.

Additionally, the BSLP has developed infrastructure solutions for the three waters. In addition, roading and transport improvements will be funded by an Infrastructure Funding and Financing (IFF) solution which has the opportunity to provide benefits beyond the development to benefit the wider Beachlands and Maraetai communities.

1.1. OBJECTIVES

This report is split into three main sections:

1. Residential Market Assessment
2. Retail / Commercial Market Assessment
3. Economic RMA S32 Cost Benefits analysis

The primary objectives for each of these assessments is outlined at the beginning of each section. The objectives are based on quantifying the market demand-supply dynamics both currently and in the future to assess broader context supply / capacity sufficiency, the market potential for each of the assessed markets, and the timing around the market opportunities for the PPC.

1.2. INFORMATION & DATA SOURCES

Information has been obtained from a variety of reliable data sources and publications which Property Economics consider to be reputable and reliable, including:

- NZ Census of Population and Dwellings 2006, 2013 & 2018 – Stats NZ
- Household and Population Projections – Stats NZ
- Household Economic Survey – Stats NZ
- Retail Trade Survey – Stats NZ
- Retail Growth Model – Property Economics
- Building Consents Issued – Stats NZ
- Residential Sales Data – CoreLogic
- Rental Data – Ministry of Business Innovation and Employment (**MBIE**)
- Catchment Maps – Google Maps NZ
- Business Frame Employment Data – Stats NZ
- Employment Forecasts – Property Economics
- Auckland Unitary Plan Operative in Part – Auckland Council
- Aerial Photography – Local Government Geospatial Alliance & LINZ
- Auckland Future Urban Land Supply Strategy – Auckland Council
- Auckland 2050 Plan – Auckland Council

2. EXECUTIVE SUMMARY

Beachlands South is a Private Plan Change that seeks to rezone a circa 307ha land holding that will enable the development of 3,800 dwellings (2,900 live zoned and 900 in Future Urban Zone) across a range of residential typologies, retail and commercial services activities, office space and range of other land uses that will expand Beachlands and urbanise the current Formosa golf course and immediately surrounding rural land. Within the overall plan change area, there is approximately 51.3ha of land between the Formosa golf course and Whitford – Maraetai Road that is not owned by BSLP to which the Future Urban Zone is to be applied that will further expand the Beachlands South area.

The proposed development, as provided for by the PPC, is designed to both accommodate, and be a stimulatory development for, the expansion of the Beachlands coastal community. Growth over the last decade in Beachlands has exceeded Statistics NZ projections, indicating higher than anticipated demand for the area. This demand could be fuelled further if a broader range of residential product as well as employment and community activities are made available to the market.

Beachlands South is designed to have a point of difference and enable a range of land uses (primarily residential) that will allow the development of a new master planned residential suburb. The vision for Beachlands South is grounded in a holistic approach of improving the quality of life for residents, Kaitiakitanga of the natural environment, and a sustainable development framework based on efficiency in energy, resources and a low carbon footprint. Key development principles include:

- **Partnership** – with iwi, Council and local community stakeholders
- **Focus on Carbon Reduction and Biodiversity** – development that addresses climate change and biodiversity loss
- **Thriving Local Community** – a neighbourhood with a strong identity and increased self sufficiency
- **Kaitiakitanga** – Acknowledging Mana Whenua values and connecting people with nature and cultivating custodianship and wellbeing
- **Diversity** – foster a diverse and adaptable community with choice in the built environment
- **Sponge City** – develop innovative and resilient methods for three waters management
- **Modal Shift** – encourage modal shifts with improved connections to the movement network.

These unique attributes of the proposed development and planning approach will provide a distinctive outcome for the locality and will enable stewardship of the environment and entrenched sustainability principles into the future. These are attributes that are increasingly

resonating with the market and are qualities purchasers are progressively looking for in new developments for which they are prepared to pay a premium. The market is increasingly considering environmentally friendly and sustainable 'green' principles when making purchasing decisions.

Other forward-thinking initiatives BSLP are looking to incorporate in the suburb are economically efficient collaborative working spaces to provide local 'work from home' and 'work from suburb' opportunities. Employment opportunities within the plan change area for future and existing residents is a key focus of the plan change. This includes high quality retail and commercial service amenities, light industrial activities, visitor accommodation, mixed use zones supported by public realm environments, walking / running tracks and health and wellbeing features that promote the welfare, safety and enjoyment of living.

An important genesis of the development is recognising that Beachlands already is an established and growing coastal community. Facilitating additional growth in Beachlands is provided for in the AUP which sets out objectives and policies enabling the expansion of coastal towns¹. More specifically Policy B2.6.2(3) which states:

"Enable the establishment of new or significant expansions of existing rural and coastal towns and villages through a structure planning and plan change processes"

Beachlands has one of Auckland's strongest economic demographic profiles underpinning the strength and opportunity of the suburb. Added to this is the strong transport links with a direct ferry connection to the Auckland CBD. There is also limited opportunities for expansion of coastal towns in the Auckland region (largely limited to Snells Beach, Clarks Beach and Kahawhai Point). Beachlands provides an ideal opportunity to deliver efficient coastal town expansion given its strong proximity and linkages to Auckland's existing urban form. Cumulatively, these attributes of Beachlands South are vital to promoting a unique proposition that brings a new benchmark residential development to the market.

Residential Capacity Context

At the Auckland Region level, a comparison of projected dwelling demand and zoned supply indicates there is a shortfall capacity over the long term of nearly 24,100 dwellings. At a regional level this shortfall is estimated to emerge post 2038. Further to this is the potential for the assessed feasible capacity shortfall to be larger and emerge sooner once realisation rates are applied, i.e., not all feasible capacity will be developed due to non-market factors such as land constraints and landowner motivations.

¹ Auckland Unitary Plan Operative in Part, Objectives B2.6.1 and Policies B2.6.2

Furthermore, around 53,700 of the region's feasible capacity is located in rural areas. While Beachlands South represents greenfield development and encompasses some rural land, it is considered a location that will generate economic efficiencies relative to a large proportion of the rural zoned feasible capacity, particularly given its ferry accessibility, its location adjacent to a well-established urban area and the ability to internalise employment, schooling and economic growth opportunities.

Across the more proximate Howick Local Board and Beachlands local catchment areas (East Auckland residential markets of which product in Beachlands South will primarily compete with) there is a total of 9,420 feasible dwellings within identified existing urban areas and 677 feasible dwellings in identified Future Urban areas. This brings the total capacity within the catchment to 10,097 dwellings. Outside of but in close proximity to the borders of the catchment is an additional 6,041 dwellings in Future Urban Zones. In total this brings the estimated dwelling capacity to around 16,140.

Table E.1 below outlines the Growth and Residential Capacity in the Local Catchment over the next 30 years (2020 – 2050). This shows that under the Medium growth scenario (and High for Beachlands, due to recent growth trends and the Beachlands South development stimulating demand in Beachlands), there is a deficit of residential capacity equivalent to around -530 dwellings over the short to medium term (2023-2028). Over the medium term there is a deficit of 3,650 dwellings (2028 to 2038). Over the long term, the projected growth will further outstrip supply in this market with a net deficit of -6,930 dwellings over the assessed period. Excluding the 6,041 dwelling capacity just outside the catchment would almost double the shortfall.

TABLE E.1: GROWTH AND RESIDENTIAL CAPACITY IN THE LOCAL CATCHMENT (2020 – 2050)

Households		2020	2020 - 2023	2023 - 2028	2028-2038	2038-2050	2020 - 2050
Beachlands	High Projection	4,240	+ 230	+ 400	+ 800	+ 930	+ 2,360
	Capacity		460	0	220	0	680
Howick Local Board	Medium Projection	49,310	+ 3,320	+ 3,000	+ 5,250	+ 5,830	+ 17,400
	Capacity		3,620	2,530	3,270		9,420
Nearby FUZ	Capacity		350	850	350	4,500	6,040
Total	Growth		+ 3,550	+ 3,400	+ 6,050	+ 6,770	+ 19,760
	Growth + NPS buffer		+ 4,260	+ 4,080	+ 6,950	+ 7,780	+ 23,070
	Capacity		4,430	3,380	3,830	4,500	16,140
	Difference		170	(700)	(3,120)	(3,280)	(6,930)
	Cumulative Net Capacity Position			170	-530	-3,650	-6,930

* All figures are rounded to the nearest 10

Source: Property Economics, Auckland Council, StatsNZ

Additionally, the High growth scenario was tested for the Howick Local Board area in which the supply deficit increased to -18,160 dwellings over the long term. Both the Medium and High projections scenarios suggest additional capacity in the Howick Local Board and Beachlands areas is required to accommodate projected growth.

In examining the growth for the wider Auckland region it appears sufficient zoned capacity in the market exists to accommodate projected growth until beyond 2038, however in the more localised Howick Local Board / Beachlands areas the supply deficit emerges 10 years earlier just before 2028.

Adverse market impacts in relation to capacity shortfalls emerge in the market well before the numeric date. Along with long infrastructure lead times and an appetite for increased supply certainty in the market, there are several economic and social costs associated with failing to deal with future supply constraints ahead of time including housing land and price pressures, slowing of economic growth and increased marginal cost of infrastructure.

Residential Price Point and Master Plan Development Comparisons

Analysing some of Auckland's largest master planned residential developments over recent years identifies some interesting trends. The average sell-down timeframe for developments is around 13 years, resource consents at peak typically ranged between 300-400 per annum, and standalone product dominated the typology delivered to the market.

However, there has been a general shift towards medium- and high-density living among the more modern large scale masterplan developments in Auckland, and as each of the developments has moved through their respective development timeframes. Part of this can be explained by the rapid increase in house prices in Auckland over recent years making standalone dwellings relatively unaffordable to many buyers in the market. Hobsonville Point sticks out as one of the country's highest density, master planned, residential developments but will likely be the 'new normal' in terms of residential development, particularly in Auckland where urban intensification is encouraged. A more efficient use and higher yields from the land are often required for feasibilities due to growing land and servicing costs.

Within each development, there is a trend to front-load a larger quantity of low-density dwellings and subsequently, bring in medium- and high-density dwellings later into the project. This is likely to build the character of the development / suburb with higher amenity, architectural dwellings and environments and leverage this amenity later with greater density to maximise sales potential. The exception to this was Stonefields which was developed at a significantly higher density from the start likely because it was leveraging off its urban location, the existing amenity and employment bases in the surrounding area and thus already had its sense of place in its urban environment (and the land being comparatively cheaper being a former quarry).

When comparing the average sale price of dwellings in Beachlands against areas identified as key competing locations (Eastern Beach, Bucklands Beach, Cockle Bay, Howick, Half Moon Bay, Mellons Bay), relative to these alternative waterfront locations, the Beachlands and Maraetai suburb is a more affordable suburb across most typologies. This is in part a reflection of sales from a lot of older housing stock from Beachland's older areas. Eastern Beaches and Mellons Bay for example have a Median Price for a residential property of \$1.65m which is more than \$400,000 higher than Beachlands median sales price of \$1.23m.

Although the Beachlands catchment has a higher median sales price than the Auckland average, it offers an opportunity for purchasers at the higher end of the market to live in a prime beach village location, at the cost of being less centrally located than the alternatives. The Beachlands South development is not aimed at delivering '*more of the same*' Beachlands stock, but a broader range of residential product and new environment. If this is achieved a sales price profile similar to Bucklands Beach would represent a better reflection of potential. Buckland's Beach average typology sale prices are 2-bedroom \$874K, 3- bedroom \$1.25m, 4- bedroom \$1.68m and 5- bedroom \$2.1m, plus a 10%-20% premium for being a new home.

A significant number of sales occurred in Beachlands over the last year, 216, suggesting a growing level of demand in the area as an alternative lifestyle choice and fuelled by the residential dwelling growth and house price increases in more central Auckland suburbs. The sale prices achieved in Beachlands over the past year were 8% above CV on average.

It is evident that typology and price trends in Auckland's housing market is changing development formulas as housing pressures force new home buyers to re-evaluate their perspectives on higher density housing options. Long gone is the 'quarter acre dream' for most people as the market instead observes the growing transferability of household structure preferences between dwelling typologies, i.e., typical stand-alone buyers are becoming increasingly accepting of terraced and higher density housing. This is also driven by the increasing requirements for greater land use efficiency in the development required to justify increasing land prices.

Although price variables are the primary force driving this shift, improved housing design and new higher density opportunities in locations where a stand-alone dwelling previously was the only choice available have resulted in a greater acceptance of quality higher density living in non-central locations.

Beachlands South is proposing to deliver a mix of dwelling typologies across THAB and MHU zones. This represents a different composition from the existing Beachlands properties but opens the development up to a wider market, provides increased consumer choice across typology and price points, and delivers greater economic efficiencies.

Commercial Centre Assessment

Property Economics assessed the commercial land requirements for both a wider retail catchment and the development itself. The local retail catchment which covers Whitford, Beachlands and Maraetai generates around \$158m in annual retail expenditure. Based on the development of Beachlands South, as well as the projected growth in the balance of the Beachlands Catchment, this retail spending is projected to grow to \$314m annually by 2043.

However, a significant proportion of this generated retail expenditure would be spent in other higher order centres in the network such as the Botany Metropolitan Centre. Furthermore, the existing and future convenience retail demand of the existing Beachlands / Maraetai / Whitford area is already supported by a range of smaller neighbourhood centres and the larger Beachlands Local Centre with 13,000sqm of commercial floorspace and further potential to grow.

Any retail development in the Beachlands South development will need to be complementary to this larger centre, although a comprehensively planned local centre within the Beachlands South development, supported by employment opportunities and higher density residential development as well as readily accessible public transport would be a positive outcome for the community.

Prior to the completion of the Structure Plan, Property Economics was engaged to estimate the appropriate size of the retail centre under two development scenarios, 3,500 dwellings and 4,500 dwellings. It was quantified that under Scenario 1 (3,500 dwellings), the Beachlands South development could sustain around 7,000sqm GFA of Retail and Commercial Services. This included a circa 1,400sqm metro supermarket / grocery store and equated to a land requirement for the commercial footprint of the centre of around 1.5ha once fully developed. Under the second, higher dwelling scenario the land requirement is increased to around 2ha.

Additionally, Property Economics recommended around 1ha of land be allocated for office sector activities if developed all at grade. This was based on an estimated 5,600sqm of office floorspace and could be reduced commensurately if multi-storeyed. This brought the centre total land requirement for commercial activities (retail, commercial services / offices) of around 2.5ha of developable land excluding roads, parks, etc. once Beachlands South is fully developed.

These land areas are net and assume all the land is developable and efficiently developed. The assessed land areas also exclude any land allocation for other non-commercial activities / land uses that might form part of a localised centre such as community hall, children's play area, civic square / urban parks, passive or active recreational spaces, library, etc. Land for these 'non-commercial' activities would be additional to the land areas identified.

Based on the quantified sustainable land areas, Property Economics consider a Local Centre provision is most appropriate for Beachlands South. The Local Centre Zone provides for a larger retail centre that while often containing predominately convenience retail and services, are permitted to include a range of retail, office, and commercial service activities. Local Centres often take the form of a small to medium-sized shopping centre anchored by a major supermarket brand.

While retail with a larger reach like clothing may be facilitated within the centre, these activities are less common, instead focusing on convenience goods and services such as food and beverage, bookstores and pharmacies. Under the AUP, the permitted commercial activities include retail up to 450sqm, Offices up to 500sqm and Supermarkets up to 2,000sqm. Activities that exceed these requirements are Restricted Discretionary.

Following the recommendations made in the draft reports, the latest Structure Plan has provided capacity for 6,375sqm of Retail and Commercial Service floorspace and 5,095sqm of Commercial Office. Most of this commercial office floorspace is in the form of an innovation hub which are designed to provide co-working / flexible / collaborative spaces for start-ups and smaller business.

Employment

In total, the Structure Plan is estimated to provide upwards of 960 local employment opportunities across a variety of land uses including retail, commercial office, retirement village, light industry, tourism / recreational and school activities.

Currently, the NZ Census 2018 showed that 78% of residents leave the Beachlands / Maraetai area, with the remaining 28% either working at home or within the local area. At capacity, the development has the potential to increase the local employment base to over 6,000 workers who in absence of jobs being made available locally, would increase daily commute levels of Beachlands.

At present 78% of residents leave the Beachlands / Maraetai area for work. Moreover, of these residents who are travelling outside of the local area for work, 60% commute daily to either Central or South Auckland. Therefore, the provision of employment land within the PPC is therefore considered essential to ensure there is a meaningful increase in employment internalisation within Beachlands. That is, more local employment opportunities for local Beachlands residents.

This is also important to providing a balanced community rather than simply a dormant residential suburb. A growing community requires increased local services and employment opportunities to support and facilitate that growth, and the PPC represents a positive step to satisfy the growing local employment opportunities and demand.

Economic Costs and Benefits

There are a number of potential economic benefits from the PPC including:

- Increased range of housing typologies
- Greater spectrum of house prices
- Increased choice of location options
- Efficiencies of infrastructure and marginal costs
- Lower transport costs
- Increased rate of appreciation
- Improved value of residential area
- Increased diversity in buyer 'pool'
- Increased local employment opportunities
- Greater level of growth

Some of the potential economics costs of the PPC include:

- Diversion of growth
- Low amenity outcomes
- Increased congestion



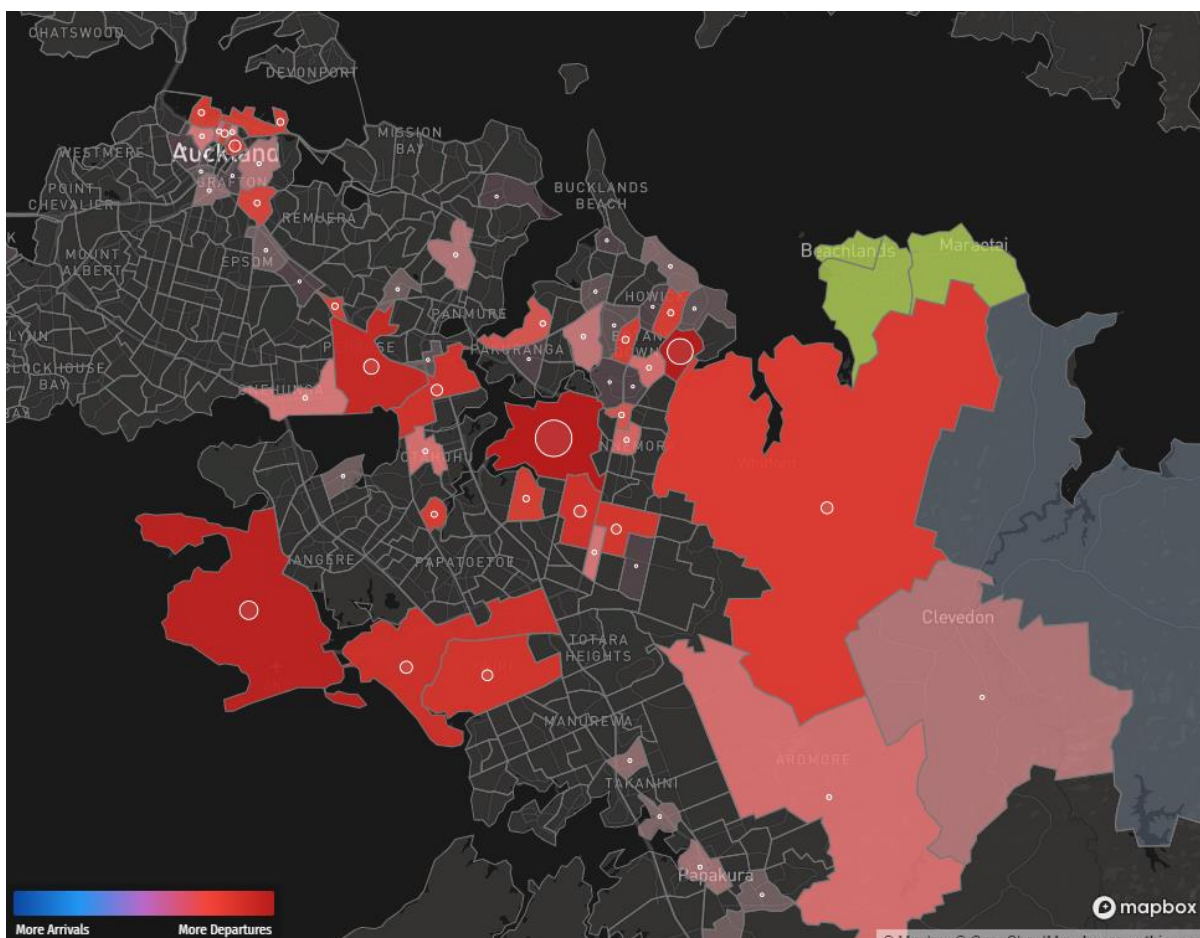
On balance, Property Economics consider the potential economic benefits of the Beachlands South development and the PPC outweigh the potential economic costs by a considerable margin.

3. RESIDENTIAL MARKET ASSESSMENT

3.1. RESIDENTIAL MARKETS

In order to quantify the residential potential of Beachlands, first there is a need to delineate the primary catchment, i.e., the area where the majority of Beachlands South purchasers are likely to be derived. In defining a catchment, it is important to consider where the residents are likely to be commuting for work on a daily basis. The trends for the existing residents in Beachlands and Maraetai are shown below in Figure 1.

FIGURE 1: COMMUTING PATTERNS OF BEACHLANDS AND MARAETAI RESIDENTS



Source: Property Economics, Statistics New Zealand

This data, quantified in Table 1 below, shows that 78% of residents leave the Beachlands / Maraetai area for work. Moreover, of these residents who are travelling outside of the local area for work, 60% commute daily to either the Central Isthmus or South Auckland. Despite access to the CBD via a ferry, the City Centre is only the third most popular place of employment.

The top two spots are taken up firstly by the East Tamaki / Botany Junction employment hub (the closest major employment hub to Beachlands) followed by the industrial land in the South-Eastern section of the Auckland Isthmus (Mt Wellington / Penrose and Onehunga).

From a wider perspective, the Central Isthmus area and East Auckland areas represent around a quarter of employees each, while South Auckland has a slightly smaller percentage at 19%. Based on this distribution of employment, Property Economics would expect current or future residents from any of these areas to see Beachlands South as a viable alternative.

TABLE 1: LOCATION OF WORKPLACE FOR BEACHLANDS / MARAETAI RESIDENTS

Location	Commuters	% Share
Eastern Rural	1,050	31%
Local (Beachlands / Maraetai)	936	28%
Clevdon / Ardmore / Turanga	114	3%
East Auckland	837	25%
East Tamaki/Botany Junction	600	18%
Other	237	7%
Central	813	24%
City Centre	288	9%
Mt Wellington / Penrose / Onehunga	426	13%
Other	99	3%
South Auckland	657	19%
Airport	219	6%
Manukau/Wiri	135	4%
Other	303	9%
North / West Auckland	21	1%
Total	3,378	100%

Source: Property Economics, Statistics New Zealand

The 2018 NZ Census showed that 80% of residents in Beachlands / Maraetai were European, the median household income was higher than the eastern beach area of Mission Bay or Takapuna on the North Shore, and that the households were families with disproportionately more middle-aged residents (40 – 60 years) and fewer younger adults (20 – 39 years).

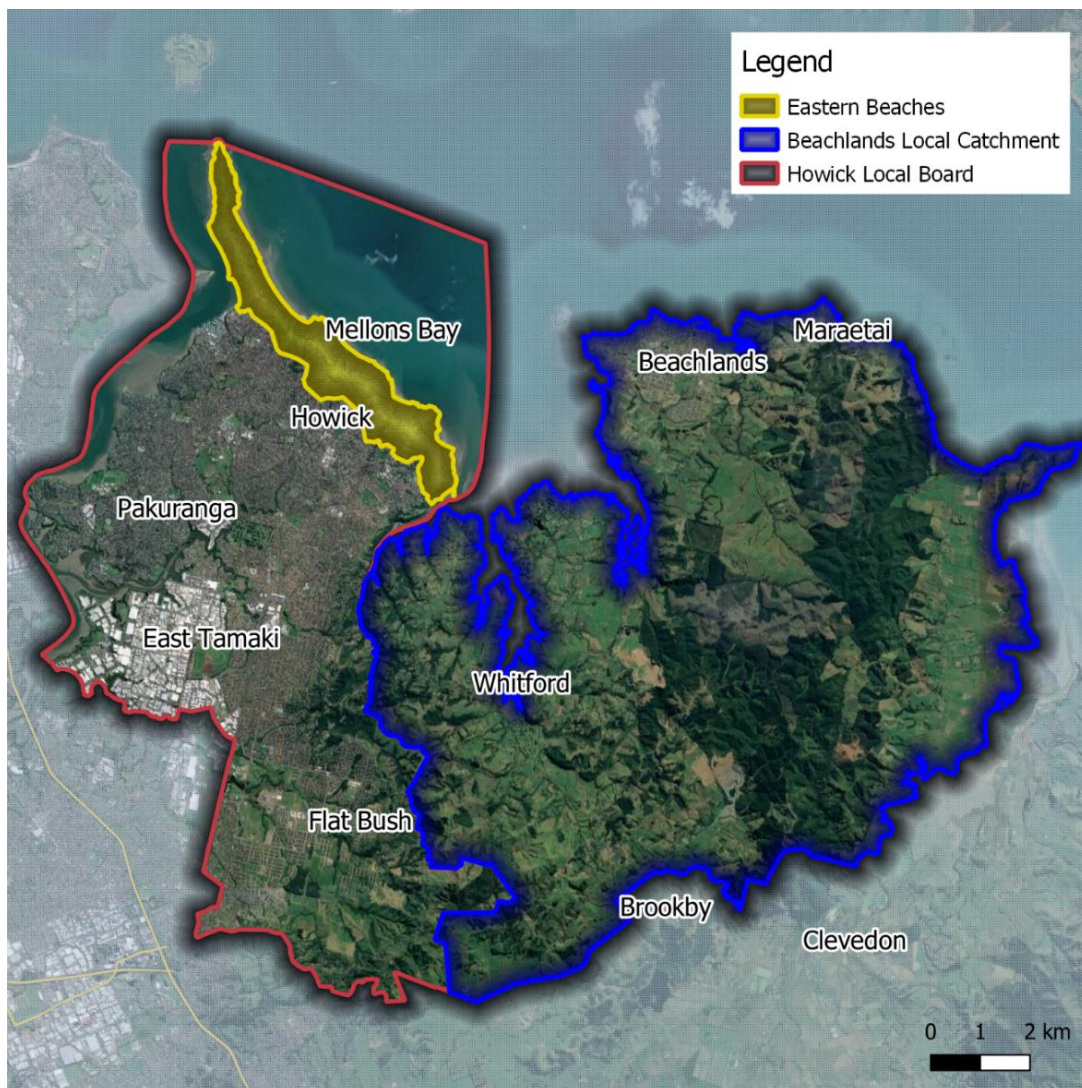
Although more central areas are typically more attractive to younger professional age cohorts, it is also likely a matter of 'stage of life' and tertiary education opportunities that is showing an under proportion of these younger adults in the Beachlands market. These younger professionals are likely 'priced out' of the Beachlands market because they are only starting out in their careers on lower wage benchmarks and the median sales price of homes in Beachlands is at around \$1.3m. This is a market not well catered for in Beachlands at present and this represents a market opportunity.

For the purposes of this report, Property Economics have focused on the Howick and upper Franklin Local Board areas (the latter of which has been designated the Beachlands Local Catchment in this report). This is illustrated in Figure 2 following and represent areas for which

demand is more likely to be redirected, or conversely where residential dwellings in the PPC area are likely to compete.

Further to this is the Eastern Beaches area which is a subset of the Howick Local Board. This is the more specialised area for which Beachlands will compete and / or derive its demand and the area for which the demographics more closely align to that of Beachlands. This in effect represents Beachlands core market or the market Beachlands residential product is likely to strongly compete with.

FIGURE 2: EAST AUCKLAND RESIDENTIAL MARKETS



Source: Property Economics, Statistics New Zealand

Ultimately, all residential capacity within reasonable proximity of Auckland (including those as far south as Pokeno for example) has an impact on the overall supply and demand in the wider Auckland region.



Interestingly, the population growth in recent years has been slower than actual demand due to a combination of several factors, not least of which includes land supply issues affecting the delivery of new homes to the market, infrastructure capacity, cost and delivery issues, house price growth forcing people to look in urban centres outside Auckland, and the supply of more affordable housing beyond the region's borders.

Furthermore, it is noted that the development enabled by the PPC is likely to draw a portion of purchasers from across Auckland Isthmus, particularly the wealthier suburbs of Central Auckland. Nevertheless, we have assessed this Beachlands South development from the perspective of addressing the supply imbalance in the East Auckland market, while also highlighting the wider regional context.

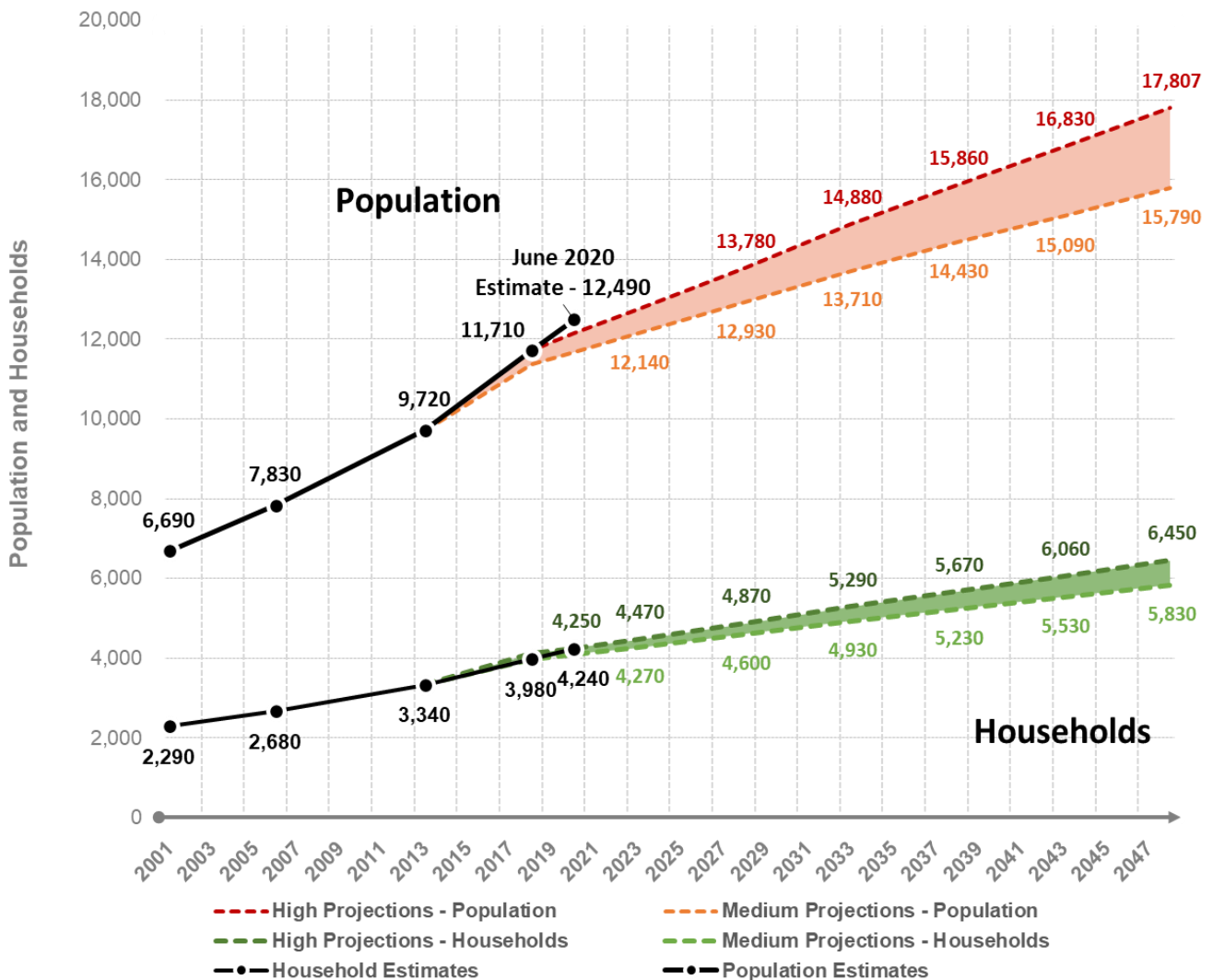


4. POPULATION AND HOUSEHOLD GROWTH

Although Stats NZ is in the process of updating their population projections, at the time of compiling this report only the projections for the Auckland Local Board and Territorial Authorities have been updated. This results in a mismatch between the newly updated projections for the Howick Local Board (with a 2018 NZ Census starting base) and the projections for the Beachlands catchment (with Dec 2017 projection off a 2013 Census starting base).

To this effect, Figure 3 following compares these older Dec 2017 population and household growth projections for the Beachlands Local Catchment against the most recent growth estimates.

FIGURE 3 POPULATION PROJECTIONS AND ESTIMATES FOR BEACHLANDS CATCHMENT



Source: Property Economics, Statistics New Zealand

The population of the Beachlands Local Catchment was estimated at around 12,500 residents in June 2020. This is a net 350 residents more than was predicted under the earlier High projection. This gap between the latest estimates and the High projection developed over the last couple of years (2018 – 2020) and is likely the result of new local residential developments.

In the absence of additional housing supply in Beachlands, the recent growth trajectory is unlikely to be able to be maintained moving forward, with growth likely to slow as a result of constrained supply rather than weakening demand. In this circumstance, the Medium projection may be more appropriate to adopt. Under this projection, the population is only anticipated to grow to 15,790 residents and require an additional 1,590 households.

However, this PPC will provide the residential supply inducement necessary for Beachlands to reach and even exceed its projection under the Stats NZ High projection series. The potential to draw a portion of demand from a wider Auckland regional market means the PPC can do so without lessening the growth in the wider East Auckland market. Additionally, the PPC will broaden the typologies available in Beachlands and the price point spread making Beachlands a viable purchasing alternative to a much broader spectrum of the market. For this reason, Property Economics consider assessing the Beachlands catchment at its High projection is appropriate, albeit acknowledging this could be considered a conservative estimate.

Under this High projection series, there is expected to be an additional net 5,320 residents over the next 28-year period (2020 – 2048). This net population growth is equivalent to 43% within the Beachlands Local Catchment, which is in between the Medium and High growth projections for the Auckland Region over the same period.

Despite population growth exceeding the High projection, Figure 3 shows that the growth in the number of households has not increased at the same rate. Historically, the number of households under the projections series was forecast to increase at a faster proportional rate than the population. This is due to a projected fall in the person per household ratio over the forecast period. This anticipated trend was not isolated to the identified catchments but projected to occur across the whole country due to an ageing population, smaller families, and a higher proportion of 'split' or single households.

However, the results of the 2018 NZ Census and subsequent population estimates have shown that the reverse has been true. That is, that the population per household ratio has increased slightly across the country with the Beachlands Local Catchment being no exception, increasing from 2.91 to 2.95 between 2013 and 2018.

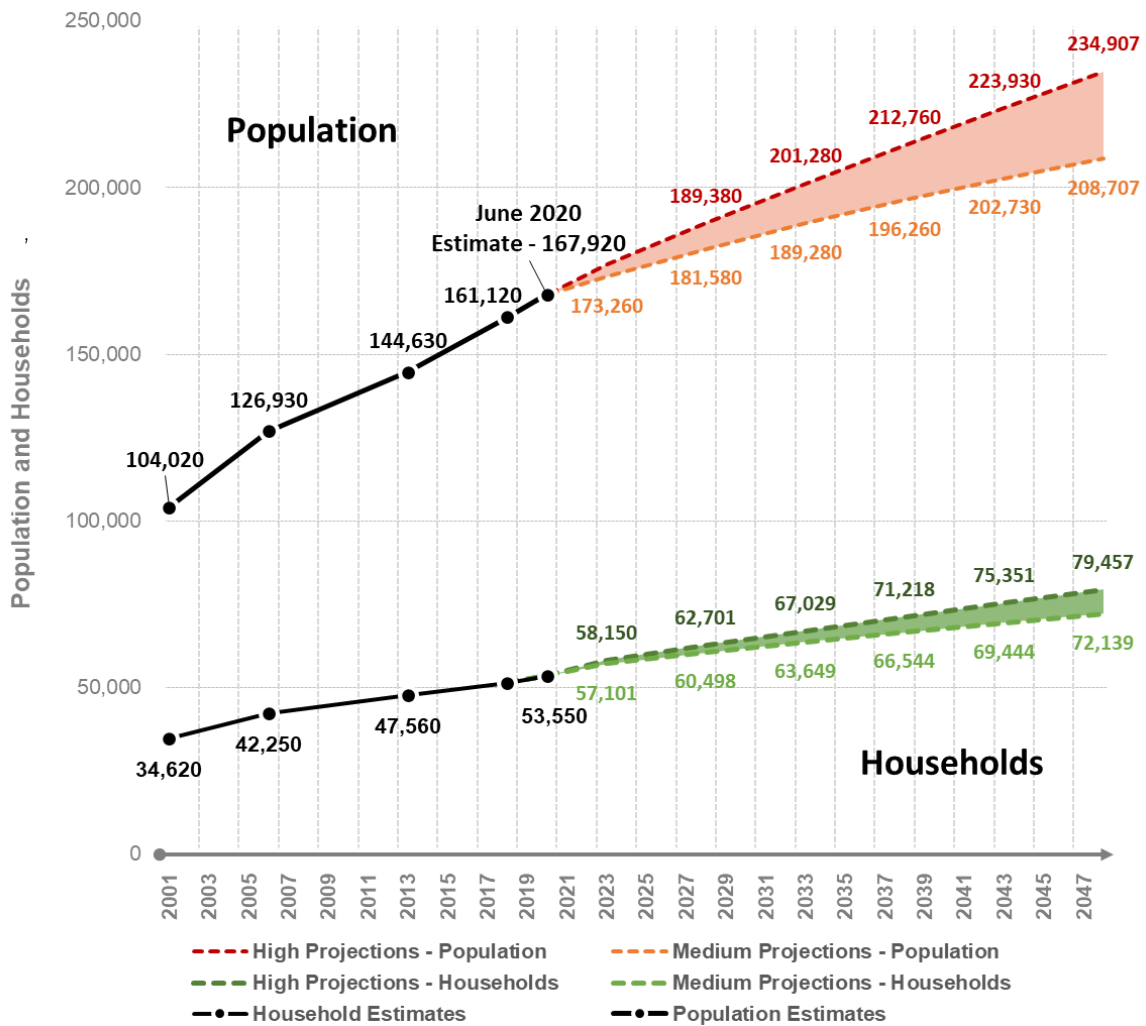
There are several potential reasons for this reversed trend, not the least of which relates to the lack of new homes being developed (relative to demand) and rising house prices that has occurred between the last intercensal period, which has driven an increase in multi-household and multi-generational dwellings. This demographic trend shift is likely to continue unless new housing stock is enabled to be developed at a rate more commensurate with market demand.

Figure 4 following combines the population projections across the Howick Local Board market and the High projection for the Beachlands Local Catchment. Under the Medium Projection



for the combined residential catchments, the population is expected to grow from 167,920 residents in 2020 to 208,707 residents in 2048. This represents a net increase of nearly 40,800 residents over the next 28 years at an average of 1,460 residents per annum. This rises to an additional 67,000 residents by 2048 under the High projection at an average of nearly 2,400 residents per annum.

FIGURE 4: POPULATION GROWTH FOR COMBINED AREA



Source: Property Economics, Statistics New Zealand

In regard to dwelling demand, over the next 28 years there is projected to be between 18,600 and 25,900 (rounded) new dwellings required under the Medium and High projections respectively to accommodate forecast growth in the Howick Local Board and Beachlands Local catchments.

4.1. DEMOGRAPHIC PROFILING

An economic and social demographic profile for the local Beachlands Market and Howick Local Board has been compiled in comparison to the wider Auckland average. This is to determine where each market sits relative to each other in terms of key economic and social demographic characteristics

Additionally, the demographics for the Eastern Beaches has been included as a potentially similar market to those in Beachlands.

A more detailed breakdown of the demographic profiles has been attached in Appendix 1 to this report.

Some of the salient findings from the demographic profiling include:

- The Auckland Region has a population of around 1.72m residents in June 2020 having experienced growth of 2% per annum the last 7 years. The Howick Local Board area has experienced a similar growth rate and has a population of 155,180 residents, just under 10% of Auckland's population base. The Beachlands Local Catchment on the other hand observed almost double the rate of growth over the last 7 years at 3.8% per annum.
- The Auckland Region is the most ethnically diverse city in New Zealand with the proportion of residents in the 2018 NZ Census who reported being born overseas reaching just over 48%. This ethnically diverse population, however, is distributed unevenly throughout the region. Certain areas such as the Beachlands Local Catchment remain predominately European (82%) despite the European population no longer forming a majority in the Auckland Region. Meanwhile, within the Howick Local Board area, the proportion of residents who identify as Asian at 43% has surpassed that of the European population at 42%.

Despite this, the European population base retains a majority of 68% in the Eastern Beaches area. This is because much of the growth in the local Asian population has predominantly occurred in the newly formed Flat Bush ethnoburb. In this suburb, the Asian population base form a comfortable majority of 62% while Europeans represent only 18% of the local population.

The attractiveness of the Flat Bush area to Asian immigrants is in part due to the design of the Flat Bush master planned development. In this suburb, 70% of the homes have four or more bedrooms and the average household size is 3.91 residents. This is reflective of the cultural variances, where Asian communities have a greater tendency to live in multi-generational family household units, regardless of their financial situation.

The median household income of the Flat Bush area of \$113,000 is in fact similar to that of the Eastern Beaches area, an area in which the majority of residents reside in homes

with an average household size of 2.82 - smaller than the Auckland Regional average of 3.09.

The Beachlands Local Catchment has a Median Household Income of \$130,000 per annum with 41% of households earning in the top income bracket of over \$150,000. This is significantly higher than both the Howick Local Board area and Auckland Region in which the Median Income is \$100,000 and \$94,000 respectfully.

- The Eastern Beaches area was chosen as a comparison area as the closest urban area that was expected to exhibit similar levels of wealth to that of the Beachlands residents. Although the median household income is smaller at \$114,000 per annum, this is likely attributable to the older population base with a higher rate of retired residents. Both catchments, however, have high rates of home ownership as well as a greater proportion of residents earning money from both investments (i.e., Interest, Dividends, Rent etc) and owning a business.
- Although the proportion of retired residents in the Beachlands Local Catchment is no different from the wider Auckland region, the Median Age of 41.2 years is older than both the Howick Local Board area (37.1 years) and Auckland Region averages (34.7 years). This is due to the Beachlands Catchment having a greater density of families with middle aged parents and a significantly smaller concentration of younger adults. The proportion of residents aged between 20-39 years is only 20% of the population compared to 31% across the Auckland Region.
- This emphasis on family units is reflected in the larger average bedroom size with 57% of homes having four bedrooms or more compared to only 34% in the Auckland Region. This is also likely a consequence of being located outside the main Urban Fringe, so the data contains a lot of larger rural lifestyle properties. Although most properties are located near the waterfront, the average rent is less than that in the Howick Local Board area. In comparison, 53% of renters in the Eastern Beaches catchment pay more than \$600 per week.

4.2. AUCKLAND GROWTH

FUTURE URBAN ZONE

As the largest city in the country, the rapid population growth in Auckland has placed unprecedented market pressures on the city's housing stock. This has forced prospective homeowners further afield, with satellite townships such as Pokeno seeing rapid growth over the last decade. If long-term residential demand is unable to be satisfied within Auckland's existing urban environments, there is a need for additional future urban expansion. This is supported by the recently released NPSUD² which articulates a combined 'up and out' approach to cities accommodating their future demand and providing sufficient residential capacity

In response to this need to accommodate a significant component of Auckland's future growth in greenfield developments, the Auckland Council has zoned certain rural areas as Future Urban Zone (**FUZ**). This FUZ designates greenfield areas as growth nodes to indicate to the market where the Council intends to expand the urban boundaries. The Auckland Council would typically prioritise existing FUZ areas over zoning new areas given they have gone through a statutory process (as is required by the Unitary Plan) and consequently, rezoning of the subject site needs to account for the existing identified future urban network.

The Beachlands South PPC includes a FUZ zone that will allow for an additional 900 dwellings once fully developed. This FUZ provides BSLP with more certainty in its position within Auckland's long term growth plans while enabling Auckland Council to ensure the development is appropriately staged.

There are limited FUZ zones around coastal townships across the region restricting their expansion potential (limited to Snells Beach, Clarks Beach and Kahawhai Point) and all are significantly more distant to Auckland than Beachlands. This amplifies the benefits of the proposed Beachlands South development further relative to other coastal village expansion opportunities.

Figure 5 following outlines the FUZ and recently zone residential areas across the broader East Auckland market. The map also indicates the FUZ in Takanini and the extent of the 'Flat Bush' and 'Clevedon' areas as it relates to the residential consents analysis in the following section.

The FUZ area shown totals almost 684ha of land, representing 6.6% of all FUZ land in the Auckland Region. This does not mean 684ha of developable land, simply the extent of the zoned FUZ land area.

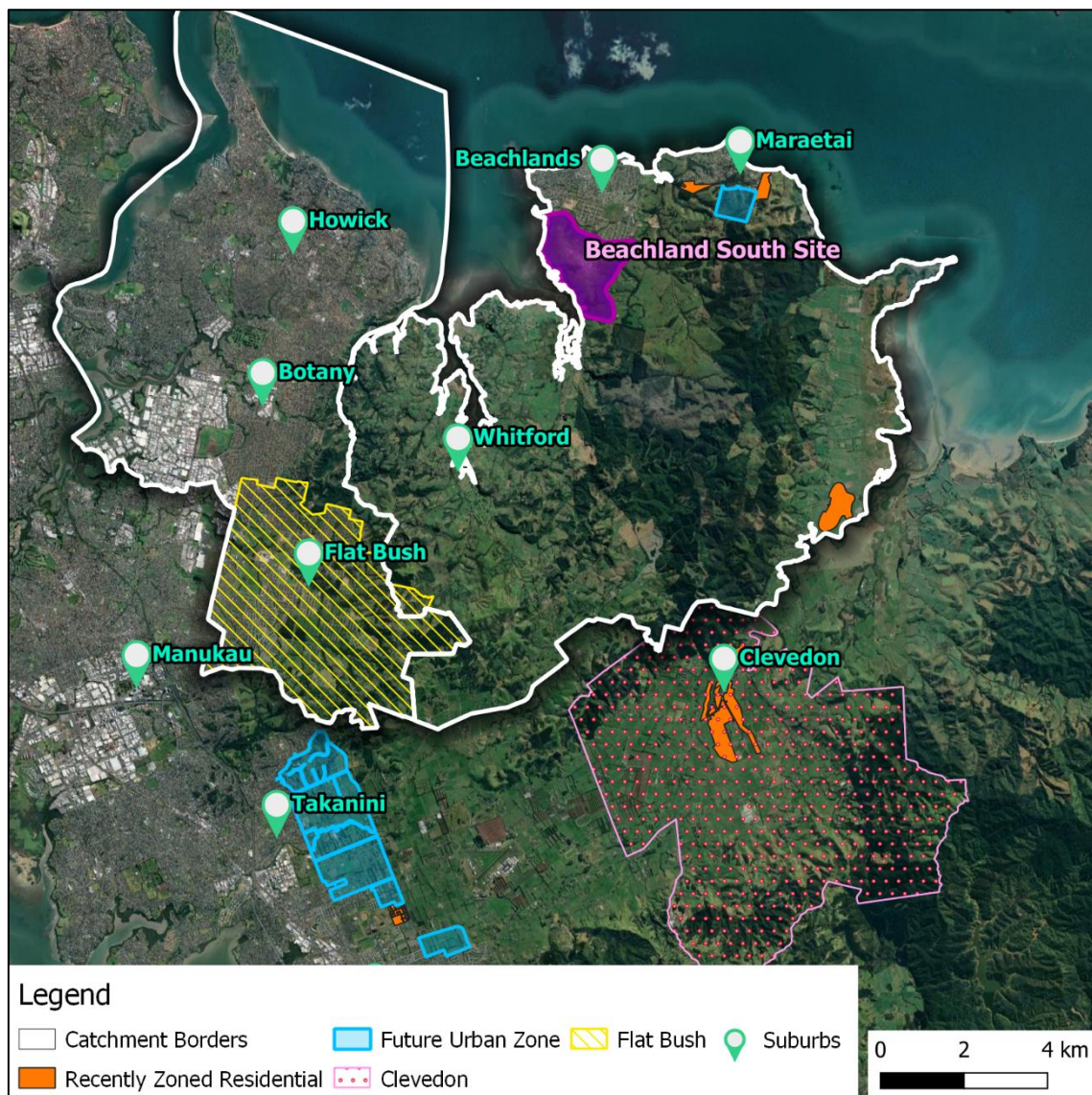
Notably, the Drury and Pukekohe Structure Plan areas located further south account for around 3,086ha of FUZ land. Property Economics considers this FUZ area to not only be

² National Policy Statement on Urban Development 2020

proximately distant but also likely to attract a different demographic to that of the Beachlands South site.

Although the latter is also true of the Takanini FUZ located just outside of the catchment, this area has a greater potential to draw from the East Auckland market. However, this FUZ zone is not planned to come 'online' until after 2043. Unlike Drury and Pukekohe, no formal structure plan has been released for this growth node at this point.

FIGURE 5: FUTURE URBAN ZONE IN AND AROUND BEACHLANDS CATCHMENTS



Source: Property Economics, Auckland Council

4.3. AUCKLAND 2050 GROWTH STRATEGY

AUCKLAND WIDE GROWTH

The Auckland Plan 2050 was a document released in June 2018 that incorporated into Auckland Council's development strategy both the elements of the Future Urban Land Supply report released in 2017 and Housing and Business development capacity assessment³ (HBA).

This is, therefore, an important document in understanding how the Auckland Council intends to provide for future growth and is the foundation for this report.

Table 2 below shows the anticipated population and household growth across the Auckland region that was utilised in the Auckland Plan 2050 report. This table then compares the household demand to the expected household supply or feasible capacity as outlined in the HBA. In assessing feasible capacity, Auckland Council undertook economic modelling on every urban site in Auckland to identify commercially feasible residential infill redevelopment opportunities.

Based on this comparison of supply and demand there is an expected shortfall across the existing urban area of Auckland of around 77,500 dwellings. Overall, the net demand and supply position (i.e., demand vs feasible capacity) across Auckland shows a shortfall of 27,100 dwellings.

TABLE 2: ANTICIPATED GROWTH IN POPULATION AND DWELLINGS 2018 – 2048 (PAGE 217 AUCKLAND PLAN 2050)

	Population 2018	Population growth 2018 - 2048	Dwellings 2018	Dwelling growth 2018 - 2048	Feasible capacity 2017
Existing urban area	1,486,000	443,300	491,700	195,000	117,500
Future urban area	44,200	243,400	15,300	99,000	114,800
Rural area	126,400	33,400	47,100	19,100	53,700
Total	1,656,600	720,100	554,100	313,100	286,000

The Auckland Plan 2050 document⁴ references the supply and demand in the Auckland HBA. This report, which was undertaken at a slightly earlier point in time, determined a significantly larger shortfall over the long term (10 -30 years) of around 82,000 dwellings with the inclusion of the required NPS buffer requirements. This was expected to be met in the following ways:

- Housing New Zealand (12,500 – 25,000 dwellings per decade),

³ National Policy Statement on Urban Development Capacity 2016: Housing and business development capacity assessment for Auckland (2017)

⁴ Auckland Plan 2050 Page 220

- KiwiBuild (25,000 dwellings per decade), and
- Panuku Development Auckland (5,000 dwellings per decade).⁵

Additionally, the report assumes that feasible capacity is expected to rise as land values continue to appreciate, thereby making more housing developments financially feasible for developers. The problem with this assumption is that the purpose of enabling sufficient capacity is to reduce appreciation in the housing market, thereby achieving the exact opposite. In effect, the modelling shows house prices have to increase to provide more capacity, an attribute the NPSUD is trying to temper with increased feasible capacity.

EAST AUCKLAND GROWTH

As the residential catchments identified in Figure 2 form the basis for this assessment, the capacity and growth from the Auckland Plan 2050 have been broken down to only include the relevant areas. Specifically, there are two tables on pages 222 – 225 which detailed the expected household demand and supply for the existing urban area and the development capacity across the future urban area.

This has been reproduced in Table 3 below to show the capacity in the residential catchments and the FUZ areas just outside the catchment that is shown in Figure 5 above. Note that the Maraetai 1, Clevedon Waterways and Clevedon areas listed in Table 3 are existing residential zones i.e., recently rezoned from FUZ to urban zoning and currently under development.

TABLE 3: ANTICIPATED TIMEFRAME AND CAPACITY IN THE EXISTING URBAN AREA.

Type	Location	Short Term 2018 - 2021	Medium Term 2021 - 2028	Decade 2 - 3	Capacity	Catchment
Existing Urban	Highland Park				2,900	Howick
	Pakuranga Corridor				3,630	Howick
	Pakuranga				2,890	Howick
	Existing Urban		2,890	6,530	9,420	
Future Urban	Maraetai 1				110	Beachlands
	Clevedon Waterways				350	Beachlands
	Maraetai 2				217	Beachlands
	Within Catchment	460		217	677	
	Clevedon				1,041	Franklin
	Cosgrave Rd, Takanini				500	Franklin
	Takanini				4,500	Franklin
Outside Catchment		1,541	500	4,500	6,041	

Source: Auckland Council, Property Economics

Table 3 shows that the Auckland Plan 2050 document identifies capacity for around 10,097 dwellings within the catchment as outlined in Figure 2. The majority of these are feasible infill

⁵ Note these were indicative target at the time and may not represent current day thinking.

or redevelopment of the Existing Urban area. Additionally, there is the capacity for an additional 6,041 homes just outside of the catchment in the Takanini and Clevedon areas.

The majority of FUZ in Takanini is designated for growth after 2043 while the 1,041 homes in Clevedon is now live zoned. Although Property Economics do not consider this capacity to be an appropriate substitute to the Beachlands South development, this extra capacity has been included to provide a wider supply context.

There are, however, several key issues with this capacity assessment that means the actual level of capacity, will differ from this assessment:

- A. Uncertainty of the Feasible Capacity in Existing Urban Areas.
- B. Uncertainty around the timing of development.
- C. Uncertainty around remaining development capacity of Ormiston (which includes parts of Flat Bush).
- D. Built and completed dwellings as of June 2020.
- E. Realisable vs Feasible Capacity

This section will go through each of these issues in more detail and then discuss in summary the implications on feasible development capacity within the catchment area. Table 4 below shows the new dwelling consents in the catchment and relevant areas. This is referred to and further discussed in several of the paragraphs below.

TABLE 4: NEW DWELLING CONSENTS ISSUED

Year Ended June	2016	2017	2018	2019	2020	Total
Flat Bush	421	187	589	448	811	2,456
Beachlands	211	283	180	164	250	1,088
Clevedon	6	5	8	1	5	25
East Auckland	209	206	253	328	494	1,490
Total Consents	847	681	1,030	941	1,560	5,059

Source: Property Economics, Statistics NZ

A. EXISTING URBAN CAPACITY OUTSIDE OF THE GROWTH NODE

Firstly, information on feasible capacity within the Existing Urban area was limited to specific growth nodes which is less than half of the total capacity. As the Auckland Plan 2050 indicates, there are 117,500 feasible homes within the Existing Urban Area and 64,810 are outside of the key growth nodes. The proportion of this capacity that is within the identified catchments, however, has not been specifically identified.

The HBA did not go into any more detail from a geospatial perspective on this issue. While it did provide the raw theoretical capacity on a local board level, the feasibility rate of homes is not uniform across the city, thereby making a proportional approach unsound.

It is important to note here that the suburbs that were chosen to be highlighted in the Auckland Plan 2050, are likely to be those that have significant capacity available. By extension, therefore, it does not follow the suburbs that have been excluded would have a similar level of capacity in each suburb as those shown in Table 5.

B. CAPACITY OF ORMISTON

A particularly important exclusion from both the Auckland Plan 2050 and HBA is the absence of capacity for the Ormiston ('Flat Bush') area. Although much of this area has already been developed, the residential consents (shown in Table 4 above) show no indication of growth in this area slowing down with 811 new residential consents for the year ended June 2020.

C. UNCERTAINTY ON DEVELOPMENT TIMING

It is important to recognise that estimates of residential capacity and its timing / roll out from structure planning and growth modelling exercises are subject to ongoing updates. These will ultimately depend on ground constraints, infrastructure funding, political policy changes and the desires of the individual landowners. There may be some instances where owners of land in plan change areas, particularly those that are Council driven, are unwilling to develop their land.

As a particular case in point, the Clevedon rezoning has not resulted in material changes to the housing stock since the area was rezoned in circa 2016. Despite there being supposedly 1,041 potential dwellings in this greenfield area, the residential consent data shown in Table 4 indicates only 25 dwellings have been consented over the last 5 years.

Online research revealed that the Clevedon North residential development has 63 lots and is currently undergoing groundworks but is yet to start construction. We are yet to see a significant uptake in the development of this rural township, and it means it could be several decades for Clevedon to reach its capacity potential.

D. BUILD AND COMPLETED DWELLINGS

The capacity as outlined in Table 5 is based on the Auckland Plan 2050, a document that was published in 2018 and was based on capacity reports published in 2017 and earlier. As such, adjustments need to be made for the homes that have already been built. In particular, we are concerned with capacity built between July 2018 – June 2020 to account for the population growth between these two points in time.

The 5,059 dwelling consents granted over the last 5 years tell only part of the story. Not all of these consents will have been completed, and although the majority of consents issued in 2016 are likely to have been completed before 2018, some consents last four or more years before a code of compliance is granted. Appendix 2 to this report outlines Property Economics methodology in translating building consents into built housing stock.

Table 5 shows that the total estimated built capacity within the catchments is 1,655 homes between 2018 – June 2020.

TABLE 5: ASSUMED BUILT CAPACITY BY CATCHMENT

Area	Built Capacity
Flat Bush	832
East Auckland	512
Beachlands	311
Total	1,655

Source: Property Economics, Statistics NZ

E. REALISABLE VS FEASIBLE CAPACITY.

The development capacity in the Auckland Plan 2050 represents the Feasible Capacity which is defined in the report as: *“...the amount of development that is commercially viable, taking into account current costs, revenue and yields.”*⁶

However, on top of the feasible capacity modelling, practical considerations must be taken into account as to what is likely to be developed adopting real world practicalities. Although the Auckland 2050 Plan makes note of the distinction between feasible and realisable capacity, it does not appear to have been assessed.

SUMMARY OF ISSUES IDENTIFIED WITH CAPACITY ESTIMATES

Table 3 above identified 10,097 dwellings that were clearly recognised in the Council documents as capacity within the Beachlands and Howick Local Board catchment area. The issues raised however, show that this capacity estimate is incomplete.

On one hand, feasible capacity within most East Auckland suburbs including the key Ormiston (Flat Bush) growth node has not been included which potentially means that several thousand dwellings have been unaccounted for. On the other hand, we estimate that 1,655 dwellings of the total feasible capacity have already been built and that furthermore, not all sites that are commercially feasible to be developed, will eventuate as capacity.

The NPSUD makes an important distinction between theoretical, feasible and realisable capacity. Although the Auckland Plan 2050 also refers to this distinction, they have not appeared to account for it in their assessment. From an economic perspective, there is an expectation that all feasible capacity could be realised over an infinite time scale, however in practise this is unlikely. Estimates of the realisable rates varies but a commonly applied assumption is 50%.



As for the capacity already built, most of this capacity appears to be in the areas unaccounted for in Table 3 (which is to be expected given the proposed timing of this growth as shown on Table 3). Within the Howick Local Board area, 62% of the built dwellings were located in the Flat Bush / Ormiston area.

Likewise, although the 110-dwelling capacity in the recently rezoned Maraetai area has been included, this development area is still under construction and yet to see any completed houses. Rather, the 311 homes built in the Beachlands Local Catchment is predominately driven by the completion of a residential development from Oyster Capital just north of the PPC area.

On this basis, Property Economics has opted to include all of the 16,140 dwelling capacities outlined in Table 3. Although much of this includes FUZ outside of the catchment, a portion of this land will likely service a similar market. Furthermore, including the full extent of FUZ capacity offsets any additional unidentified feasible / realisable capacity urban capacity that is located in the catchment.

4.4. HOUSEHOLD SUPPLY AND DEMAND

AUCKLAND REGION

Table 6 below outlines a comparison of the dwelling supply and demand for the Auckland region based on the updated population projections and estimates (Figure 4). These household projections, , are based on applying the adjusted⁷ housing density assumptions from the most recent household projections to the new population projections.

TABLE 6: GROWTH AND RESIDENTIAL CAPACITY IN THE AUCKLAND REGION (2020 – 2050)

	Households	2020	2020 - 2023	2023 - 2028	2028-2038	2038-2050	2020 - 2050
Auckland	Medium Projection	4,240	+ 23,754	+ 43,569	+ 83,234	+ 98,653	+ 249,209
	Existing Urban Capacity		15,000	39,623	42,743		97,367
	Future Urban Zone		36,300	7,700	66,300	4,500	114,800
	Rural		22,240	16,463	14,996		53,700
Total	Growth + NPS buffer		+ 28,504	+ 52,282	+ 95,719	+ 113,450	+ 289,956
	Capacity		73,541	63,787	124,040	4,500	265,867
	Difference		45,036	11,504	28,320	(108,950)	(24,089)
	Cumulative Net Capacity Position		45,036	56,541	84,861	-24,089	-24,089

Source: Property Economics, Auckland Council

The capacity estimates used are the same as the ones shown in Table 3 in all except the Existing Urban Capacity which has 20,133⁸ dwellings removed to account for those built between 2018 and 2020.

The population base in the Auckland Region grew at a slightly slower rate than was projected under the Medium projection series in the 2017 Stats NZ population projections due to supply issues. Consequently, the projections released this year place the Auckland region at a slightly lower 2,302,900 residents in 2048 compared to 2,376,700 residents implied earlier in the Auckland Plan 2050. This factor, combined with the higher average population per household ratio, means the anticipated dwelling demand over the next 30 years is lower than the growth predicted earlier.

Despite this lower growth profile, Property Economics has identified a shortfall in capacity over the long term of nearly 24,100 dwellings. Further to this is the potential for the realisable capacity to fall short of the assessed feasible capacity and the inefficiency around the location

⁷ Population per household ratio is adjusted to account for the higher starting point in 2018 but retains the assumed rate of decline.

⁸ The number of Code of Compliance Certificates issued between July 2018 – June 2020

with 53,700 dwellings being provided for in the Rural areas. Although the Beachlands / Maraetai area is also classed as a rural area, there is growing demand for homes in this area.

BEACHLANDS CATCHMENT

Table 7 below shows the growth and residential capacity across each of the residential catchments using the Medium Growth projection for the Howick Local Board and the High Projection for Beachlands. This is then summed across the total row to identify the net surplus or deficit of housing supply over the long-term growth projections.

The High Growth projection has been used as the baseline for Beachlands based on current trajectory, and the reality that this PPC will drive and provide additional growth in the area. In essence this accounts for some of the demand that will come from beyond the identified catchment.

TABLE 7: GROWTH AND RESIDENTIAL CAPACITY IN THE LOCAL CATCHMENT (2020 – 2050)

	Households	2020	2020 - 2023	2023 - 2028	2028-2038	2038-2050	2020 - 2050
Beachlands	High Projection	4,240	+ 230	+ 400	+ 800	+ 930	+ 2,360
	Capacity		460	0	220	0	680
Howick Local Board	Medium Projection	49,310	+ 3,320	+ 3,000	+ 5,250	+ 5,830	+ 17,400
	Capacity		3,620	2,530	3,270		9,420
Nearby FUZ	Capacity		350	850	350	4,500	6,040
Total	Growth		+ 3,550	+ 3,400	+ 6,050	+ 6,770	+ 19,760
	Growth + NPS buffer		+ 4,260	+ 4,080	+ 6,950	+ 7,780	+ 23,070
	Capacity		4,430	3,380	3,830	4,500	16,140
	Difference		170	(700)	(3,120)	(3,280)	(6,930)
	Cumulative Net Capacity Position			170	-530	-3,650	-6,930

* All figures are rounded to the nearest 10

Source: Property Economics, Auckland Council, Statistics NZ

Note that Table 7 also includes extra FUZ capacity detailed earlier and the capacity in Clevedon is distributed across an 18-year time frame to account for the slower development rate of this township. Also included in the growth assessment is the NPS-UD required 20% competitiveness margin⁹ over the short and medium terms and a 15% buffer on capacity over the long term. Table 7 shows that under the Medium growth scenario (and High for Beachlands), there is a deficit of capacity equal to -530 dwellings over the medium term (2023 – 2028). Over the long term, the projected growth will further outstrip supply in this market with

⁹ NPS_UD 3.22: (1) A competitiveness margin is a margin of development capacity, over and above the expected demand that tier 1 and tier 2 local authorities are required to provide, that is required in order to support choice and competitiveness in housing and business land markets.

a net deficit of -6,930 dwellings over the target period. This deficit is only increased if the 6,040 homes included in the growth nodes outside of the catchment area (Nearby FUZ) is removed from the supply.

Table 8 following has been included to show the supply and demand capacity under a High growth scenario for the Howick Local Board area. This scenario suggests that the local household growth has the potential to outstrip the feasible development capacity by 1,290 dwellings within the short term. As with the medium growth scenario, this supply deficit will only continue with a total net deficit of -18,160 dwellings over the next 30 years.

In the previous section of this report, we examined the growth for the wider Auckland market. This showed that sufficient capacity in the market exists to support growth until beyond 2038 which is seemingly at odds with this assessment. What this highlights, therefore, is the shortage of land in the East Auckland market, although this capacity is being supported in other FUZ areas such as in Drury and Pukekohe.

Adverse market impacts in relation to capacity shortfalls emerge in the market well before the numeric date. Along with long infrastructure lead times and an appetite for increased supply certainty in the market, there are several costs associated with failing to deal with future supply constraints ahead of time including housing land and price pressures, slowing of economic growth and increased marginal cost of infrastructure.

TABLE 8: GROWTH AND RESIDENTIAL CAPACITY IN THE LOCAL CATCHMENT (HIGH PROJECTION)

	Households	2020	2020 - 2023	2023 - 2028	2028-2038	2038-2050	2020 - 2050
Beachlands	High Projection	4,240	+ 230	+ 400	+ 800	+ 930	+ 2,360
	Capacity		460	0	220		680
Howick Local Board	High Projection	49,310	+ 4,530	+ 4,370	+ 8,230	+ 9,910	+ 27,040
	Capacity		3,620	2,530	3,270		9,420
Nearby FUZ	Capacity		350	850	350	4,500	6,040
Total	Growth		+ 4,760	+ 4,770	+ 9,030	+ 10,850	+ 29,410
	Growth + NPS buffer		+ 5,720	+ 5,720	+ 10,380	+ 12,470	+ 34,300
	Capacity		4,430	3,380	3,830	4,500	16,140
	Difference		(1,290)	(2,340)	(6,550)	(7,970)	(18,160)
	Cumulative Net Capacity Position			-1,290	-3,630	-10,180	-18,160

Source: Auckland Council, Property Economics

4.5. AUCKLAND RESIDENTIAL CAPACITY ASSESSMENT 2021

In July 2021, Auckland Council released an update to their earlier HBA which provided revised estimates of theoretical and feasible capacity for both infill and redevelopment options of Auckland's urban zones. These new capacity numbers will supersede the capacity numbers presented in the Auckland Plan 2050 (and by extension the capacity numbers relied upon by the preceding capacity estimates).

The Auckland Council's new capacity assessment has defined any development to be feasible if it achieves a positive profit margin (i.e., greater than 0%). This is in direct contrast to their previous HBA which uses a 20% profit margin, a figure that is standard across the other Councils in New Zealand. Property Economics consider a minimum 20% profit margin is appropriate to adopt given the commercial risks associated with any such development and the need for developers to make a profit out of developments. This would lower the Council's capacity estimates.

Based on the Council's approach, they have estimated feasible capacity as being anywhere from 838,000 under a maximum profit option to 1.4 million dwelling units under the minimum price option. The key driving factor that differentiates these two options is the typologies that are built. For the minimum price option, the vast majority of modelled typology options are terraces and apartments with typically smaller floorspaces and smaller site sizes.

As mentioned earlier, Property Economics consider that Auckland Council's assumption of 0% profit margin is unrealistic. Although an infill site may be developed by the existing owner themselves with variant profit expectations, anything not built by their prospective occupants will invariably demand an appropriate market return on investment. This would reduce terrace or apartment typologies being built significantly with the expectation of a 0% profit margin.

If the base 20% profit margin to define feasibility was applied, then only 8% or 99,000 of the 1.4 million dwellings under the minimum price scenario would be classified as being feasible. This places significant doubt on the practicality of the determined theoretical capacity being realised.

In contrast, applying the 20% profit margin to the highest profit scenario achieves a significantly higher feasible capacity of 630,450, equivalent to around three quarters of the quoted total. This is also the approach that is more comparable to the previous HBA estimate of 146,000 feasible dwellings, thereby suggesting an increase in feasible capacity of more than 400%. However, realisation of this higher capacity is not clear, as are the price points associated with the feasible capacity and whether this matches demand by price and typology.

Table 6 in this report above identified a long-term shortfall of about 24,000 dwellings for the Auckland Region. Even with the reduced estimates of feasible capacity from the HBA using a 20% profit margin, the additional feasible capacity would (theoretically) be more than sufficient to support this shortfall over the long term without additional greenfield capacity being required.



However, this pure 'modelled' calculation does not provide the complete picture, nor does it appear to be ground truthed in a meaningful way.

This modelled feasible capacity is further limited by the underlying infrastructure issues that plague Auckland. Although multistory dwellings may be feasible for a developer to build within Auckland's urban area, infrastructure constraints mean Auckland may struggle to service these additional dwellings within the Auckland Area. There are therefore significant question marks over the veracity and usefulness of Council's updated residential capacity assessment in applying it to residential plan change applications at this point without more detailed 'real world' considerations on likely profitability, deliverability and realization of the capacity.

4.7. COMPARATIVE LARGE-SCALE MASTERPLANNED RESIDENTIAL DEVELOPMENTS

Table 9 below identifies some of the largest, comprehensive residential development areas in Auckland in recent years by their development timeframe and development typology using residential building consent data. Figure 6 following shows the timeline of each development based on the number of building consents per year.

TABLE 9: MAJOR AUCKLAND RESIDENTIAL DEVELOPMENT SUMMARY COMPOSITIONS

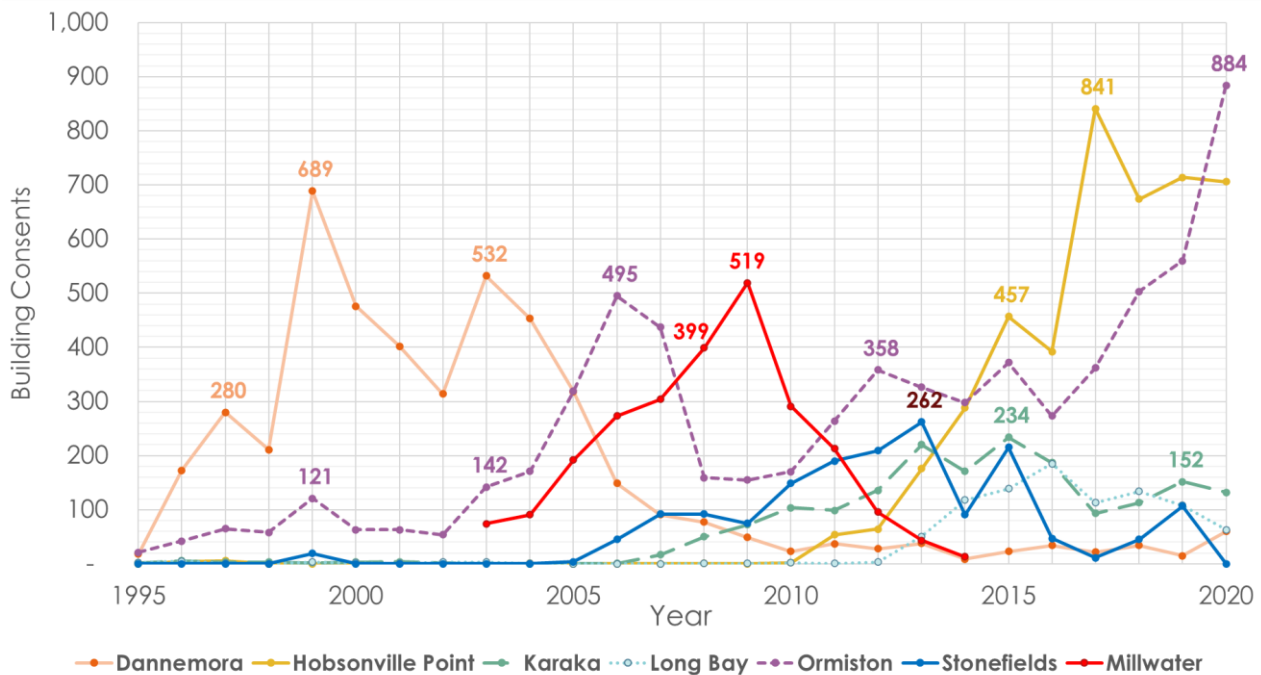
Development Particular	Dannemora	Hobsonville Point	Karaka	Long Bay
Development Timeframe	1996 - 2008 13 years	2011 - present 11+ years	2008 - present 14+ years	2013 - present 9+ years
Consents to date	4,165	4,416	1,780	928
Average Consents Per Annum	320	400	130	100
Standalone	4,026	1,761	1,419	689
Terrace / Retirement Unit	119	2,087	351	175
Apartment	20	568	10	64
Standalone	97%	40%	80%	74%
Terrace / Retirement Unit	3%	47%	20%	19%
Apartment	0%	13%	1%	7%

Development Particular	Ormiston	Stonefields	Millwater
Development Timeframe	2003 - present 19+ years	2006 - 2019 14 years	2010 - present 11+ Years
Consents to date	6,392	1,630	2,514
Average Consents Per Annum	340	120	209
Standalone	5,153	909	2,002
Terrace / Retirement Unit	1,041	287	436
Apartment	198	434	70
Standalone	81%	56%	80%
Terrace / Retirement Unit	16%	18%	17%
Apartment	3%	27%	3%

Source: Statistics NZ, Property Economics.

Dannemora is the earliest development area identified and had a major uplift in the number of dwellings consented in 1996. Major investment finished in 2008 when fully developed with only a few dwellings consented each year after that. The development area over this time consisted almost entirely of low-density standalone dwellings and totalled 4,165 dwellings.

FIGURE 6: MAJOR AUCKLAND RESIDENTIAL DEVELOPMENT TIMELINES



Source: Property Economics, Statistics NZ

Ormiston (which includes parts of Flat Bush) is a suburb contiguous with Dannemora and began development soon after. Ormiston has also been comprised primarily of standalone dwellings, but the proportion of higher density terrace units has increased with time. Ormiston continues to be developed and is one of the largest development areas in Auckland's recent history consisting of 6,392 dwellings up to 2020.

Stonefields is an inner-city suburb developed in the former Mt Wellington Quarry, adjacent to Panmure and Ellerslie on Auckland's Isthmus. Major development began in 2006 and the development is touted as one of the first successful higher density residential developments. Just over half the dwellings consented in Stonefields were low density standalone dwellings with the balance being made up of terrace dwellings and apartments.

Karaka is a large area on Auckland's southern fringe. The major development that began in 2008 and continues today refers to the area surrounding Hingaia Road and includes Karaka Harbourside. Karaka is primarily low- and medium-density dwellings and totals 1,780 dwellings consented to-date. The medium density dwellings in Karaka have just started to emerge and were likely catalysed out of a 230-unit retirement village set near the development's centre.

Hobsonville Point's residential development began development in 2011 following the closure of the former RNZAF base. The development has been significantly higher density than the other developments assessed with 60% of the 4,416 dwelling units consented being medium- or high-density residential. There will likely continue to be a significant number of higher density residential dwelling constructed as much of the inner core of the suburb is yet to begin completed. There are two major retirement villages, and it is known that at least two more are in the pipeline. This is a ground-breaking development on Auckland's urban fringe with residential development density increasing as the development has progressed.

Long Bay is the youngest development on the list and began in 2013. The fringe location in the northern part of Auckland's North Shore is comprised of approximately 67ha of buildable land area. The development so far has yielded 928 dwellings in a mix of low-, medium- and high-density living arrangements. The development will likely end up with a significant number of medium density living options given this is the primary advertising vehicle for the development.

Millwater in Silverdale is another significantly scaled urban fringe development similar to Beachlands in terms of amenities and locational attributes. Millwater built off its early success with standalone product and then started developing higher density product when amenities and community facilities were more advanced, i.e., when local shops were sustainable and sports fields, walking tracks, local schools and children's playgrounds were established. Development in Millwater over the last 4 years has had an increasing proportion of higher density product developed.

There has been a general shift towards medium- and high-density living among the more modern large scale masterplan developments in Auckland, and as each of the developments has moved through their respective development timeframes. Part of this can be explained by the rapid increase in house prices in Auckland over recent years making standalone dwellings relatively unaffordable to many buyers in the market. Hobsonville Point sticks out as one of the country's highest density, master planned, residential developments but will likely be the 'new normal' in terms of residential development, particularly in Auckland. A more efficient use and higher yields from the land are required due to growing land and servicing costs.

Within each development, there is a trend to front-load a larger quantity of low-density dwellings and subsequently, bring in medium- and high-density dwellings later into the project. This is likely to build the character of the development/suburb with higher amenity, architectural dwellings and environments and leverage this amenity later with greater density to maximise sales potential.

The exception to this was Stonefields which was significantly higher density from the start likely because it was leveraging off the existing amenity in the surrounding area and thus already had its sense of place in its urban environment (and the land being comparatively cheaper being a former quarry).

4.8. PROPERTY PRICE AND RENTS ASSESSMENT

Table 10 below shows the rental data by dwelling typology and dwelling size (number of bedrooms) for select areas in east Auckland. A colour scheme is used to compare the relative affordability at each typology and dwelling size.

Among smaller rental units, Beachlands is relatively affordable, with some of the cheapest rental rates for 2-bedroom dwellings. At the mid- and larger sized rental houses (three and four bedroom) Beachlands is relatively more expensive. Of note is the considerable range between the lower and upper quartiles for Beachlands. There is a difference of \$300/week a significantly wider range than other areas.

Relative to the suburbs shown, Beachlands has the widest range in rental prices. This may be indicative of a steeper price scale relative to the distance from the water and sea views compared to more internalised areas within Beachlands where rents are a bit softer.

TABLE 10: WEEKLY RESIDENTIAL RENT BY SUBURB, DWELLING TYPE AND SIZE

Area	Dwelling Type	Dwelling Size	Active Bonds	Lower Quartile	Median	Upper Quartile
Beachlands	House	2 bedrooms	108	\$470	\$500	\$565
		3 bedrooms	111	\$610	\$680	\$720
		4 bedrooms	117	\$780	\$843	\$890
	Total (all bonds)		504	\$500	\$680	\$800
Buckland's Beach	Flat	2 bedrooms	99	\$450	\$490	\$525
		3 bedrooms	27	\$558	\$615	\$630
	House	2 bedrooms	144	\$483	\$520	\$570
		3 bedrooms	432	\$600	\$630	\$680
		4 bedrooms	204	\$695	\$800	\$850
		5+ bedrooms	54	\$868	\$950	\$1,100
	Total (all bonds)		1,203	\$550	\$630	\$720
Cockle Bay	Flat	2 bedrooms	51	\$479	\$490	\$513
	House	3 bedrooms	63	\$608	\$660	\$698
		4 bedrooms	54	\$714	\$723	\$743
	Total (all bonds)		324	\$496	\$600	\$720

Area	Dwelling Type	Dwelling Size	Active Bonds	Lower Quartile	Median	Upper Quartile
Eastern Beach	House	3 bedrooms	48	\$591	\$640	\$698
		4 bedrooms	30	\$810	\$875	\$963
	Total (all bonds)		174	\$600	\$690	\$850
Half Moon Bay	House	2 bedrooms	84	\$490	\$530	\$550
		3 bedrooms	303	\$580	\$600	\$650
		4 bedrooms	126	\$700	\$750	\$800
		5+ bedrooms	27	\$815	\$850	\$875
	Total (all bonds)		759	\$580	\$620	\$716
Maraetai	House	2 bedrooms	27	\$575	\$605	\$613
		4 bedrooms	30	\$666	\$720	\$768
	Total (all bonds)		198	\$450	\$580	\$650
Mellon's Bay	House	3 bedrooms	54	\$575	\$660	\$720
		4 bedrooms	42	\$765	\$835	\$975
	Total (all bonds)		270	\$550	\$635	\$770
Whifford	Total (all bonds)		102	\$646	\$763	\$894
Silverdale / Millwater	House	3 bedrooms	303	\$580	\$600	\$650
		4 bedrooms	126	\$700	\$750	\$800
		5+ bedrooms	27	\$815	\$850	\$875
	Total (all bonds)		555	\$550	\$760	\$830

Source: MBIE, Property Economics

Table 11 below shows the median sale price among all dwellings sold in select areas by the number of bedrooms over the last year, May 2020 – April 2021. The areas selected include coastal areas that are considered to provide some comparative basis to Beachlands and a few other large scale coastal development areas like Millwater and Hobsonville. Note that Hobsonville includes properties sold in the wider Hobsonville suburban area.

TABLE 11: ANNUAL MEDIAN SALES DATA BY AREA AND DWELLING SIZE

Suburb	Median Sale Price					Overall Median	# of Sales	Sale Price over CV
	1-bed	2-bed	3-bed	4-bed	5 or more beds			
Beachlands	\$600,000	\$879,000	\$955,000	\$1,262,000	\$1,535,000	\$1,234,500	216	8%
Bucklands Beach	-	\$874,000	\$1,250,000	\$1,688,000	\$2,105,500	\$1,440,000	205	23%
Cockle Bay	\$675,000	\$857,500	\$1,255,000	\$1,610,000	\$1,550,000	\$1,390,000	99	7%
Eastern Beach	-	\$984,888	\$1,345,000	\$1,900,000	\$1,950,000	\$1,650,000	24	11%
Half Moon Bay	-	\$870,000	\$1,049,000	\$1,580,000	\$1,810,000	\$1,307,000	153	19%
Maraetai	\$850,000	\$900,000	\$1,090,000	\$1,250,000	\$1,300,000	\$1,197,500	66	2%
Mellons Bay	\$1,403,500	\$880,000	\$1,268,000	\$1,760,000	\$2,273,000	\$1,650,000	80	11%
Long Bay	-	\$967,000	\$1,100,000	\$1,250,800	\$1,655,000	\$1,499,000	111	-%
Hobsonville	\$600,000	\$729,000	\$947,000	\$1,193,500	\$1,365,000	\$927,500	362	1%
Whitford	-	-	-	\$1,752,500	\$1,925,000	\$1,850,000	6	6%
Silverdale / Millwater	-	\$695,000	\$910,000	\$1,250,500	\$1,550,000	\$1,195,000	239	9%
Total	\$600,000	\$775,000	\$1,030,000	\$1,340,000	\$1,600,000	\$1,200,000	1,322	13%
Auckland Region						\$1,120,000	10,617	

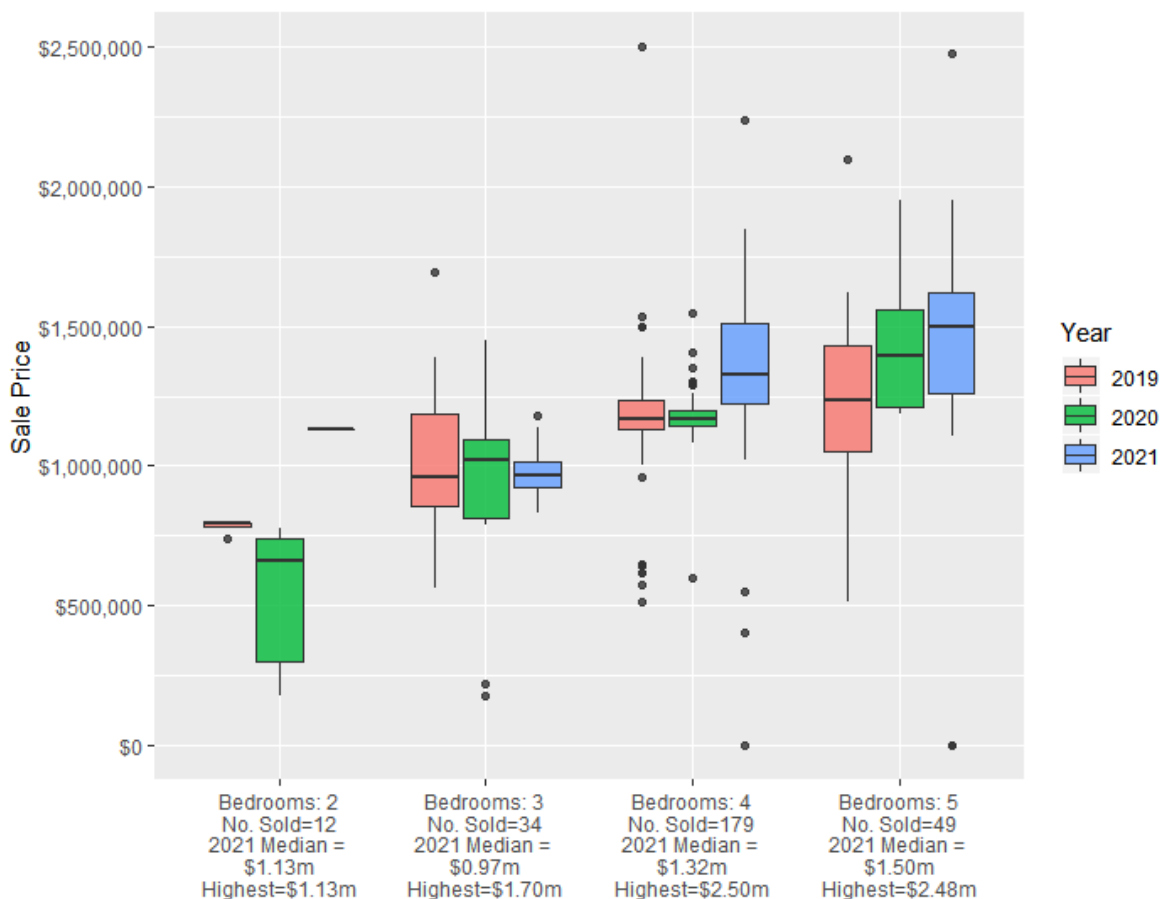
Source: CoreLogic, REINZ.

Relative to these alternative waterfront locations, the Beachlands and Maraetai suburb is a more affordable suburb in many categories. Eastern Beaches and Mellons Bay for example have a Median Price for a residential property of \$1.65m which is more than \$400,000 higher than Beachlands median sales price of \$1.23m. Although the Beachlands catchment has a higher median sales price than the Auckland average, it offers an opportunity for purchasers at the higher end of the market to live in a prime beach village location, at the cost of being less centrally located than the alternatives shown.

A significant number of sales occurred in Beachlands over the last year, 216, suggesting a growing level of demand in the area as an alternative lifestyle choice and fuelled by the residential dwelling growth and house price increases in more central Auckland suburbs. Over the last month Beachlands represented around 2% of Auckland Region's residential sales.

Figure 7 below shows the distribution of sale price for new homes (defined as any home built after 2010). This is broken down by year sold (June 1 - May 31) and number of bedrooms. Note that the usefulness of this data for two-bedroom homes is limited due to only 12 properties been sold over the last three years. The upper 2021 price point thresholds of new home sales would represent a better indication of the starting position for the new product in Beachlands South given its envisaged superior quality (built form, environment and amenity).

FIGURE 7: SALE PRICE DISTRIBUTION OF NEW DWELLINGS (BUILD THIS DECADE) IN BEACHLANDS BY NUMBER OF BEDROOMS AND YEAR SOLD (JUNE 1 – MAY 31)



Source: Property Economics, CoreLogic

Figure 7 also shows how the sale price of homes has increased over the last three years. Current 'top end' threshold prices for new 4-bedroom product in Beachlands has increased significantly in 2021 to \$1.5m (significantly higher than in 2020), while new 5-bedroom dwellings are reaching \$1.6m with a steady year-on-year increase for the last 3 years.

On average however, Figure 7 data indicates that compared to the rest of the housing stock, new dwellings in Beachlands do not have a discernibly higher average sale price. The median sale price for new (built after 2010) four-bedroom homes sold during the year ended May 2021 was \$1.32m, which is only 5% higher than the median sales price of all four-bedroom homes sold in Beachlands. Meanwhile, the difference in price for other property sizes was negligible.

This is seemingly an anomaly when compared to other similar research Property Economics has undertaken in other areas of Auckland previously which determined there is generally a 10-20% premium on the sales of new homes (relative to older stock of similar size in the same area). Further regression analysis which attempted to isolate the effect of property age from other factors such as land area and floorspace, confirmed that there is no statistically discernible difference in the sale price of new homes to older stock in Beachlands based on the sales data available for the last three years.

One of the potential reasons for this result, is the disparity in land values within Beachlands based on their location relative to the waterfront, with many of the older established properties being closer to the waterfront than a lot of the new product on the market. Additionally, these results may be indicative of the relative quality of even the older Beachlands homes which may have received renovations and modernisation.

Table 12 below shows the effect on property prices if a 10 – 20% premium on new homes (typically experienced elsewhere in Auckland) would translate based on the median sales price of Beachlands.

TABLE 12: BEACHLANDS MEDIAN SALE PRICE

Suburb	Median Sale Price					
	1-bed	2-bed	3-bed	4-bed	5 or more beds	Overall Median
Beachlands	\$600,000	\$879,000	\$955,000	\$1,262,000	\$1,535,000	\$1,234,500
Beachlands + 10%	\$660,000	\$966,900	\$1,050,500	\$1,388,200	\$1,688,500	\$1,357,950
Beachlands + 20%	\$720,000	\$1,054,800	\$1,146,000	\$1,514,400	\$1,842,000	\$1,481,400

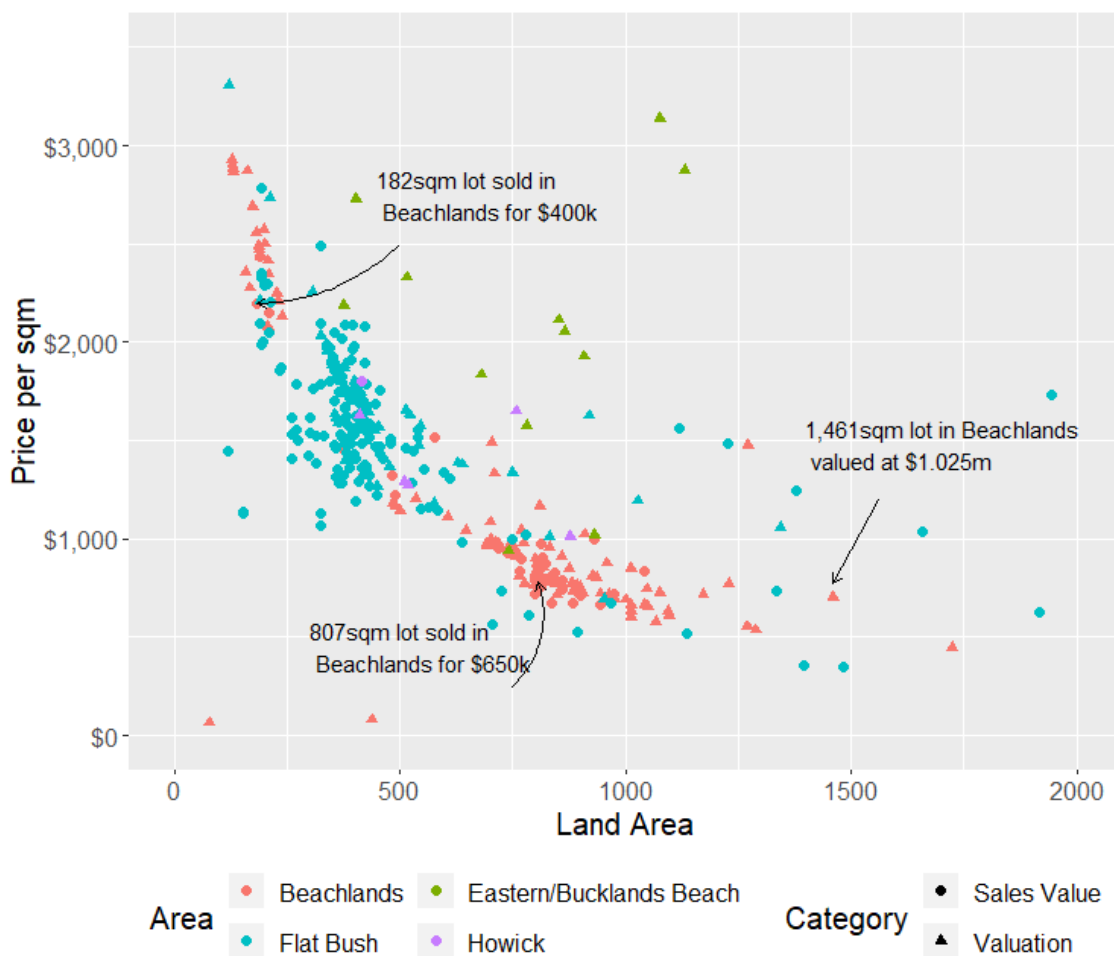
Source: Property Economics, CoreLogic

There is no doubt some special and unique waterfront / water edge locations in Beachlands South that would suit luxury dwellings and are considered to achieve price points well above the prices indicated. They do not form part of the current price statistics simply because there is no such product like these in Beachlands yet.

4.9. VACANT LOT SALES

Figure 8 below shows the sale and valuation price per sqm by land area for properties in Beachlands, Eastern / Buckland's Beach, Flat Bush and Howick. Although the valuations are dated by default as being four years old (July 2017 was the last regional valuations in Auckland), many of these vacant sites were only recently created and therefore represent more up-to date valuations. The sales values represent actual sales from January 2020 till May 2021.

FIGURE 8: VACANT LOT SALE AND VALUATION PRICE PER SQM BY LAND AREA



Source: Property Economics, CoreLogic

There is significant variation in the price of land based on factors such as its proximity to the sea, views of the water and site size. Figure 8 provides a clear framework to estimate the sale price on vacant lots. The value of land does not decrease in a linear manner with size, but rather increases following natural curvature. As the highlighted examples in Figure 8 show, an 807sqm lot may sell for \$650,000, while an 182sqm lot that is less than a quarter of the size, sold for \$400,000. On a per sqm basis, this smaller property was sold for 2.73 times the price than the larger 807sqm site.

4.10. HOUSEHOLD TYPOLOGIES – TRENDS

Changes to Housing Size

Auckland's housing market is changing as housing pressures force new home buyers to re-evaluate their perspectives on higher density housing options. Gone is the 'quarter acre dream' for most people as the market instead observes the growing transferability of household structure preferences between dwelling typologies, i.e., typical stand-alone buyers are becoming increasingly accepting of terraced and higher density housing. This is also driven by the increasing requirements for greater land use efficiency in the development required to justify increasing land prices.

Although price variables are the primary force driving this shift, improved housing design and new higher density opportunities in locations where a stand-alone dwelling previously was the only choice available have resulted in a greater acceptance of quality higher density living in non-central locations.

The success of the Stonefields, Hobsonville Point, Long Bay and Millwater developments are a clear indication of this. These master-planned communities were designed with medium density living in mind, and this is reflected in the urban design and amenities better meeting modern day expectations. There appears to be a definite trend emerging where a new home is being preferred to an existing one within a similar price point.

Included in Table 3 above was a comparison of the dwelling types being constructed in Auckland's urban developments. Just over a quarter of dwellings built in Stonefields were apartment buildings. In Hobsonville Point the proportion of apartments was much lower at 13% however almost half (47%) of dwellings built were either Terraced or Retirement Units.

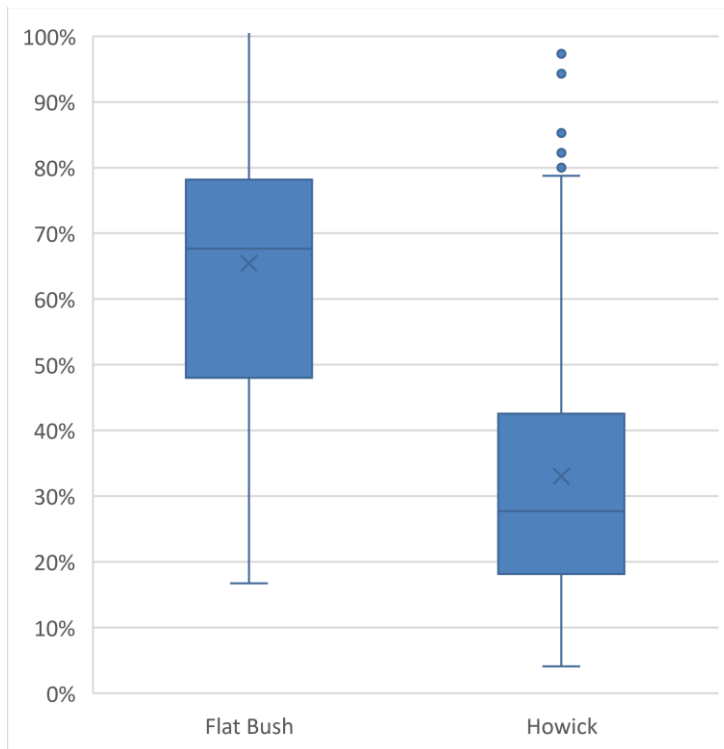
The remaining four development areas shown had much higher proportion of Standalone dwellings. Dannemora, being the oldest of the assessed developments, was 97% Standalone dwellings with only 20 (<1%) low rise apartments being built in this area. In comparison, the newer developments like Karaka and Ormiston have around 80% of dwellings built as Standalone.

Despite Standalone dwellings retaining their dominance in these areas, there is an increasing trend in the building floor space to land area ratio i.e., smaller backyards and setbacks. This is demonstrated in Figure 9 below which compares the distribution of floorspace to land ratios between the homes recently sold in the Flat Bush and Howick markets. This is a box and whisker plot where the box indicates the extent of the interquartile range (i.e., where the middle 50% of data is located). The lines show the remaining top and bottom 25% and the dots representing outliers. This shows that Howick, being an older developed suburb, has on average a 30% floorspace to land ratio, almost three quarters of homes sold in the Flat Bush area have a ratio above 50%.

As discussed in the Demographic Profiling, the Flat Bush development has predominately attracted Asian families. From the 2018 NZ Census the data shows that 62% of Flat Bush residents identified as Asian, the average household size (person per dwelling ratio) was 3.91 residents, and the average home was 4 bedrooms or larger. These high Floorspace to Land

Ratios is therefore the resulting of building larger, often two-story standalone homes while limiting the amount of backyard space available. The Standalone homes in Stonefields were no different although the average house size (in regard to number of bedrooms) was smaller.

FIGURE 9: BUILDING FLOORSPACE TO LAND AREA RATIO COMPARISON



Source: CoreLogic, REINZ.

Projected Auckland Typologies

With all this in mind, Table 13 below outlines a guide to the projected split in household typologies for some of the key surrounding Auckland Local Boards. These should be treated as a guide only. As discussed above there are a number of emerging factors that are changing the choices observed in the market. Although most Kiwi families may prefer standalone homes, the growing income to housing price gap means households may not be able to secure their dwelling type preference. These choices are further constrained by other market factors such as new supply, timing, location, affordability / serviceability, etc.

Further to this the Resource Management (Enabling Housing Supply and Other Matters) Amendment Bill will allow up to 3 three-storey dwellings on each site as of right. This has the potential to usher in a wave of three storey townhouses and reduce the impetus to build apartments.

TABLE 13: ESTIMATED AUCKLAND FUTURE GROWTH TYPOLOGY MIX

		Standalone	Terraced	Apartment	Total
Auckland Subset*	No.	68,000	28,300	17,000	113,300
	%	60.0%	25.0%	15.0%	100%

Source: Property Economics

Auckland Subset include the following local boards: Waitemata, Albert – Eden, Orakei, Howick and Franklin

Note hotels and retirement village units are not included.

Beachlands South

Beachlands South is designed to have a point of difference and enable a range of land uses (primarily residential) that will allow the development of a new master planned residential suburb. The vision for Beachlands South is grounded in a holistic approach of improving the quality of life for residents, Kaitiakitanga of the natural environment, and a sustainable development framework based on efficiency in energy, resources and a low carbon footprint. Key development principles include:

- **Partnership** – with iwi, Council and local community stakeholders
- **Carbon Neutral and Biodiversity** – development that addresses climate change and biodiversity loss
- **Thriving Local Community** – a neighbourhood with a strong identity and increased self sufficiency
- **Kaitiakitanga** – Acknowledging Mana Whenua values and connecting people with nature and cultivating custodianship and wellbeing.
- **Diversity** – foster a diverse and adaptable community with choice in the built environment
- **Sponge City** – develop innovative and resilient ways to manage three waters management
- **Modal Shift** – encourage modal shifts with improved connections to the movement network.

These unique attributes in terms of the built environment, unique stewardship lens on the environment and entrenched sustainability principles are all attributes that are increasingly resonating with the market and are qualities purchasers are progressively looking for in new developments for which they are prepared to pay a premium. The market is increasingly considering environmentally friendly and sustainable 'green' principles when making purchasing decisions.

Other forward-thinking initiatives BSLP are looking to incorporate in the suburb are economically efficient collaborative working spaces to provide local 'work from home' and 'work from suburb' opportunities. These are to be surrounded by high quality retail and commercial service amenities, public realm environments, walking / running tracks and health and wellbeing features that promote the welfare, safety and enjoyment of living.

Added to this is the direct ferry connection to the Auckland CBD and the ability for Beachlands South to be an exemplar development with local employment and a broad spectrum of housing choice in terms of typology and price points.

Cumulatively, these attributes of Beachlands South are vital to promoting the higher price points with competing product.

While Hobsonville Point achieved noteworthy terraced and apartments proportions, the price point of that product was lower than what Property Economics understands can be achieved in Beachlands South. As such the Hobsonville Point density composition needs to be kept in context and may not reflect what can be achieved in Beachlands South.

To achieve higher densities, given Beachlands South's coastal village and urban fringe location, the higher density product is likely required to be more spacious than terraces and apartments typically seen around Auckland, and have a higher specification in terms of quality of fitout, materials and finishings in addition to natural site attributes Beachlands South offers.

This will ease the pathway for transferring standalone buyers to terraced homes. This will only be emphasised if higher prices, on average, are being sought in the Beachlands South development. This also assumes high quality services, facilities, amenities and environment are also provided as part of the overall development.

The recent structure plans provided to Property Economics indicated that around 42% of the 3,800 dwellings in the full Beachlands South development plan is proposed to be apartments, 33% Terraced housing and around 24% Standalone. This distribution disproportionately favours higher density typologies relative to that of both the current Beachlands stock and the projected wider Auckland average. This is not unusual in well established suburbs where new development is planned to occur, and will improve the land use efficiency of the area.

However, an increasing proportion of higher density product does not represent a fundamental flaw to the long-term success of development at Beachlands South, it simply means transferring standalone purchaser preferences will likely have to be higher and the sell down rate might take a bit longer. Offsetting this is the significant level of positive attributes and economic efficiency generated by the increased residential density.

It should also be noted that the proportion typology split as indicated is based on a simplified typology breakdown of standalone, terraced and apartment dwelling types. Within this is a range of housing options including duplexes which, although classified as Terraced, can be considered a hybrid between standalone and terraced. This, based on the size of such a dwelling being of comparable size to standalone product, represents a typology that could more easily transfer a purchaser with standalone preference to a duplex product. This range in

housing options expands the potential market that Beachlands South can compete in and thereby offsetting some of the potential risk.

4.11. SUMMARY

In summary, the East Auckland markets are estimated to have a feasible capacity and residential land sufficiency issue over the next 30 years taking into account the greenfield and existing urban infill capacity.

Applying the Statistics NZ Medium projections there is an estimated residential capacity shortfall of 6,930 dwellings with the deficit emerging within the first decade (2028). Under the High projection growth series, this deficit increases to 18,160 dwellings with a capacity deficit of 1,290 within the short term.

Beachlands South represents an opportunity to address these potential capacity sufficiency issues in a desirable location and provide a range of typology options not otherwise available in the local market.

5. RETAIL / COMMERCIAL MARKET ASSESSMENT

5.1. KEY OBJECTIVES

This assessment analyses the retail market potential within the PPC and will include the following:

RETAIL LAND REQUIREMENT

- Identify and geospatially map the locations of the existing commercial centres in the wider catchment and outline each broad role and function in the community.
- Identify a core catchment area for a commercial offering in Beachlands South (the area commercial activity in Beachlands South would be predominantly designed to service).
- Determine the 'at capacity' or fully developed residential yield of the catchment as a base input in the Retail Modelling.
- Quantify the level of retail demand for convenience retail activity on an annualised basis.
- Break down retail demand by activity / store types and highlight the types of retail activities suitable for a commercial provision in Beachlands South.
- Determine the demand for convenience commercial service activities and identify these activity types.
- Quantify the total commercial GFA sustainable within the Beachlands South catchment at full capacity, and appropriate staging over that period based on demand.

COMMERCIAL LAND REQUIREMENT

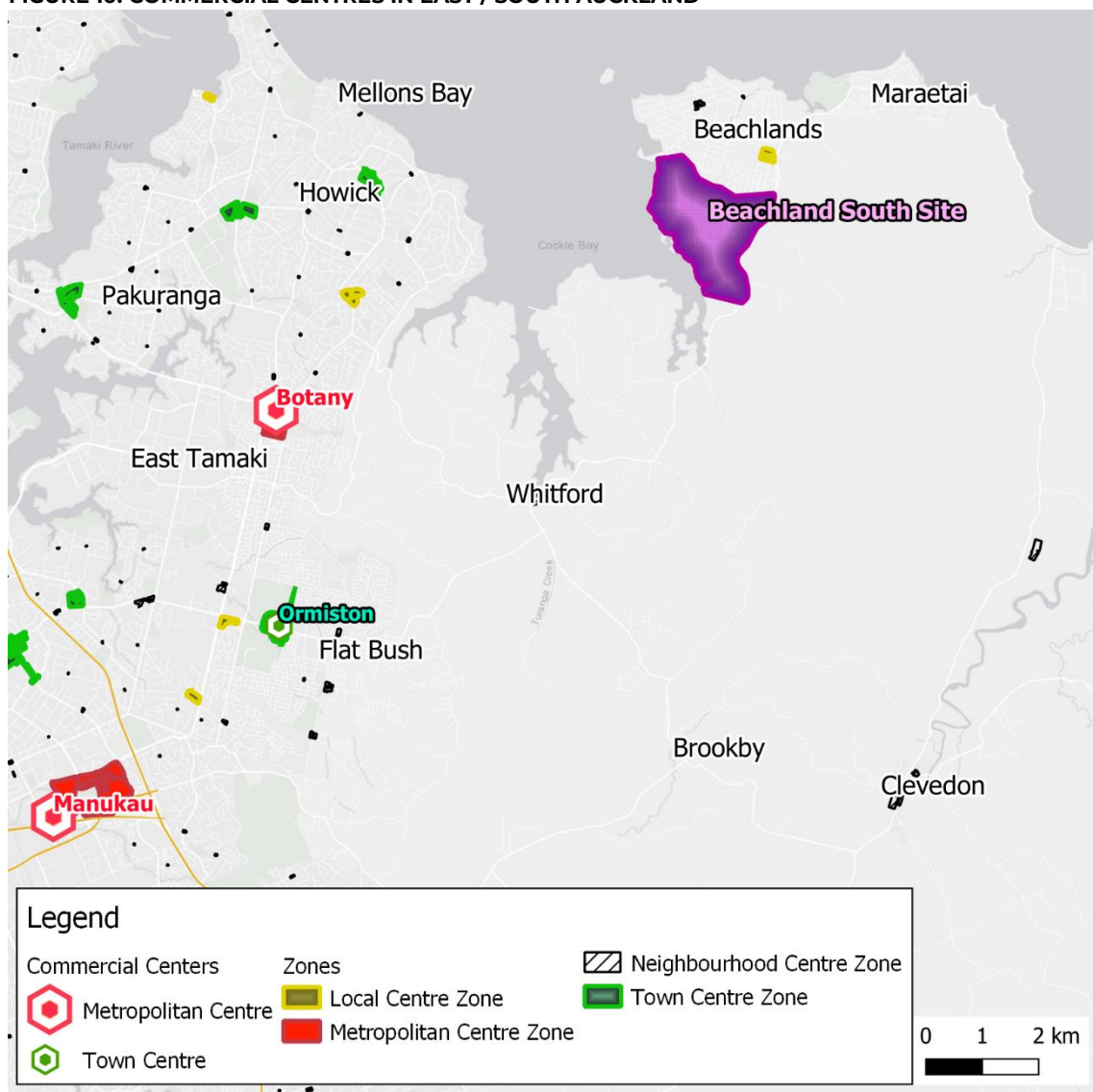
- Determine the amount of land required for commercial activities in Beachlands South.
- Identify location options that would maximise the performance, accessibility and amenity of the commercial activity from an economic perspective.
- Assess potential for splitting this commercial land requirement into multiple smaller commercial nodes or a single commercial centre.
- Determine the appropriate scale, composition and activity types suitable for any commercial provision within the PPC area, with supporting RMA analysis and rationale.

5.2. CURRENT COMMERCIAL ENVIRONMENT

This section provides the relevant background context for the assessment of a potential commercial centre within the Beachlands South PPC area. It does so by providing a detailed overview of the current centre network and discussing the implications of the residential yield potential in the PPC on the appropriate scale of a commercial centre within the Beachlands South PPC.

Figure 10 below shows the zones for each of the commercial centres in the surrounding area having specific points for each Town Centre or Metropolitan Centres.

FIGURE 10: COMMERCIAL CENTRES IN EAST / SOUTH AUCKLAND



There are four different levels of business zoning that forms a distinct commercial centre hierarchy with a clear role and function for each of the centres. The Zone types are as follows:

- **Neighbourhood Centre Zone** – Single corner stores or small shopping strips located in residential neighbourhoods. This commonly includes your local takeaway shop, dairy and convenience services like hairdressers as an example. These centres provide frequent retail and commercial service needs to local community and passers-by and as such are scattered through the residential areas. This is evident in the almost polka dot appearance of each of these centres on the map such as those surrounding the Ormiston Town Centre on Figure 10.

Ideally, residents are able to walk or have to drive only a short distance to their local Neighbourhood Centre and they are not designed to rely on public transport.

- **Local Centre Zone** – The Local Centre Zone provides for a larger retail centre that while often containing predominately convenience retail and services, are permitted to include a range of retail, office, and commercial service activities. Local Centres often take the form of a small to medium-sized shopping centre anchored by a major supermarket brand.

While retail with a larger reach like clothing may be facilitated within the centre, these activities are less common, instead focusing on convenience goods and services such as Food and Beverage, bookstores and Pharmacies.

Under the Unitary Plan, the permitted commercial activities include retail up to 450sqm, Offices up to 500sqm and Supermarkets up to 2,000sqm. Activities that exceed these requirements are Restricted Discretionary.

- **Town Centre Zone** – This zone is applied to suburban centres throughout Auckland and satellite townships such as Pukekohe. The provisions in this zone allow for a wider range of activities including commercial, leisure, residential, tourist, cultural, community and civic services.

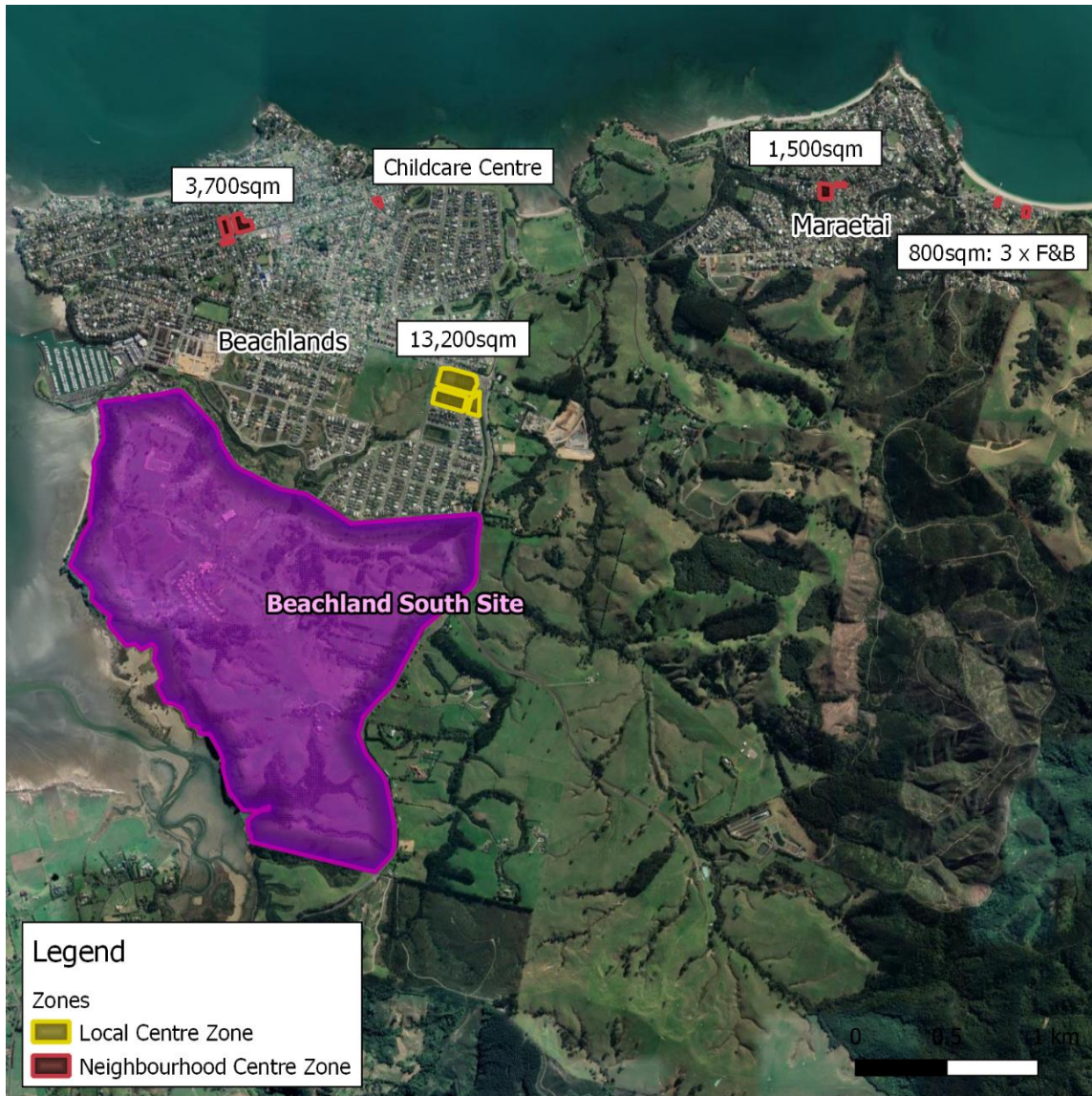
A Town Centre is designed to service a broader catchment and permits large format retailing, a cinema complex and other entertainment facilities. In essence, it is a more fulsome range of commercial activities enabled to satisfy the surrounding suburbs, but not of a scale that would attract material custom from other areas of the city.

- **Metropolitan Centre Zone** – Metropolitan Centres are the largest centres outside of Auckland's CBD in both "*overall scale and intensity*". Metropolitan Centres generally contain large malls such as Sylvia Park, Westfield Manukau and Albany, although the Metropolitan Centre in Papakura is an exception when assessed against key economic metrics.

The Unitary Plan states, Metropolitan Centres are designed to act as "*focal points for community interaction and commercial growth and contain hubs serving high-frequency transport*". Metropolitan centres draw customers from a very wide catchment and are typically built on a large retail and commercial GFA base.

In particular, the Botany Metropolitan Centre is the closest major commercial centre to the Beachlands / Maraetai population base. This centre would attract the majority of the local residents spending within several of the core retailing categories such as Clothing stores and Department Stores.

FIGURE 11: BEACHLANDS / MARAETAI COMMERCIAL CONTEXT



Source: Auckland Council, Property Economics, CoreLogic

Although several activities in the Beachlands Local Centre are convenience spend in nature, it is designed with a wider goal in mind, catering to a wider range of commercial uses. In total, this centre contains around 13,200sqm of retail and office floorspace including a 3,600sqm Countdown, a 636sqm Early Learning Centre and a 1,702sqm Mitre 10 store. Examples of some of the other key tenants include gyms, food and beverage outlets, local medical facilities (i.e., Dentist) hairdressers and professional services (i.e., Accountancy firm). This area of Local Centre Zoning also includes approximately 3,200sqm of Vacant Land which is likely to service at least 1,400sqm of floor space (or more depending on parking requirements).

In addition to the local centre, the Beachlands / Maraetai area is home to three neighbourhood centres. Including the retail floorspace in Whitford, the additional retail provision totals 6,490sqm of floorspace as outlined in Table 15 below. There is no town centre in Beachlands at present.

TABLE 14: EXSITING NEIGHBOURHOOD CENTRE FLOORSPACE AND ZONED LAND

Neighborhood Centers	Convenience Floorspace	Total Zoned Land Area (ha)
Whitford	1,200	2.11
Beachlands	3,700	1.27
Maraetai	790	0.63
Maraetai (Beachfront)	800	0.24
Total	6,490	4.25

Source: Auckland Council, Property Economics, CoreLogic

5.3. LOCAL RETAIL CATCHMENT

The following sections set out the projected retail expenditure and sustainable GFA forecasts for a potential commercial centre within Beachlands South PPC. These forecasts have been based on both 3,500 and 4,500 dwelling scenarios and have been prepared using Property Economics' Retail Growth Model.

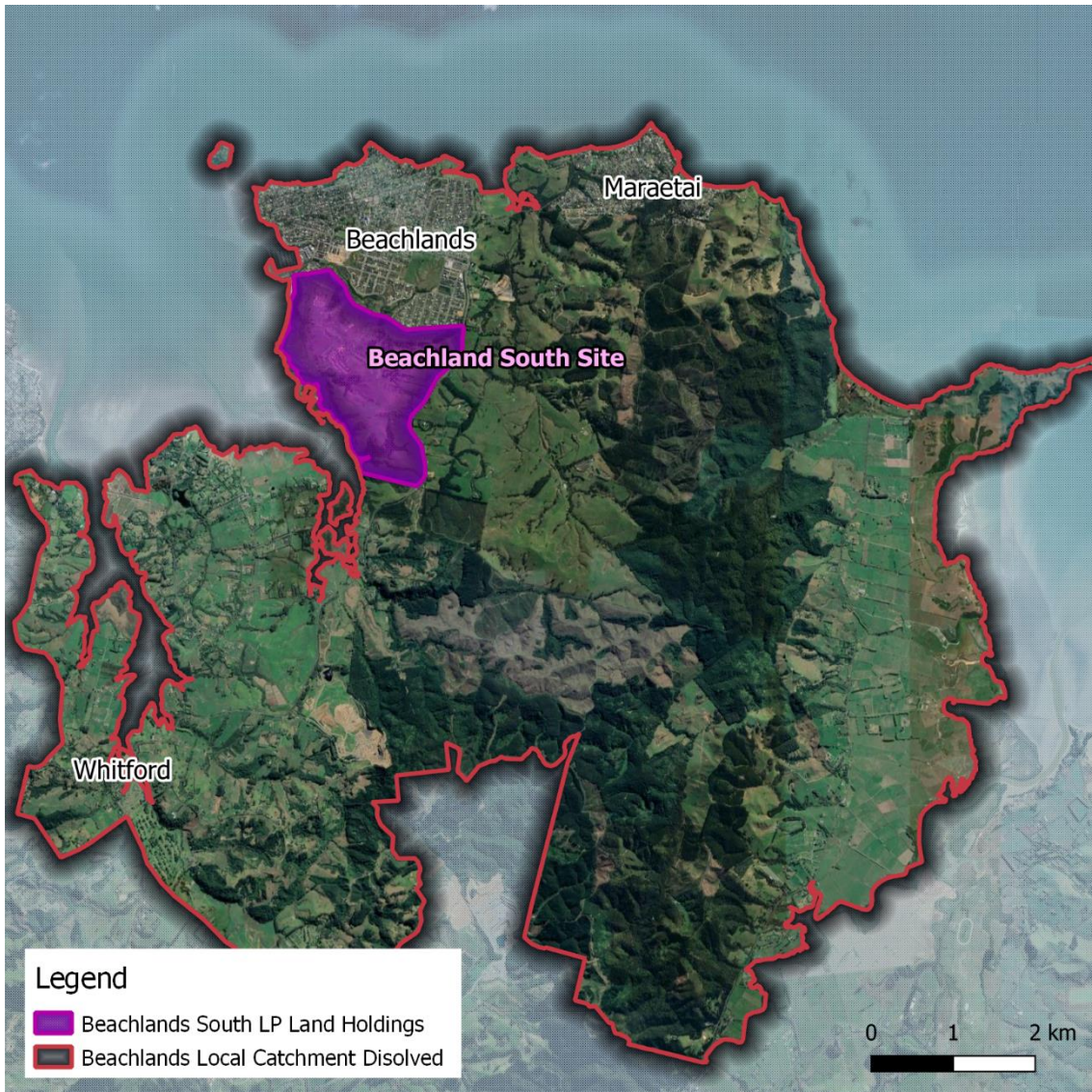
These dwelling capacity scenarios and the work for the retail centre were undertaken prior to finalisation of the Structure Plan. Under the current proposal, the full development will include a total of around 3,800 including the FUZ and 51ha of additional land outside of BSLP control that will deliver further capacity. The retail centre development is therefore appropriately based on a development of 4,500 dwelling scenarios.

In estimating the retail development potential (or opportunity available) for the proposed Beachlands South centre and assess its potential impacts, it is necessary to first identify its core economic market. The core economic market or retail catchment is essentially the geographic area from which the proposed centre is likely to derive the majority of its sales or the area the centre is designed to primarily service, and where the centre is considered to have a strategic locational advantage in terms of proximity over other centres. Consequently, this catchment is independent of and different to the catchments drawn in the residential section of this report.

Ultimately, the extent of the retail catchment depends on the role and function of any commercial centre in development. BSLP has indicated that the centre is likely to be positioned as a boutique convenience centre catering to a wealthier market.

Figure 12 illustrates the geospatial extent of the proposed centre's core retail market. This has been based on the existing and proposed supermarket network, road network, natural and physical geographical barriers and the professional opinion of Property Economics in known shopping patterns and trade area dynamics for retail developments in New Zealand.

FIGURE 12: BEACHLANDS SOUTH CORE/LOCAL CATCHMENT



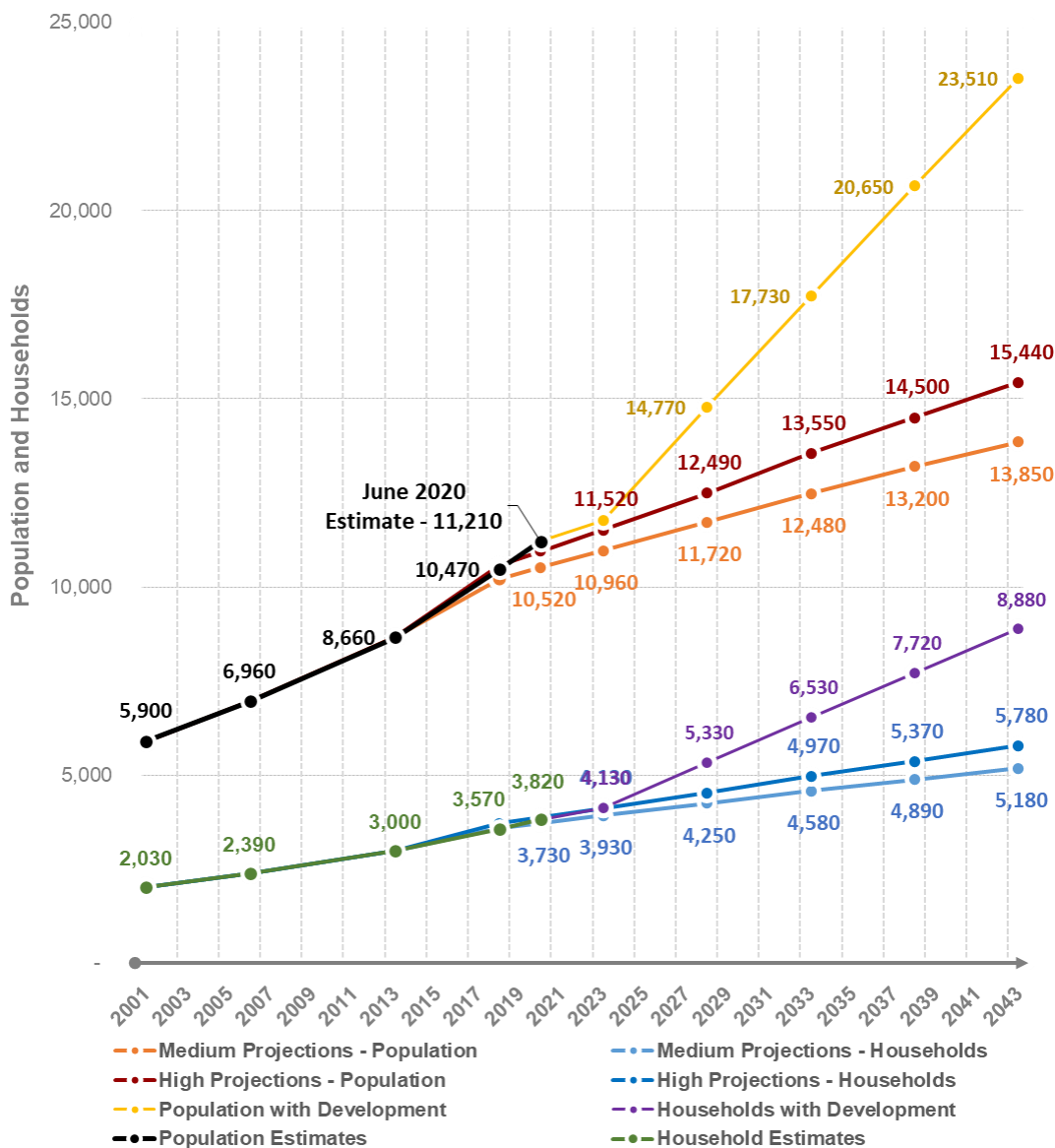
Source: Property Economics, Auckland Council



5.4. POPULATION GROWTH

Figure 13 below displays the population and household growth projections within the localised retail catchment. As discussed in the residential section, the population growth projections for more localised areas are yet to be updated to reflect the 2018 Census base by Statistics NZ. We, therefore, derive these projections from the latest available Statistics NZ population growth projections for both the High and Medium growth series. We then make a comparison between the current population estimates determined in the 2018 Census against the growth that was anticipated.

FIGURE 13 POPULATION PROJECTIONS AND ESTIMATES FOR COMBINED AREAS



Source: Property Economics, Statistics New Zealand

The identified local market had an estimated population of 11,210 residents in June 2020. This recent growth has so far tended towards the Statistics NZ High Projection having exceeded the Medium Projection by almost 700 residents. This growth of 2,550 residents over the last 7 years



is equivalent to growth of 29%, almost double the growth rate of the wider Auckland Region at 15% over the same period. Under this Statistics New Zealand High projection, the number of residents is projected to rise to 15,440 residents by 2043 and 5,780 households.

For the purposes of assessing the retail requirements following a successful PPC, we understand the dwelling yield for Beachlands South ranges between 2,500-4,500 homes to be additional to the growth that was anticipated under the Medium projection. This represents the residential growth within the wider Auckland market that will be supported by this development.

The projection with the development shown on Figure 13 above is based on an assumed 3,500 dwelling scenario. Under this scenario, by the anticipated completion of the development in 2043 the population is expected to be 23,510 which is equivalent to an additional 8,070 residents over the High projection.

5.5. RETAIL GROWTH MODEL

A more detailed breakdown of the Property Economics Retail Growth Model and its inputs is set out in Appendix 3.

The following flow chart provides a graphical representation of the Property Economics Retail Expenditure Growth Model to assist in better understanding the methodology and key inputs utilised.

FIGURE 14: PROPERTY ECONOMICS RETAIL GROWTH MODEL OUTLINE



GROWTH IN REAL RETAIL EXPENDITURE

For the purposes of projecting retail expenditure, growth in real retail spend has been incorporated into the model at a rate of 1% per annum over the forecast period. This 1% rate is based on the level of debt retail spending, interest rates and changes in disposable income levels, and is the average inflation adjusted increase in spend per household over the assessed period.

LAYERED RETAIL CATCHMENTS

It is important to note that the retail expenditure generated in the identified markets do not necessarily equate to the sales within that particular area. Residents can freely travel in and out of the area, and they will typically choose the centres with their preferred range of stores, products, brands, proximity, accessibility and price points. A good quality offering will attract

customers from beyond its core market, whereas a low-quality offering is likely to experience retail expenditure leakage out of its core market.

Therefore, the retail expenditure generated in an area represents the sales centres or retail stores within that area could potentially achieve and is the key influence on what the market can potentially sustain. This should not be interpreted as a negative for any potential retail activity in Beachlands South, but simply represents normal commercial market mechanisms (competition) and is a consideration that needs to be appropriately accounted for in any retail economic analysis.

EXCLUDED ACTIVITIES

The retail expenditure figures below are in 2020 NZ dollars and exclude the following retail activities, as categorised under the ANZSIC categorisation system:

- Accommodation (hotels, motels, backpackers, etc.)
- Vehicle and marine sales & services (petrol stations, car yards, boat shops, caravan sales, and stores such as Repco, Super Cheap Autos, tyre stores, panel beating, auto electrical and mechanical repairs, etc.)
- Hardware, home improvement, building and garden supplies retailing (e.g., Mitre 10, Hammer Hardware, Bunnings, PlaceMakers, ITM, Kings Plant Barn, Palmers Garden Centres, etc.)

The above retail sectors have been excluded because they are not considered to be core retail expenditure, nor fundamental retail centre activities in terms of visibility, location, viability or functionality, particularly convenience centres like the proposed commercial centre in the PPC. Modern retail centres do not rely on these types of stores to be viable or retain their role and function in the market as such stores have the potential to generate only non-consequential trade competition effects rather than flow-on retail distribution effects in the context of the RMA. Therefore, the retail centre network's economic wellbeing and social amenity cannot be unduly compromised.

The latter two bullet points contain activity types that generally have great difficulty establishing new stores in centres for land economic and site constraint reasons, i.e. the commercial reality is that for most of these activity types it would be unviable to establish new stores in centres given their modern store footprint requirements and untenable to remain located within them for an extended period of time (beyond an initial lease term) in successful centres due to property economic considerations such as rent, operating expenses, land value, operational and functional requirements and site sizes.

Trade orientated activities such as kitchen showrooms, plumbing stores, electrical stores and paint stores are also excluded from the model for similar reasons. This is not to imply that these activity types are not situated in centres, as in many instances some of these stores types remain operating in centres as a historic overhang.

However, in the future, it is increasingly difficult from a retail economic perspective to see these store types establishing in centres (new or redeveloped), albeit they likely have equal planning opportunity to do so. As such, demand for these store types is additional to the retail demand assessed in this analysis. In essence, these store types are not convenience centre activities.

CONVENIENCE STORES

Convenience retailing can be generally defined as stores used for quick stop and frequently required shopping, used primarily due to their close proximity and easy accessibility for the customer. These stores are not exclusive to any one retail category with examples of such stores including, dairies, bakeries, fruit & vegetable stores, cafes and restaurants.

Supermarkets, albeit being a large footprint store, are also classified as convenience stores given they predominantly service more localised catchments, the products sold are largely homogenous between supermarket stores and they tend to be fairly evenly distributed right across an area's urban fabric.

SUSTAINABLE GFA

This analysis uses a sustainable footprint approach to assess retail demand. Sustainable floorspace in this context refers to the level of floor space proportionate to an area's retainable retail expenditure that is likely to result in an appropriate quality and offer in the retail environment. This does not necessarily represent the 'break even' point, but a level of sales productivity (\$/sqm) that allows retail stores to trade profitably and provide a good quality retail environment, and thus economic wellbeing and social amenity.

It is also necessary to separate the Gross Floor Area into:

- Net retail floorspace (Sustainable Floorspace); and
- Back office floorspace that does not generate any retail spend (**Back Office Floorspace**).

A store's net retail floor area only includes the area which displays the goods and services sold and represents the area which the general public has access. By contrast, the Gross Floor Area typically represents the total area leased by a retailer. Back Office Floorspace in a retail store is the area used for storage, warehousing, staff facilities, admin functions, toilets and other 'back office' uses.

These activities on average occupy around 25-30% of a store's GFA but can vary (higher and lower) between individual retailers based on operational and functional requirements. It is important to separate out such back office floorspace from sustainable floorspace because back office floorspace does not generate any retail spend. For the purposes of this analysis a 30% ratio has been applied.

5.6. RETAIL EXPENDITURE

Table 15 breaks down the total retail expenditure on an annualised basis of the Beachlands Local catchment from 2020 till 2043. These values include the expenditure of an 'at capacity'

Beachlands South Development (at around 2043) and is based on the demographic composition and household income levels of those currently living in the Local Catchment.

TABLE 15: ANNUAL BEACHLANDS CATCHMENT RETAIL EXPENDITURE (\$M)

	2020	2023	2033	2043
Food retailing (Specialty)	\$14	\$15	\$23	\$32
Supermarket (Large Format Food Retailing)	\$43	\$46	\$70	\$95
Food and beverage services	\$31	\$34	\$45	\$57
Total Food Retail Expenditure	\$89	\$95	\$138	\$184
Clothing, footwear and personal accessories retailing	\$7	\$7	\$9	\$11
Furniture, floor coverings, houseware and textile goods retailing	\$4	\$4	\$6	\$8
Electrical and electronic goods retailing	\$5	\$5	\$8	\$10
Pharmaceutical and personal care goods retailing	\$9	\$9	\$13	\$17
Department stores	\$10	\$11	\$15	\$18
Recreational goods retailing	\$4	\$4	\$6	\$8
Other goods retailing	\$31	\$34	\$45	\$57
Total Retail Expenditure	\$158	\$170	\$240	\$314

Source: Property Economics

The total retail expenditure generated by the Local Catchment including the Beachlands South development is \$314m by 2043. Food related retailing and services forms the bulk of any market's retail expenditure, representing around 59% of the Beachlands South market.

By itself, this is sufficient retail expenditure to sustain a local centre with a range of retailing and commercial services, a role that the existing Beachlands Local Centre is designed to support.

As such, large format retail and national banner brands (excluding supermarkets) typically found in larger town and metropolitan centres and shopping malls would not be suitable retail activities for the prospective Beachlands South local centre that is provided for by the PPC. These store types such as Harvey Norman, Moochi, Mecca, Noel Leeming, Farmers etc. all require draw from large catchments whereas Beachlands is more appropriately pitched at convenience retail and commercial service activities.

Property Economics has therefore limited the scope of retailing to focus on convenience retail spend. This retailing activity represents the spending typically done within a localised area and consumers are less willing to travel for, thereby giving the retail in Beachlands a competitive advantage.

At a broad level, convenience retail spend is estimated to represent around 19% of all retail expenditure and this proportion has been adopted for the purpose of this analysis.

Table 16 below shows how the retail demand from Table 15 above is translated into Convenience and Grocery Store expenditure. In this case, the Local Catchment with the additional 3,500 dwellings in Beachlands South is projected to grow to \$45m in Convenience store spend by 2043.

TABLE 16: CONVENIENCE AND SUPERMARKET BEACHLANDS 'AT CAPACITY' EXPEDITURE

Local Catchment	2020	2023	2028	2033	2043
Convenience	\$20.3	\$21.6	\$26.9	\$32.7	\$45.1
Grocery Stores	\$9.3	\$10.0	\$12.6	\$15.4	\$21.7
Total	\$29.6	\$31.5	\$39.5	\$48.1	\$66.7

Source: Property Economics

5.7. CENTRE LAND REQUIREMENTS

Table 17 following illustrates the total sustainable land requirements for convenience and grocery store retail activities within both the Local Catchment under Scenario 1 and the Development alone under the two scenarios (3,500 dwellings and 4,500 dwellings). It excludes land for urban parks, roads, reserves, playgrounds, community and education facilities that BSLP may want to incorporate in the proposed centre within the PPC area. Land for these land uses would be additional to the land areas identified in Table 17.

Additionally, for this localised convenience centre:

- Non-Retail Commercial Service land requirement is assumed to be 50% of the retail land requirement, and;
- Approximately one-third of generated convenience spend is assumed to leave the catchment, but this is likely offset by the inflow of spend into the area (i.e., weekend visitors).
- Commercial service GFA is assumed to have a 2-storey average (which halves its ground level land requirement).

TABLE 17: SUSTAINABLE CONVENIENCE LAND REQUIREMENTS

Beachlands South (2043)	Scenario - 1 (3,500 dwellings)	Scenario - 2 (4,500 dwellings)	Local Catchment (Scenario 1)
Grocery Store Demand (\$m)	\$9.0	\$11.6	\$21.7
Grocery Store Floorspace	1,430	1,840	3,440
Convenience Retail Demand (\$m)	\$17.0	\$21.9	\$45.1
Convenience Retail GFA (sqm)	3,240	4,170	8,590
Non-Retail Commercial Service (sqm)	2,340	3,010	6,020
Total Retail / Commercial Service Requirement (sqm)	7,010	9,020	18,050
Retail Land (sqm)	10,380	13,360	26,730
Non-Retail Commercial Service Land (sqm)	2,600	3,340	6,690
Total Retail / Commercial Service Requirement (sqm)	12,980	16,700	33,420
Likely Land Requirement (ha)	1.30	1.67	3.34
Likely Land Requirement (ha) + NPS Buffer	1.49	1.92	3.84

Source: Property Economics

At a broader level the local catchment under Scenario 1 can sustain around 18,000sqm convenience activity. Currently, the convenience needs of the local catchment is serviced through the areas previously identified in Figure 11, with the new Beachlands Local Centre (where the Countdown is located) forming the bulk of the commercial floorspace.

Given the growth potential of this local centre and the existing retail supply in comparison to the requirements of the Local Catchment, Property Economics believes the existing retail supply is sufficient to service the convenience retail needs of the balance of the Retail Catchment. Consequently, any retail activity in the Beachlands South development should service the development itself.

Under Scenario 1, the Beachlands South development could sustain around 7,000sqm GFA (including a circa 1,400sqm metro supermarket/grocery store) equating to a land requirement for the retail and commercial services footprint of the centre of around 1.5ha once fully developed. Under the second, higher dwelling scenario the land requirement is increased to around 2ha.

As noted earlier additional to this land requirement is land for any public squares, community facilities, reserves, playgrounds, roads, etc. BSLP may want to incorporate into the centre. Therefore the 1.5ha and 1.92ha represents the commercial elements of the sustainable convenience activities.

5.8. APPROPRIATE CONVENIENCE OPTIONS

The potential range of tenancy types considered appropriate and sustainable for an Beachlands South commercial centre, given its convenience role and function in the market, is highlighted in the following list.

Note this is not intended to represent an exhaustive list, simply an indication of the types of convenience retail and commercial & professional services businesses that could fit seamlessly into such a centre that would meet the local community's convenience and frequently required commercial needs.

EXAMPLES OF CONVENIENCE RETAIL STORE TYPES

- Supermarket / grocery store
- Superette / Dairy / Mini mart
- Fish shop
- Butcher
- Bakery
- Post Shop / Stationery
- Fruit & Vege Shop
- Delicatessen
- Cake Shop
- Ice Cream Parlour
- Liquor / Wine Shop
- Takeaways (Fish & Chips, Pizza, Chinese, Thai, Turkish, Indian, etc.)
- Cafés & Restaurants
- Newsagent
- Pub / Bar / Tavern

- Florist
- Gift Shops
- Pharmacy

EXAMPLES OF CONVENIENCE COMMERCIAL / PROFESSIONAL SERVICE ACTIVITIES

- Optometrist
- Locksmith
- Hairdresser
- Drycleaners
- Doctors
- Accountants
- Physiotherapists
- Medical practitioners
- Dentists
- Travel agency
- Childcare facilities
- Banks
- Financial Advisors
- Gym
- Lawyers

5.9. EMPLOYMENT LAND DEMAND

Additional to the land requirement identified above is the potential for a more focused / specific office building for boutique businesses who desire an innovative / co-working / hot desking type office premises and environment. This is seen as a gap in the Beachlands / Maraetai offer at present and offers an opportunity to reduce the level of employment leakage from the local catchment on a daily basis.

As was discussed and outlined in the residential section of this report, only 28% of the workforce work within the Beachlands / Maraetai area, with the remaining 72% of employed residents commuting outside the local catchment to other employment locations across Auckland. This high level of employment leakage clearly shows a market opportunity to improve employment market efficiency.

Furthermore, the demographics of both the Beachlands / Maraetai Local Catchment and the Eastern Beaches area (including Mellon's Bay, etc.) showed a higher rate of business ownership (proportionally more residents received income from a business they owned than the Auckland average). These residents have a greater ability and choice around where to locate their business than regular employees, so the propensity for uptake of any modern/innovative office space within Beachlands South is higher than other areas of Auckland.

This can also be shown in Table 18 below comparing the proportional differences in the number of employees across each industry against the existing resident's employment. The lower the percentage, the worse the employment internalisation for that sector or conversely the greater the market opportunity. This shows that only 18% of the commercial sectors such as Professional, Scientific and Technical Services are employed within the local catchment and thereby heavily under-represented.

By the nature of the efficient conglomeration of business activity, commercial office activity is concentrated in the key Metropolitan and City Centres. This is neither unexpected nor desirable to fundamentally shift, however, there is the potential for some co-working / flexible / collaborative spaces to enable the internalisation of even a small proportion of this workforce. Future opportunities for industry activity such as food tech industries, sustainable business initiatives, innovation hubs, tech business / start-ups and collaborative enterprises may also exist which would include AI, coding, gaming and robotics engineering businesses.

These activity types are considered to identify business activity required in the future and that is currently missing (or a proportionally lower component of employment in the Beachlands economy) where Beachlands may have an opportunity to better meet its future community needs. The success of such activities within the Beachlands South centre will in part depend on the attractiveness of the centre, the experience it offers, the quality of the built form and environment, and the quality of the retail stores and commercial/professional services offered.

TABLE 18: BEACHLANDS EMPLOYMENT COMPARED TO LOCAL WORKFORCE

ANZSIC	Local Resident Employment Base	Employed in Beachlands Catchment	
A - Agriculture, Forestry and Fishing	84	34	40%
B - Mining	9	52	578%
C - Manufacturing	702	134	19%
D - Electricity, Gas, Water and Waste Services	57	33	58%
E - Construction	744	241	32%
F - Wholesale Trade	528	48	9%
G - Retail Trade	396	113	29%
H - Accommodation and Food Services	195	134	69%
I - Transport, Postal and Warehousing	375	119	32%
J - Information Media and Telecommunications	78	3	4%
K - Financial and Insurance Services	150	12	8%
L - Rental, Hiring and Real Estate Services	147	24	16%
M - Professional, Scientific and Technical Services	636	75	12%
N - Administrative and Support Services	174	27	16%
O - Public Administration and Safety	186	126	68%
P - Education and Training	519	170	33%
Q - Health Care and Social Assistance	384	57	15%
R - Arts and Recreation Services	90	60	67%
S - Other Services	255	51	20%
Total All Industries	5,709	1,513	27%

Source: Property Economics

At present the office sectors' employment internalisation in the Beachlands / Maraetai catchment is around 18%. Increasing this to 25% by 2043 would sustain an additional 5,600sqm GFA for modern innovative office premises. All at grade would require just over 1ha, albeit this could be reduced commensurately if multi-storeyed.

This would give the centre total land requirement for commercial activities (retail, commercial services / offices) of around 2.5ha excluding roads, parks, etc. once Beachlands South is fully developed.

Ultimately, Table 18 shows there is significant potential for Beachlands to provide more local employment opportunities.

5.10. PROPOSED EMPLOYMENT HUBS

The Structure Plan outlines the land uses and total floorspace proposed to be established within the two main employment hubs. This employment land is considered essential to ensure there is a meaningful increase in employment internalisation within Beachlands. That is, more local employment opportunities for local Beachlands residents. This is also important to providing a balanced community rather than simply a dormant residential suburb. A growing community requires increased local services to support and facilitate that growth. The Structure Plan and accompanying PPC represent a positive step to satisfy the growing local employment opportunities and demand.

The first of these is the Village Centre employment area which is currently proposed to include:

- 1,335sqm of Commercial Offices (estimate 50 employees),
- A 3,760sqm Innovation Hub (estimate 130 employees),
- 6,375sqm of Retail floorspace including Metro-supermarket and Specialty Retail (estimate 150 employees), and,
- Community facilities (estimate 20 employees).

In total, this Village Centre is estimated to provide roughly 350 employees, just over half (180) of which are Commercial with the majority of the balance (150) in the retail sectors.

The second employment hub is a service / light industrial zone on the corner of Jack Lachlan Drive and Whitford-Maraetai Road. This is proposed to provide capacity for approximately 12,000sqm GFA of Light Industrial activity and 70 live work units. These units will include 85sqm of workshop space, thereby raising the total potential service / light industrial floorspace to around 18,000sqm GFA. Assuming a typical mix of light industrial activities are developed, Property Economics estimate that this could further deliver around 240 jobs to the Beachlands area.

Lastly, Beachlands South LP have proposed several other activities that will generate further employment within the Structure Plan area. These include

- A Retirement Village with 100 – 150 units (estimate 40 - 50 employees)
- Conference Centre (estimate 20 employees),
- Hotel with 150 keys and 9-hole golf course (estimate 100 employees),



- Primary School of approx. 900 students and Secondary School with approx. 2,000 students (estimate 150 - 200 employees).

It is estimated that the combination of these activities could contribute between an additional 310 – 370 jobs to the Beachlands market.

Combined, these employment areas and activities are estimated to provide for upwards of 960 employees.

6. ECONOMIC COSTS AND BENEFITS

This section highlights the costs and benefits of the PPC and subsequent development through an economic lens.

6.1. BENEFITS

MEDIUM-HIGH DENSITY RESIDENTIAL ZONES

There are a number of potential economic benefits from the PPC including:

- Increased range of housing typologies
- Greater spectrum of house prices
- Increased choice of location options
- Efficiencies of infrastructure and marginal costs
- Lower transport costs
- Increased rate of appreciation
- Improved value of residential area
- Increased diversity in buyer 'pool'
- Increased local employment opportunities
- Greater level of growth
- Private sector infrastructure investment

These are articulated in more detail below.

Greater Range of Housing Typologies:

In an economic environment where the market identifies a diverse range of circumstances, expanding the residential typologies or choices available to consumers enable them to make decisions that better suit their personal needs and preferences. In this regard, the provision of any additional residential product provides more options that, putting aside the costs element, will improve the community wellbeing. However, what is important is the extent of this benefit or demand for the product in comparison to the costs.

In the case of this planned residential development, the produced residential options are likely to be highly desired by the community. This represents the opportunity to provide new homes in a location with coastal village lifestyle qualities. The relatively high value of the homes in this area despite being located outside of the main Auckland urban boundaries demonstrates the preserved value of the local natural amenities and features

A greater range of housing options (standalone, terraced and apartment dwellings) is enabled with higher density zoning. This provides existing residents and potential future residents with a greater range of choice for their living arrangements. In turn this provides improved accessibility as well as price points.

Greater Range of Price Points:

A greater range of price points may also be enabled as a developer's average costs (price per dwelling) are decreased with higher allowable densities. This is the result of a higher land price

being spread over more purchasers and is typically geared toward the lower end of the pricing brackets (i.e., an increase in affordability).

An increase in the general supply of housing is generally positive for housing affordability as wealthier households upgrade to higher end housings they free up lower end housing stock. While Medium density zones typically result in an increase in the per square metre value of land the proportional utilisation of land is generally higher (when tending towards capacity) thereby reducing the cost of land per dwelling.

Increased Choice of Location:

A higher level of density also enables more choice in location for residents as more people can occupy the same environ. This is, of course, dependent on the dispersion of medium density areas, but typically providing higher density zones around the main centres and in convenience centre locations is more optimal as these areas can provide their amenity to a larger number of people.

Increased Efficiency:

Greater density zoning typically provides a more efficient use of infrastructure. The larger number of people in an area means greater returns on the use of the local infrastructure. This can vary depending on the level of unused capacity of existing infrastructure and the cost of replacement / upgrade of said infrastructure.

Further, any future improvement in infrastructure will benefit a greater number of people – this includes any three waters upgrades, berm / park improvements, waste collection, transport upgrades, etc.

Increased Local Employment Retention:

There is increased access to employment opportunities using higher density zoning as more people will be able to occupy a smaller area. This means employment opportunities are incentivised to locate a short distance away from the higher density areas, and vice versa.

The PPC will enable local employment opportunities within the PPC area which will result in a net increase in the Beachlands local employment base, and therefore generate a positive benefit to the local economy.

Lower Transport Costs:

Higher density zoning also provides lower transport costs as a greater number of people will be able to access efficient transport links. This means there is a greater benefit of providing public transit and higher capacity roading near areas of high-density dwellings.

Increased Rate of Appreciation:

High density zoned land appreciates at a faster rate than low density zoned land, particularly if it is less-, or un-, developed. This is because the real option price of development is higher based on allowable density and lower based on existing development. This higher appreciation rate means that future development will be more likely to occur in these areas as the development feasibility is increased due to the decrease in improvement to land values.

High Value Residential Area:

Beachlands is a high value area where residential property is desired, which is reflected in the high property prices, and is therefore prime for additional residential activity. New residential land use would leverage off the existing amenity values for a greater number of people, with limited changes in marginal value.

Diverse Buyer Pool:

Beachlands is an attractive suburb for a broad range of homebuyers including young professionals, young couples and families and retirees and additional residential development would likely stimulate demand within a diverse group of people.

Increased Local Employment:

The increased population will result in a net increase in the number of full-time equivalent employees able to work within Beachlands and the surrounding suburbs. This will be a net gain for the local economy and stimulate further growth and amenity improvements for the area.

Greater Levels of Growth:

Growth from residential developments can often work as a catalyst that spurs further growth in the area. A large residential development could increase interest for additional residential / small-scale commercial activity within the Beachlands and provide significant impetus for growing its local economy.

Private Sector Infrastructure Investment:

BSLP proposes to spend around \$210m, out of a circa \$450m total infrastructure investment, to increase above and below ground infrastructure capacity in Beachlands beyond the PPC area. This would generate significant infrastructure benefits for the wider Beachlands / Maraetai communities, and not just the new Beachlands South community. This includes upgrading to the Whitford – Maraetai Road to improve vehicle capacity and safety. There is also a levy on future development within the PPC area to cover infrastructure requirements.

NEIGHBOURHOOD CENTRE / LOCAL CENTRE ZONE

Employment and Convenience:

Centres generate employment opportunities and convenience retail / services and amenity for residents. These are highly valued hedonic characteristics for homebuyers, particularly when so proximate for frequently required purchases.

Lower Transport Costs:

Reduced congestion traffic of larger, destination centres. Convenience centres are able to ease pressure off larger centres by providing some day-to-day retail and commercial service options that would otherwise be provided by larger centres.

Increased Amenity:

Convenience centres, particularly planned centres, increase the amenity of an area by providing a hub for the local community. This also directs and bounds higher road and foot traffic to these areas that may otherwise be in residential areas.

6.2. COSTS

MEDIUM-HIGH RESIDENTIAL ZONES

Some of the economics costs of the PPC include:

- Diversion of growth
- Low amenity outcomes
- Increased congestion

This are conveyed in more detail below.

Diversion of Growth:

The development of Beachlands could potentially divert growth away from other growth nodes. This could impact growth nodes that are aiming at even higher densities such as high-rise apartments, particularly those markets closer to Beachlands rather than the CBD.

Low Amenity Outcomes:

Higher density residential developments can suffer from lower amenity outcomes due to increased light-, noise-, waste-pollution as well as higher levels of traffic. This can be damaging to both the environment and the existing populations amenity values in neighbouring suburbs.

Increased Congestion:

Greater numbers of people would use the transport network in place and increase the risk of congestion and degradation of network infrastructure. However, as identified under the discussion of Economic Benefits above the developer proposes to carry out extensive roading and infrastructure upgrades to mitigate the effects of the development enabled by the PPC which would provide significant infrastructure benefits for the wider community at no financial cost. Further, the replacement cost of infrastructure is likely offset by the efficiency gains of replacing it for a larger number of users.

6.3. CONCLUSION

The proposed development, as provided for by the PPC, is designed to both accommodate, and be a stimulatory development for, the expansion of the Beachlands coastal community. Growth over the last decade in Beachlands has been strong, fuelled by the urban expansion and rising house prices in Auckland. By providing a range of typologies and price points, Beachlands South provides increased choice and is generally positive towards Auckland's overall housing affordability.

This high-density development will deliver an efficient greenfield development that leverages off and improves the efficiency of the existing infrastructure. This is assisted by the significant private sector investment that will ensure this development is cost efficient for the Council. Added to this is the strong transport links with a direct ferry connection to the Auckland CBD. Beachlands provides an ideal opportunity to deliver efficient coastal town expansion given its strong proximity and linkages to Auckland's existing urban form.

The developers have included a local centre and a mixed-use zone that will provide more local employment opportunities for local Beachlands residents. This is also important to providing a balanced community rather than simply a dormant residential suburb. A growing community requires increased local services, amenities and employment opportunities to support and facilitate that growth, and the PPC represents a positive step to satisfy the growing local employment opportunities and demand.

Although there are some costs associated with this PPC, Property Economics consider these be minor. On balance, Property Economics consider the potential economic benefits of the Beachlands South development and the PPC significantly outweigh the potential economic costs.

APPENDIX 1 – DEMOGRAPHIC PROFILING

	Beachlands	Eastern Beaches	Howick Local Board	Auckland Region
GENERAL				
Population	12,490	16,050	155,430	1,717,450
Households	4,240	5,700	49,310	555,940
Person Per Household Ratio	2.95	2.82	3.15	3.09
Intercensal Population Growth (Total	1,994 3.8%	405 0.5%	14,498 2.1%	161,882 2.1%
AGE PROFILE				
0 - 9 Years	14%	9%	13%	13%
10 - 19 Years	15%	16%	14%	13%
20 - 29 Years	9%	10%	13%	16%
30 - 39 Years	11%	9%	14%	15%
40 - 49 Years	18%	15%	14%	13%
50 - 59 Years	16%	16%	13%	12%
60 - 69 Years	11%	13%	10%	9%
70 - 79 Years	6%	8%	6%	5%
80 Years and Over	2%	4%	3%	3%
Median Age	41.4	44.5	37.1	34.7
Household Income				
\$20,000 or less	3%	5%	6%	8%
\$20,001-\$30,000	5%	6%	6%	7%
\$30,001-\$50,000	7%	11%	11%	12%
\$50,001-\$70,000	8%	10%	11%	11%
\$70,001-\$100,000	13%	13%	15%	15%
\$100,001-\$150,000	21%	20%	23%	21%
\$150,001 or more	42%	35%	27%	26%
Median Income	\$132,000	\$114,000	\$100,000	\$94,000
ETHNICITY				
Asian	5%	23%	43%	25%
European	81%	68%	42%	47%
Maori	8%	4%	5%	10%
Middle Eastern Latin American African	1%	1%	2%	2%
New Zealander	1%	1%	1%	1%
Other Ethnicity	1%	1%	1%	1%
Pacific Peoples	2%	2%	5%	14%
QUALIFICATION ATTAINMENT				
No qualification	12%	10%	13%	15%
Overseas secondary school qualification	6%	10%	13%	9%
Level 1 certificate	12%	9%	8%	9%
Level 2 certificate	10%	9%	7%	8%
Level 3 certificate	10%	10%	11%	12%
Level 4 certificate	10%	7%	6%	7%
Level 5 diploma	5%	5%	5%	5%
Level 6 diploma	7%	7%	5%	5%
Bachelor degree and Level 7 qualification	16%	19%	20%	19%
Post graduate and honours degrees	7%	7%	6%	7%
Masters degree	4%	6%	5%	5%
Doctorate degree	1%	1%	1%	1%
LOCATION 5 YEARS AGO				
Elsewhere in New Zealand	47%	35%	38%	41%
No fixed abode five years ago	0%	0%	0%	0%
Not born five years ago	7%	4%	7%	8%
Overseas	5%	11%	12%	12%
Same as usual residence	41%	51%	43%	40%

	Beachlands	Eastern Beaches	Howick Local Board	Auckland Region	
EMPLOYMENT	Employed Full time	56%	48%	51%	52%
	Employed Part time	16%	16%	13%	14%
	Not in the Labour Force	25%	34%	32%	30%
	Unemployed	2%	3%	3%	4%
	0	0	0	0	
EMPLOYMENT CLASSIFICATION	Clerical and Administrative Workers	13%	13%	13%	12%
	Community and Personal Service Workers	8%	8%	8%	9%
	Labourers	4%	4%	6%	8%
	Machinery Operators and Drivers	4%	2%	5%	6%
	Managers	27%	25%	20%	18%
	Professionals	25%	28%	25%	26%
	Sales Workers	8%	10%	11%	10%
	Technicians and Trades Workers	11%	10%	12%	11%
PERSONAL INCOME SOURCES	Wages, Salary, Commissions, Bonuses etc paid by my employer	63%	56%	60%	62%
	Interest, Dividends, Rent, Other Investments	23%	28%	17%	15%
	Jobseeker Support	2%	1%	3%	6%
	New Zealand Superannuation or Veteran s Pension	14%	19%	14%	13%
	Other government benefits, Payments or Pension	2%	2%	3%	4%
	Other Sources of Income	1%	2%	1%	2%
	Other Superannuation, Pensions or Annuities	2%	3%	2%	2%
	Regular payments from ACC or a Private Work Accident Insurer	1%	1%	1%	1%
	Self Employment or Business I own and work in	21%	19%	15%	14%
	Sole Parent Support	1%	1%	1%	2%
	Student Allowance	1%	2%	2%	3%
	Supported Living Payment	1%	1%	1%	2%
	No source of income during that time	7%	9%	10%	8%
	INDUSTRY OF EMPLOYMENT	Accommodation and Food Services	3%	4%	6%
Administrative and Support Services		3%	3%	4%	5%
Agriculture Forestry and Fishing		2%	1%	0%	1%
Arts and Recreation Services		2%	2%	1%	2%
Construction		13%	9%	9%	9%
Education and Training		9%	10%	8%	8%
Electricity Gas Water and Waste Services		1%	0%	1%	1%
Financial and Insurance Services		3%	3%	4%	4%
Health Care and Social Assistance		7%	8%	8%	9%
Information Media and Telecommunications		1%	2%	2%	2%
Manufacturing		12%	11%	12%	10%
Mining		0%	0%	0%	0%
Other Services		4%	4%	4%	4%
Professional Scientific and Technical Services		11%	13%	11%	13%
Public Administration and Safety		3%	3%	4%	4%
Rental Hiring and Real Estate Services		3%	3%	2%	2%
Retail Trade		7%	8%	10%	9%
Transport Postal and Warehousing		6%	5%	5%	5%
Wholesale Trade		9%	9%	8%	7%

	Beachlands	Eastern Beaches	Howick Local Board	Auckland Region	
WEEKLY RENT PAID	Under \$100	0%	1%	2%	6%
	\$100 - 149	0%	0%	3%	8%
	\$150 - 199	0%	0%	2%	3%
	\$200 - 299	2%	2%	3%	6%
	\$300 - 399	21%	6%	6%	14%
	\$400 - 499	28%	21%	22%	25%
	\$500 - 599	24%	18%	29%	19%
	\$600 and over	25%	53%	33%	20%
DWELLING OWNERSHIP	Dwelling held in a family trust	26%	28%	16%	14%
	Dwelling not owned and not held in a family trust	21%	24%	33%	41%
	Dwelling owned or partly owned	53%	48%	50%	45%
DWELLING TYPE	Joined dwelling	5%	15%	16%	19%
	Other private dwelling	0%	0%	0%	0%
	Private dwelling not further defined	0%	0%	0%	0%
	Separate house	94%	85%	84%	80%
DWELLING OCCUPANCY	Dwelling Under Construction	3%	1%	1%	1%
	Empty Dwelling	4%	2%	2%	3%
	Occupied Dwelling	89%	93%	94%	91%
	Residents Away	4%	4%	3%	4%
NUMBER OF BEDROOMS	One bedroom	3%	3%	3%	7%
	Two bedrooms	10%	12%	13%	20%
	Three bedrooms	29%	32%	35%	39%
	Four bedrooms	39%	37%	31%	24%
	Five or more bedrooms	19%	15%	17%	10%
STUDYING	Full time study	24%	24%	23%	22%
	Not studying	74%	74%	75%	75%
	Part time study	3%	2%	2%	3%
Household Size	One usual resident	14%	14%	13%	18%
	Two usual residents	31%	33%	27%	29%
	Three usual residents	17%	18%	20%	18%
	Four usual residents	23%	22%	22%	19%
	Five usual residents	10%	9%	10%	9%
	Six usual residents	3%	3%	5%	4%
	Seven usual residents	1%	1%	2%	2%
	Eight or more usual residents	0%	0%	1%	2%
	Number of usual residents unidentifiable	4%	3%	3%	4%

APPENDIX 2: TRANSLATING CONSENTS TO BUILT HOMES

Statistics NZ does not provide specific data on building completions and although Auckland Council has published Code of Compliance data for the region, it is not available at the Local Board level. Instead, Property Economics has applied proportional estimates based on the data available from these two sources. The Auckland Council¹⁰ has reported 20,133 Code of Compliance Certificates issued between July 2018 – June 2020. Of these, 83% were granted to dwellings consented in the last two years. This rises to 97% counting all dwellings that were granted a consent over the last four years.

In 2017, Statistics NZ produced a Proof-of-Concept paper¹¹ regarding the possibility of publishing dwelling completion statistics. This report addressed both the average dwelling lag and cancellation rates. The most recent estimates of mean (average) dwelling lag for 2016 and 2017 were 10 months between the consent granted and building completion. This statistic fluctuated between a low of 6 months in 1998 and a high of 12 months in 2007. The report also addressed the average cancellation rates of the dwelling consents which was found to be between 2-3% on average with a high of 7% for dwellings consented in 2008 due to the Global Financial Crisis.

Property Economics has utilised this data to estimate the average completion rate by number of months and applied this to the number of new dwellings consented per month in order to estimate the new dwellings built and occupied over the 2018 – 2020 period.

This model was then sense checked against the actual number of compliance certificates issued in Auckland over the same period. This found that the modelled number of built homes was approximately 15% higher than the number of CC's. In the Statistic NZ report, the authors distinguish between completion and a code of compliance being granted stating "*Anecdotal information indicates that people sometimes live in dwellings that don't yet have a code compliance certificate and may not apply for one until the dwelling is to be sold.*". While this may explain part of this variance, the estimated number of completed houses has been adjusted down accordingly to this aforementioned regional difference.

¹⁰ *Auckland monthly housing update. Datasheet - Knowledge Auckland*

¹¹ *[proof-of-concept-subnational-dwelling-completions-and-stock-estimates.pdf \(stats.govt.nz\)](#)*

APPENDIX 3: PROPERTY ECONOMICS RETAIL MODEL

This overview outlines the methodology that has been used to estimate retail spend generated at Statistical Area 1 level for the identified catchment out to 2048.

Statistical Area 1 2018 Boundaries

All analysis has been based on Statistical Area 1 2018 boundaries, the most recent available.

Household Estimates

Statistics New Zealand have not published household estimates below the national level since 2017. As a driving input into Property Economics Retail Expenditure Model, several assumptions have been made. Specifically, the household count from the 2018 Census (available at the SA1 level) have been used to estimate the 2020 household numbers based on the population growth from Statistics NZ's population estimates which are available at the Statistical Area 2 level, while also making adjustments for changes in the population per household ratios at a national level.

Population Growth

The population growth projections utilised in projecting future household retail growth are shown in Section 4 of this report. Although the demographics at the household level drive the estimates in the distribution of the household retail spend, the growth in population has been used as the input to project future retail growth.

Statistics New Zealand's latest household projections are based on the assumption of a decreasing household size, resulting in proportionally greater household growth than population. However, the Household Expenditure Survey shows a clear positive relationship between household size and retail expenditure. Therefore, relying solely on the household growth as an indicator without adjusting for the changing demographic would artificially inflate the projected retail growth.

Given the recent trends of an increasing household size contrary to the projection assumptions, Property Economics believes projecting the retail growth based on future population growth rather than households is a more appropriate assumption. This is ultimately a conservative assumption in the decreasing household size scenario and will be more accurate the less the demographics shift.

International Tourist Spend

The total tourism retail spend has been derived from the Tourism Satellite Account and distributed to each District according to the data as published by MBIE. Within each district, this has been distributed on a 'spend per retail employee' basis. Employees are the preferred basis for distributing regional spend geo-spatially as tourists tend to gravitate toward areas of commercial activity, however they are very mobile.

Total Tourist Spend Forecast

Growth is forecast in the model at 3% per annum.

Average Household Retail Spend

The 2019 Household Expenditure survey breaks down average weekly spend by retail category on a national level by annual household income brackets and by the average number of usual residents. These have been applied to each of the geospatial units based on the distribution of household size and income for that geospatial unit as determined in the 2018 Census.

While there are variables other than household income that will affect retail spending levels, such as wealth, access to retail, population age, household types and cultural preferences, the effects of these are not able to be assessed given data limitations, and have been excluded from these estimates.

Real Retail Spend Growth (excl. trade-based retailing)

Real retail spend growth has been factored in at 1% per annum. This accounts for the increasing wealth of the population and the subsequent increase in retail spend. The following explanation has been provided.

Retail Spend is an important factor in determining the level of retail activity and hence the 'sustainable amount' of retail floorspace for a given catchment. For the purposes of this outline 'retail' is defined by the following categories:

- Food Retailing
- Footwear
- Clothing and Softgoods
- Furniture and Floor coverings
- Appliance Retailing
- Chemist
- Department Stores
- Recreational Goods
- Cafes, Restaurants and Takeaways
- Personal and Household Services
- Other Stores.

These are the retail categories as currently defined by the ANZSIC codes (Australia New Zealand Standard Industry Classification).

Assessing the level and growth of retail spend is fundamental in planning for retail networking and land use within a regional network.

Internet Retail Spend Growth

Internet retailing within New Zealand has seen significant growth over the last few decades. This growth has led to an increasing variety of business structures and retailing methods including; internet auctions, just-in-time retailing, online ordering, virtual stores, and etc.

Additionally, growth of internet retailing for virtual stores, auctions and overseas stores is leading to a decrease in on-the-ground spend and floor space demand. In order to account for

this, a non-linear percentage decrease of 8% in 2020 growing to 12.5% by 2043 has been applied to retail expenditure encompassing all retail categories in our retail model. These losses represent the retail diversion from on-the-ground stores to internet-based retailing that will no longer contribute to retail floor space demand.

Retail Spend Determinants

Retail Spend for a given area is determined by: the population, number of households, size and composition of households, income levels, available retail offer and real retail growth. Changes in any of these factors can have a significant impact on the available amount of retail spend generated by the area. The coefficient that determines the level of 'retail spend' that eventuates from these factors is the MPC (Marginal Propensity to Consume). This is how much people will spend of their income on retail items. The MPC is influenced by the amount of disposable and discretionary income people are able to access.

Retail Spend Economic Variables

Income levels and household MPC are directly influenced by several macroeconomic variables that will alter the amount of spend. Real retail growth does not rely on the base determinants changing but a change in the financial and economic environment under which these determinants operate. These variables include:

Interest Rates: Changing interest rates has a direct impact upon households' discretionary income as a greater proportion of income is needed to finance debt and typically lowers general domestic business activity. Higher interest rates typically lower real retail growth.

Government Policy (Spending): Both Monetary and Fiscal Policy play a part in domestic retail spending. Fiscal policy, regarding government spending, has played a big part recently with government policy being blamed for inflationary spending. Higher government spending (targeting on consumer goods, direct and indirectly) typically increases the amount of nominal retail spend. Much of this spend does not, however, translate into floors pace since it is inflationary and only serves to drive up prices.

Wealth / Equity / Debt: This in the early-mid 2000s had a dramatic impact on the level of retail spending nationally. The increase in property prices has increased home owners unrealised equity in their properties. This has led to a significant increase in debt funded spending, with residents borrowing against this equity to fund consumable spending. This debt spending is a growth facet of New Zealand retail. In 1960 households saved 14.6% of their income, while households currently spend 14% more than their household income.

Inflation: As discussed above, this factor may increase the amount spent by consumers but typically does not dramatically influence the level of sustainable retail floor space. This is the reason that productivity levels are not adjusted but similarly inflation is factored out of retail spend assessments.

Exchange Rate: Apart from having a general influence over the national balance of payments accounts, the exchange rate directly influences retail spending. A change in the \$NZ influences the price of imports and therefore their quantity and the level of spend.

General consumer confidence: This indicator is important as consumers consider the future and the level of security/finances they will require over the coming year.

Economic / Income growth: Income growth has a similar impact to confidence. Although a large proportion of this growth may not impact upon households MPC (rather just increasing the income determinant) it does impact upon households discretionary spending and therefore likely retail spend.

Mandatory Expenses: The cost of goods and services that are necessary has an impact on the level of discretionary income that is available from a household's disposal income. Important factors include housing costs and oil prices. As these increase the level of household discretionary income drops reducing the likely real retail growth rate.

Current and Future Conditions

Retail spend has experienced a significant real increase in the early-mid 2000s. This was due in large part to the increasing housing market. Although retail growth is tempered or crowded out in some part by the increased cost of housing it showed massive gains as home owners, prematurely, access their potential equity gains. This resulted in strong growth in debt / equity spending as residents borrow against capital gains to fund retail spending on consumption goods. A seemingly strong economy also influenced these spending trends, with decreased employment and greater job security producing an environment where households were more willing to accept debt.

New Zealand's economy has been market by several key events over the last two decades. Firstly, this trend temporally reversed in light of the worldwide GFC recession in 2008 with economic uncertainty and job losses reducing consumers' willingness and ability to accept debt. Following this however, New Zealand's economy recovered with growth in the first half of the decade driven by the Christchurch Earthquake Rebuild. Additionally, rapid inflation in the construction industry has contributed to the rapidly rising house prices. This has had a significant impact on reducing the disposable income which has flow-on effects to the rate of retail growth. Finally, most recently the COVID-19 Global Pandemic resulted in a National Lockdown with retailers forced to close under Alert Level 3 and 4.

Despite this, New Zealand's economy so far has not fallen to the same extent economists predicted heading into the first lockdown during the first quarter of 2020. Data available on Statistics New Zealand showed that total Electronic Retail expenditure declined by only 0.2% between 2020 and 2019. This is in comparison to the average annual growth of just over 5% per annum between 2010 – 2019.

From an economist perspective, COVID-19 represents significant uncertainty and thereby making the already difficult job of anticipating the future, that much harder. There are several unpredictable factors that will decide the fate of worldwide economy and it is difficult to accurately predict what long term impacts this global pandemic will have on international travel, the domestic economy and retail trends as it relates to internet retailing.

Impacts of Changing Retail Spend

At this point in time a 1% real retail growth rate is being applied by Property Economics over the longer term 30-year period. This rate is highly volatile however and is likely to be in the order of 0.5% to 1% over the next 5 – 10 years rising to 1% - 2% over the more medium term as the economy stabilises and experiences cyclical growth. This would mean that it would be prudent in the shorter term to be conservative with regard to the level of sustainable retail floor space within given centres.

Business Spend

This is the total retail spend generated by businesses. This has been determined by subtracting International Tourism retail spend and the Household retail expenditure from the Total Retail Sales as determined by the Retail Trade Survey (RTS) which is prepared by Statistics NZ. All categories are included with the exception of accommodation and automotive related spend. In total, Business Spend accounts for 36% of all retail sales in NZ. Business spend is distributed based on the location of employees in each Census Area Unit and the national average retail spend per employee.

Business Spend Forecast

Business spend has been forecasted at the same rate of growth estimated to be achieved by household retail sales in the absence reliable information on business retail spend trends. It is noted that while working age population may be decreasing as a proportion of total population, employees are likely to become more productive over time and therefore offset the relative decrease in the size of the total workforce.