



Wellington International Airport Limited Rongotai, Wellington MVAU Aeronautical Land Valuation

For Wellington International Airport Limited

1 April 2019

savills
valuation report

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Executive Summary

Addressee	Jenna Raeburn Wellington International Airport Limited PO Box 14175 Wellington 6140
Purpose of Valuation	To Establish Market Value Alternative Use (MVAU) of the Wellington International Airport Landholdings.
Interest Valued	Fee Simple subject to vacant possession.
Property Description	Wellington Airport is a modern airport catering for commercial air movements servicing New Zealand's Capital City Wellington. The landholding comprises a compact area situated between Lyall Bay and Evans Bay in Miramar and Rongotai. Some of the land has been reclaimed from the seabed and provides for a runway of approximately 1,815 metres and associated taxiways, aprons, terminal buildings and associated ancillary buildings and infrastructure.
Critical Assumptions	The report is subject to critical assumptions by necessity and the details are listed herein.
Site Area	87.5729 ha
Titles	Refer Section 3.
Zoning	A combination of Airport, Airport and Golf Course Recreational Precinct, Open Space, Outer Residential & Suburban Centre under the Wellington City District Plan Operative 2000.
Valuation Approach	Direct Comparison & Residual Feasibility Analysis.
Date of Inspection	8 May 2019
Date of Valuation	1 April 2019
Market Value Alternative Use including WANT	\$175,260,000 The above value is rounded and is stated plus GST, if any.
	Steven Dunlop
	Registered Valuer – Director
	Savills (NZ) Ltd

To any party relying on this report we advise that this summary must be read in conjunction with the attached report of which this summary forms part. This valuation summary should not be relied upon in isolation for finance or any other purposes.

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- Discounted Cashflow Calculations MVAU
- Sales Comparisons
- Boffa Miskell - Alternative Land Use Plan 2018
- Property Economics - Alternative Land Use Assessment
- Opus Development Cost

1 Introduction

1.1 Instruction & Scope of Works

We have been instructed by Jenna Raeburn of Wellington International Airport Limited to provide the Market Value Alternative Use of the aeronautical property that constitutes Wellington International Airport Limited's land.

This valuation has been prepared for Regulatory Asset Base reporting purposes and can be relied upon by Wellington International Airport Limited, subject to the commentary, suggestions, recommendations and details herein. The valuation has been prepared in keeping with the Airport Services Input Methodologies Determination 2010.

The valuation covers land within the Regulatory Asset Base but specifically excludes:

- Investment Property Land
- WANT Land
- Moa Point Land
- Residential land East and West
- Commercial Land

This valuation report has been prepared in accordance with the Property Institute of New Zealand Property and Valuation Standards and the International Valuation Standards 2017. Specifically the valuation is completed in keeping with IVS101, IVS102 and IVS103 and ANZVGN1.

1.2 Scope of Diligence

For the purpose of this valuation we have relied upon electronic copies of the following information which have been provided by Wellington International Airport Limited (WIAL).

- Alternative Land Use Plan (prepared by Boffa Miskell);
- Alternative Land Use Assessment (prepared by Property Economics)
- Estimated Development Costs (prepared by Opus);
- Land Areas.

1.3 Report Addressee

Jenna Raeburn
Wellington International Airport Limited
PO Box 14175
Wellington 6140

1.4 Basis of Valuation

Market Value Alternative Use (MVAU) as defined by the Commerce Commission in its Airport Services Input Methodologies Determination 2010. MVAU is the market value of land in its highest and best alternative use, which in turn means the most probable use of the land, which:

- a) Is not the supply of specified airport services;
- b) Is not use to the extent that it is influenced by the supply of specified airport services;
- c) Is physically possible;
- d) Is appropriately justified;
- e) Is legally permissible;
- f) Is financially feasible, and;
- g) Results in the highest estimated value of the land in question.

1.5 Market Value Definition

Market value as defined by the International Valuation Standards Committee and as adopted by the Property Institute of New Zealand (PINZ) and the International Valuation Standards is as follows:

“Market value is the estimated amount for which an asset or liability should exchange on the date of valuation between a willing buyer and a willing seller in an arm’s length transaction, after proper marketing, wherein the parties had each acted knowledgeably, prudently and without compulsion.”

The definitions of Market Value above embody the concept of Highest and Best Use and in the case of the subject property Highest and Best Alternative Use.

1.6 Date of Inspection

8 May 2019

1.7 Date of Valuation

1 April 2019

2 Location

2.1 Locality & Surrounding Development

The subject property is located within the suburb of Rongotai, to the east of Kilbirnie and Lyall Bay and adjoins the west side of the Miramar Peninsula. The subject property falls under the jurisdiction of the Wellington City Council.

The locality is positioned approximately 5.5 radial kilometres, or approximately 7.7 kilometres by road, south-east of Wellington's Central Business District and Centre Port Wellington.

The Wellington International Airport is located toward the south-east periphery of the Wellington city area and essentially comprises the bulk of the suburb Rongotai. The northern runway boundary is defined by Cobham Drive in the north, which extends along the coastal frontage of Evan's Bay, its east boundary defined by Calabar Road and its west boundary defined by the suburb of Kilbirnie.

The southern, main body of the airport, has its west boundary defined by Business Zoned land within the suburb of Lyall Bay and the Lyall Bay Coastal frontage. The southern boundary of the airport is defined by Moa Point Road which extends along the coastal frontage from Rongotai to Moa Point. To the east of the main body of the airport land is with the Miramar Golf Course.

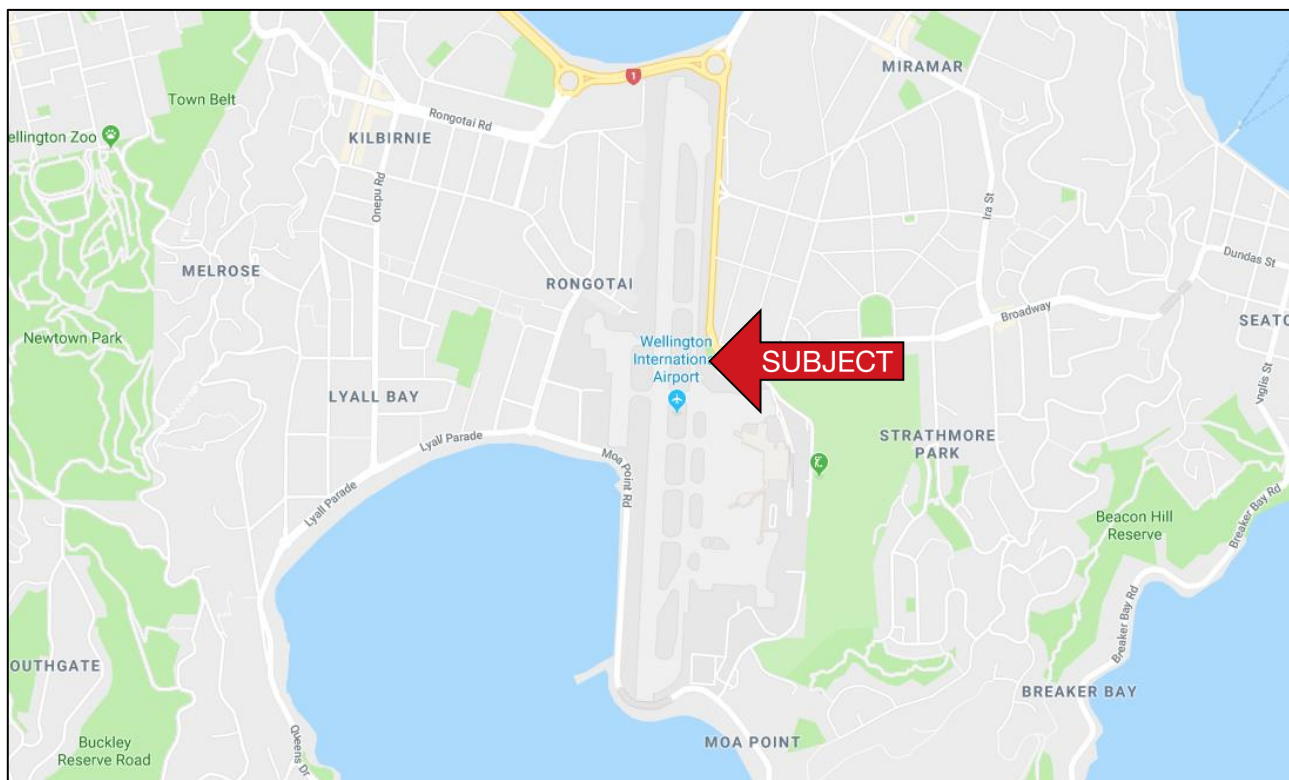
The airport and ancillary services are the predominant use of land within Rongotai, along with the adjoining golf course. In the wider area, land is predominantly utilised for residential purposes, with the bulk of the dwellings appearing to date from pre 1950, with intermittent character homes and more modern development.

Lyall Bay is a popular surf-beach with a southern orientation. Lyall Parade extends along the coastal frontage of Lyall Bay, with a business zoned precinct positioned to the east end of Lyall Parade, adjoining the west side of the airport. The precinct features the Wellington Airport Retail Park and a range of large format occupiers including The Warehouse, Bunnings, Rebel Sport and Briscoes, along with a range of specialty tenancies. Additionally, many of the historic industrial premises remain in use.

Kilbirnie Township is located a short distance to the west of the Airport and features tradition strip retail, along with Pak'nSave and Countdown Supermarkets.

There is a range of public amenities in the wider area including the ASB Sports Centre, Wellington Regional Aquatic Centre, along with various intermittent open space areas. There are a number of schools in the wider area, these having an average decile rating of 8.

2.2 Location Maps



3 Legal Description

3.1 Title Details

The Airport precinct and the subject properties are held in numerous Computer Freehold Registers. We have been provided a list of relevant Computer Freehold Registers by the addressee and have been advised of land areas within asset schedules provided by the instructing party.

We have relied upon these areas in undertaking our assessments of value.

We have searched title documentation and instruments for the largest 6 titles listed in the table overleaf. The registered instruments on the titles do not appear to be deleterious to value and are reflected in our assessment. We provide a summary of the relevant titles as provided by the addressee as follows:

Computer Freehold Register Summary		
Location	Title Reference	Land Area
Stewart Duff Drive	518352	976,943 sqm
Moa Point Road Lot 2	45A/74	19,042 sqm
Wexford	36D/925	57,668 sqm
Tirangi Road, 113-117	46C/667	4,323 sqm
George Bolt Street	46C/668	27,054 sqm
George Bolt/Cochrane Street	62499	5,684 sqm
Broadway Street 321	287/226	7 sqm
Broadway Street 335	42B/707	506 sqm
Broadway Street 337	42B/708	506 sqm
Broadway Street 341	42B/710	506 sqm
Broadway Street 343	42B/709	506 sqm
Broadway Street 360	317/104	269 sqm
Broadway Street 362	374/298	460 sqm
Broadway Street 364	47D/260	488 sqm
Broadway Street 366	327/110	504 sqm
Broadway Street 368	357/296	506 sqm
Broadway Street 370	356/267	506 sqm
Coutts Street 250	10B/942	718 sqm
Coutts Street 252	355/113	573 sqm
Coutts Street 254	358/16	534 sqm
Miro Street 2/353 Broadway	295/38	506 sqm
Miro Street 3	305/266	165 sqm
Miro Street 7	35A/78	267 sqm
Miro Street 9	45A/77	321 sqm
Miro Street 11	896/19	312 sqm
Miro Street 13	863/60	488 sqm
Miro Street 15	300/140	450 sqm
Miro Street 17	298/224	451 sqm
Miro Street 19	298/135	487 sqm
Broadway/Calabar	22946	647 sqm
Coutts Street 234	370/155	402 sqm
Coutts Street 236	366/246	402 sqm
Coutts Street 238	454/120	402 sqm
Coutts Street 240	409/112	402 sqm
Coutts Street 242	357/174	402 sqm
Coutts Street 244	34D/142	402 sqm

Computer Freehold Registers Continued		
Location	Title Reference	Land Area
Bridge Street 3	56A/908	443 sqm
Bridge Street 15	294/190	446 sqm
Bridge Street 19	271/154	445 sqm
Bridge Street 21	270/158	446 sqm
Bridge Street 25	258/187	668 sqm
Bridge Street 29	539597	337 sqm
Bridge Street 29A	539598	331 sqm
Bridge Street 31	16A/1186	724 sqm
Bridge Street 33	260/101	724 sqm
Bridge Street 35	260/102	723 sqm
Bridge Street 39	262/61	787 sqm
Bridge Street 41	265/297	716 sqm
Bridge Street 43	9C/1416	711 sqm
Bridge Street 45	245/70	692 sqm
Bridge Street 49	272/241	629 sqm
Bridge Street 51	267/78	597 sqm
Bridge Street 53	266/102	470 sqm
Bridge Street 55	B2/184	424 sqm
Bridge Street 57	29D/826	395 sqm
Bridge Street 59	320/105	393 sqm
Bridge Street 61	320/104	399 sqm
Bridge Street 65	304/49	355 sqm
Bridge Street 67	322/108	310 sqm
Bridge Street 73	297/248	459 sqm
Calabar Rd 64	309/101	587 sqm
Calabar Rd 62	169816	Crosslease
Broadway Street 372	579/249	506 sqm
Bridge Street 17	505/120	446 sqm
38 Moa Point	413/223	865 sqm
45 Moa Point	416/120	840 sqm
Moa Point Road 39	805/14	865 sqm
Moa Point Road 39A	458463	1,205 sqm
Moa Point Road 37	677/5	865 sqm
Moa Point Road 36	297876	Crosslease 419 sqm
Moa Point Road 36A	297875	Crosslease 419 sqm
Moa Point Road 35	297874	Crosslease 419 sqm
PPE Land		1,123,869 sqm
Plus WANT		
Bridge Street 6	5d/920	443 sqm
Bridge Street 8	262/264	444 sqm
Bridge Street 10	290/220	444 sqm
Bridge Street 16	283/122	445 sqm
Total WANT		1,776 sqm
Total Land Holdings		1,125,645 sqm
Total Land Holdings Hectares		112.5645 ha

4 Resource Management

4.1 Zoning and Development Guidelines – Alternative Land Use

The scope of this valuation includes land zoned a combination of Airport within the Airport and Golf Course Recreational Precinct, Outer Residential, Suburban Centre & Open Space under the Wellington City District Plan Operative 2000. The existing designation and planning is to be disregarded in arriving at Market Value Alternative Use.

The current zoning is disregarded for the preparation of the Market Value Alternative Use valuation and the assessment is to be based on a likely hypothetical resource management construct (zoning) had the airport never been established in this location. We refer to Sections 1.4 and 9 of the report for further details.

4.2 Existing Zoning and Development Guidelines

The scope of this valuation includes land currently zoned a combination of Airport within the Airport and Golf Course Recreational Precinct, Outer Residential & Open Space under the Wellington City District Plan Operative 2000.

The Airport and Golf Course Recreation Precinct separates the activities of the Wellington Airport and the Miramar Golf Course into two distinct areas; the Airport area, and the Golf Course recreation area.

The Plan provisions provide for the Airport's continued use and development and for activities that are ancillary to this primary function. These activities include runways, taxiways, terminals, air carrier facilities, fuel storage, refuelling operations, and aircraft maintenance, as well as a number of support and commercial activities associated with an international airport.

The Plan also contains provisions to manage non-airport activities and developments. This recognises that certain complementary activities can add to the attractiveness and vitality of the airport as a destination and departure point, as well as providing uses which benefit local communities. These activities will however be carefully managed to safeguard the ongoing operation of the Airport, to protect the character and amenity of adjacent land uses and to ensure retail activities do not affect the ongoing vitality and viability of the Kilbirnie and Miramar town centres.

Airport and Golf Course Recreation Precinct Objectives

- To promote the safe, effective and efficient operation of the Airport;
- To provide for the continued use and development of the Golf Course lands for golf course and recreational purposes;
- To provide for non-airport activities and developments within the Airport area of the Precinct;

- Protect the character and amenities of identified areas within the Airport area from inappropriate non-airport related uses and development;
- To protect the amenities of areas surrounding, and within, the Precinct from adverse environmental effects;
- To ensure signage is designed and located in a way which will not detract from the character of the locality, and will not cause a traffic hazard;
- To prevent or mitigate any adverse effects of the storage, use, disposal, or transportation of hazardous substances, including waste disposal, and from the use of contaminated;
- To avoid or mitigate the adverse effects of natural and technological hazards on people, property and the environment;

Permitted Activities:

Uses & Activities:

- Any activities related to the primary function of the Airport area subject to conditions – Rule 11.1.1;
- Upgrade and maintenance of existing formed roads and accessways – Rule 11.1.4;
- Permitted signs subject to conditions – Rule 11.1.5;
- Earthworks on Rongotai Ridge subject to conditions – Rule 11.1.6;

Airport Buildings:

- The construction alteration of or addition to buildings and structures related to the primary function of the Airport subject to conditions – Rule 11.1.2;

Subdivision:

- Subdivision subject to conditions – Rule 11.1.3;

Utilities:

- Utilities – Rule 23;

Rule 11.1.1 referred to above covers an extensive range of topics including: Noise - Aircraft operations in general, Noise - Night flying operations, Noise – Engine testing, Noise – Land based activities, Noise – Ground power and auxiliary power units (GPU/APUs), Screening of Activities and Storage, Dust, Vehicle parking, Site Access for Vehicles, Lighting, Use, Storage or Handling of Hazardous Substances, Signage, Waste Management, Other, Landscape Design, Discharge of Contaminants, Electromagnetic Radiation.

Rule 11.1.5.1 relates to any sign located on a building, within the Terminal Area, free-standing sign or sign located on a structure within any part of the Airport area, except the Terminal Area and free-standing sign or sign located on a structure within any part of the Terminal Area.

Rule 11.1.2 relates to a range of height limits pertaining to various parts of the airport, including:

- Terminal Area
- Lighting poles and navigation instruments
- Height Control Adjoining Residential Areas
- Areas within 5 metres of an Outer Residential Area
- Height Control Adjoining the Golf Course Recreation Area

The provisions and conditions that relates to the permitted activities are extensive and as such we refrain from providing a detailed overview. They essentially protect the ongoing operations of the airport, as well as the interests of the surrounding landowners.

Outer Residential

The Residential Areas of Wellington City are characterised by low-rise single dwelling houses on individual lots. Marked variations exist in the character of particular neighbourhoods or suburbs. Past planning policies have combined with historical and geographic factors to determine residential character. Patterns of residential development range from the more intensive and densely populated inner city areas developed from the early days of colonial settlement through to modern subdivisions designed for the motor vehicle.

Within the District Plan, three residential areas are identified: Medium Density Residential Areas, inner Residential and Outer Residential Areas.

The Outer Residential Area contains the suburbs, from the inner Town Belt to the boundary of the Rural Areas. In the Outer Residential Area, houses are usually located on larger sections and developments are more spacious. Residential character varies depending on the type of landform and the extent of vegetation. Most non-residential activities in the area are of a type that directly service local residents.

In both the Inner and Outer Residential Areas new development will be provided for in a manner that will maintain existing character and respect the amenity of adjacent properties. Council's approach in Residential Areas is to permit typical residential activities and to assess others on a controlled or discretionary basis. This is considered necessary to protect the character and amenities of Residential Areas. The intention is to make specific development standards as flexible as possible to encourage appropriate development opportunities that do not harm the amenities of the area.

Within the Outer Residential Area is the Residential Coastal Edge. This area, which includes the pockets of residential development located along the coast from Evans Bay to the south coast, has a unique character that contributes to Wellington City's sense of place and provides an important visual amenity for local residents and

the public generally. Specific rules have been included in the plan to protect this special character. A design guide also applies within the Residential Coastal Edge to acknowledge the fundamental character attributes of the area and to provide guidance for multi-unit and infill development.

Permitted Activities

- Residential activities that comply with standards 5.6.1 – Rule 5.1.1
- Work from home activities that comply with standards 5.6.1 – Rule 5.1.2
- Non-residential activities in existing non-residential buildings that contain shopfront display window adjacent to the footpath – Rule 5.2.1
- Temporary activities that comply with standards 5.6.1 – Rule 5.1.3
- Storage, use, etc of hazardous substances, except in a Hazard Area, that comply with standards 5.6.1.6 – Rule 5.2.1
- Upgrade and maintenance of existing formed roads and accessways – Rule 5.1.5
- The creation of open land for recreation or amenity purposes – Rule 5.1.6
- Residential buildings, accessory buildings and residential structures subject to standards 5.6.2 – Rule 5.1.7
- Alterations and additions to existing residential buildings constructed prior to 27 July 2000 subject to standards that do not comply with standards 5.6.2.2, 5.6.2.4, 5.6.2.5 and 5.6.2.8 – Rule 5.1.8
- Construction of, alteration of, and addition to, buildings and structures within an Educational Precinct subject to standards 5.6.2 – Rule 5.6.2
- Alterations of, and additions to, and structures within the Oriental Bay Height Area subject to standards 5.6.2 – Rule 5.1.10
- Internal alterations, minor additions to existing residential buildings and new accessory buildings in the Tawa Hazard (Flooding Area)
- Demolition or removal of buildings and structures except heritage items, pre 1930's buildings in the Inner Residential Area and Holloway Road (Outer Residential Area) and the removal or demolition of architectural features from the primary façade constructed prior to 1930 – Rule 5.1.12.
- Signs subject to conditions – Rule 5.1.13
- Subdivision around existing houses subject to conditions (excluding company lease, cross lease and unit title subdivision) – Rule 5.1.14
- Activities involving earthworks – Rule 30
- Activities affecting listed heritage items – Rule 21
- Buildings, structures and other utility activities – Rule 23
- Activities involving contaminated sites – Rule 32

Residential Area Standards – 5.6

Residential Area Standards relate to a wide range of requirements, relevant provisions of the more standards are outlined in further detailed as follows:

- Noise;
- Fixed Plant Noise;
- Vehicle Parking;
 - residential activities: minimum 1 space per household unit
- Site access;
- Work from home Activities;
- Use, Storage and Handling of Hazardous Substances;
- Signage;
- Minimum Site Area: In order to undertake multi-unit development within Medium Density Residential Area 2 - Johnsonville, sites must be of a size that can accommodate a circle with a radius of 11 metres (laid horizontally).
- Front Yards: Outer Residential Area: 3 metres, or 10 metres less half the width of the road, whichever is the lesser;
- Side and Rear Yards: Outer Residential Area: No requirement
- Ground Level Open Space: Outer Residential Area: 50 sqm per unit (minimum dimension 4 metres)
- Site Coverage: Outer Residential Areas: 35% (this may be increased to 40% if the extra site coverage comprises only uncovered decks over 1 metre in height);
- Maximum Height: Outer Residential Area: 8 metres
- Building Recession Planes: Outer Residential Area: Outer Residential Area On all boundaries – 1 vertical: 1 horizontal (45 degrees);
- Alterations and additions to buildings with an existing non-compliance
- Maximum Fence Height
- Residential buildings within a Hazard (Fault Line) Area
- Proximity to High Voltage Transmission Line
- Fixed Plant Noise
- Noise insulation: Airport Area
- Noise insulation Port Affected Area

Open Space B

Set amongst the Residential Areas are areas of Open Space, Centres, Business Areas, Institutional Precincts and Conservation Sites. It is the combination of the character of these different areas combined with the topography and natural environment that gives different parts of the city their different character.



The bulk of the subject land is subject to Designation G2 – Wellington International Airport Ltd - Airspace Designation. Designation G2 protects; Runway Strip and Flyover Area, Take-off and Approach Fans, Transitional Side Surfaces.

5 Asset Overview

5.1 Land Use

WIAL's landholding comprises a total of 112.3940 hectares including 5.0887 hectares of land contained within the Investment Portfolio and other non-aeronautical land, which is excluded from the scope of this valuation.

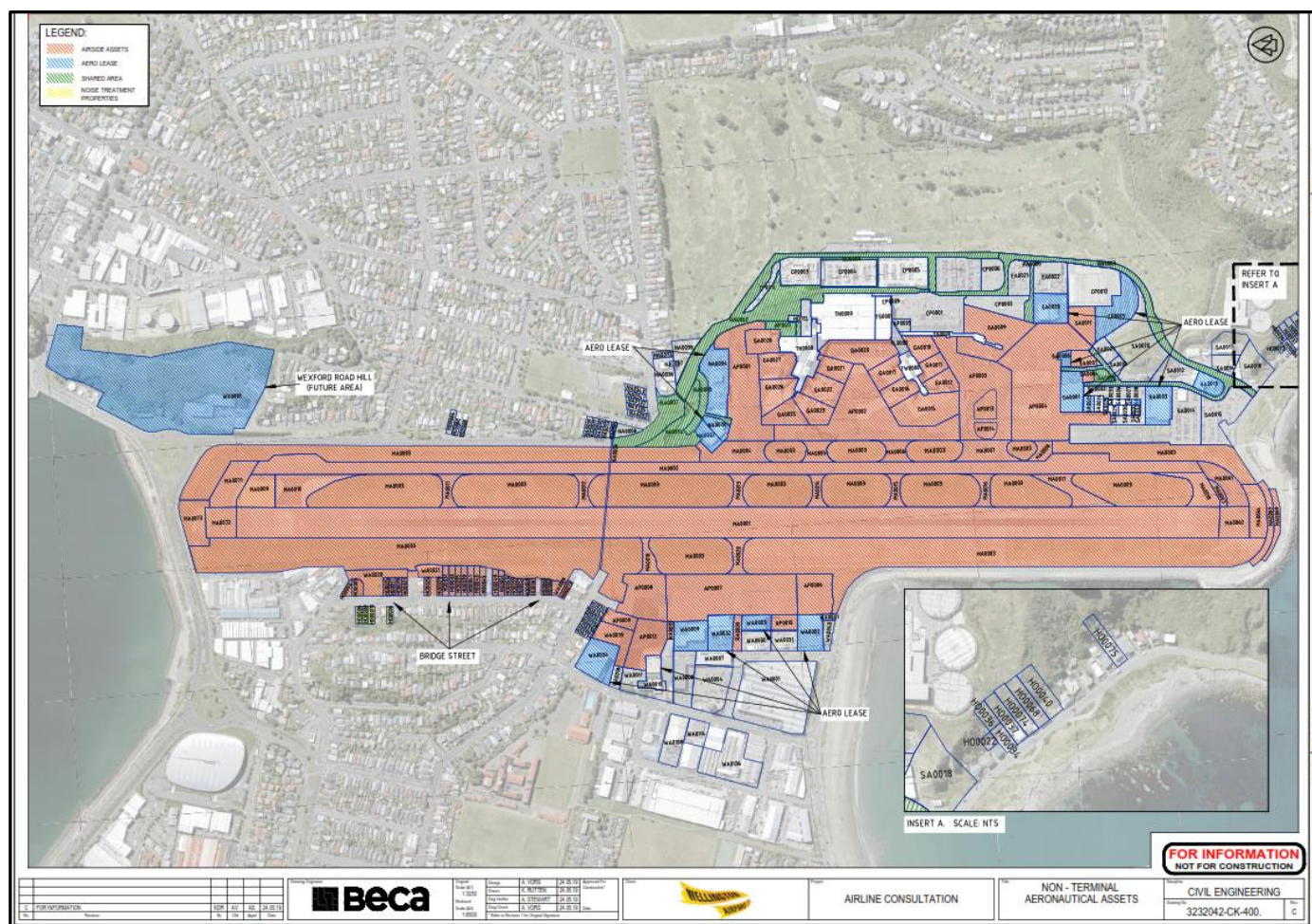
The landholding comprises a combination of naturally formed land and reclaimed land.

We have been provided with a detailed breakdown of the total land area, classifying the land areas by use. We include the summary schedule below.

	Total Area (Ha)
Total Landholding	112.5645
Less:	
WANT Land	-0.1776
Moa Point Reserve Land	-1.9042
Moa Point Residential	-0.5897
Boffa Miskell Alternative Land Use Plan Area	109.8930
Less:	
Investment Property Land	-5.0887
Commercial Land	-17.2314
Alternative Land Use Area Used to Provide Specified Airport Services	87.5729
Less:	
Roads	20.5000
Public Open Space	10.0000
Net Development Land Area	57.0729

Land areas identified above and adopted within valuation calculations have been provided by WIAL. We have not searched all of the titles and have proceeded on the basis that the land that falls within the scope of this instruction is held in the ownership of WIAL. Additionally, we have proceeded with this valuation on the basis that any instruments registered on the titles are not detrimental to value for the basis of this assignment.

Overleaf is an aerial photograph of the airport with key components and some precincts identified.



6 Methodology and Approach

The approach to assessment of MVAU has been prepared in keeping with the Commerce Commission of New Zealand's - Airport Services Input Methodologies Determination 2010 Consolidating all amendments as of 20 December 2016 and in particular - Schedule A Airport Land Valuation Methodology.

We confirm the valuation has been prepared in keeping with Schedule A;

1. In undertaking an MVAU valuation, the valuer must make the special assumption set out in clause A4.
2. The valuer must disclose in the valuation report how they determined the special assumptions for land zoning and the likelihood, timing and costs (both direct and indirect if any) of moving the special assumption for land zoning to the zoning required for the development of the land in its highest and best alternative use.
3. The valuer may rely on evidence of sales of land as comparable market based data only to the extent the sales were unaffected by the supply of specified airport services.
4. The valuer may rely on evidence of sales of land to, or by, the airport only to the extent the transactions in question:
 - a. Occurred on an arm's length basis; and
 - b. The price and other terms of the sales were unaffected by the supply of specified airport services.
5. The valuer must assume an orderly sale of the aggregated land (in economically manageable parcels) over such time as would likely be needed to achieve the highest and best alternative use of the land.
6. The valuer must give consideration to the physical characteristics of the land (including contiguity), existing title and easements arrangements, zoning, any other restrictions or impediments, and adjoining land uses, when determining the highest and best alternative use, so as to maximise the value in the land's alternative use and market value.
7. The valuer must disclose all material assumptions and special assumptions made in undertaking the MVAU valuation in the valuation report.
8. The valuer must include or attach to the valuation report any expert opinion obtained by the valuer in accordance with subclause A2(5)(d).

6.1 Special Assumptions

Special assumptions set out in the Schedule and complied with in preparing our MVAU valuation include:

1. The land must be valued as an aggregated parcel (which may be made up of multiple titles) of a size equal to that attributed to the supply of specified airport services.
2. The land must be assumed to be notionally vacant and clear of airport related improvements.
3. The land zoning must be assumed to be the zoning that is most likely to apply if the airport did not exist.
4. The land zoning most likely to apply if the airport did not exist must be determined by having regard to:
 - a. the current zoning (other than zoning for aeronautical services or zoning influenced by the airport);
 - b. the existing zoning of the land surrounding the airport;
 - c. the zoning that applied prior to the land being zoned for aeronautical services; and
 - d. any other relevant matters including:
 - i. the physical features of the land;
 - ii. local authority planning objectives and policies, including consistency with regional policy directions;
 - iii. likely permissibility under the Resource Management Act 1991 and any other statutory or regulatory requirements or considerations.
5. Relevant development costs, including construction costs, holding costs, and the developer's or investor's profit and risk, must be included in the MVAU valuation.
6. The costs of converting the land to an airport must be excluded from the MVAU valuation, including:
 - a. Costs of resources for airport development;
 - b. Holding costs during airport development;
 - c. Costs of earthworks necessary for the formation to the level airport platform;
 - d. Costs of any land reclamation or dredging;
 - e. Costs of seawall or other coastal protection systems;
 - f. Costs of airport specific drainage systems, including retention ponds;
 - g. Professional fees, including those for surveyors, engineers, and planners with respect to the above mentioned activities, and
 - h. Any other costs incurred in the conversion of land to provide aeronautical services.

7. Costs for remediation or demolition expenditure must be excluded from the MVAU valuation, including the costs of:
- a) Demolition crushing and removal of concreted and sealed surfaces including runways, taxiways, aprons, roading, kerbs, and channels;
 - b) Demolition and debris removal of airport-specific buildings and structures including runways, taxiways, aprons, roading, kerbs, and channels;
 - c) Removing above and below ground utilities, including pipelines and cabling required for airport specific activities like fuel pipelines, tanks, runway drainage and lighting, and approach lighting, and
 - d) Clean up of potential site contamination, including contamination occurring through aircraft and maintenance operations by spills of aircraft and vehicle fuels, paints/solvents, firefighting foams, underground and above ground storage tanks, radioactive materials, asbestos, PCBs, pesticides and herbicides or battery acids, or through the operation or waste disposal facilities, vehicle storage, dredging operations, building construction and underground and aboveground utility lines/pipes.
 - e) Seawalls and reclamation are assumed to be subsumed into the land value and the land is treated as firm natural ground suitable for development.

Traditional development valuation methodologies include:

- Residual feasibility approaches illustrate the amount a purchaser could reasonably afford to pay for the land subject to the revenue and costs associated with a proposed development. In the case of land with subdivisional potential two approaches are often applied, discounted cashflow approach and the static residual approach.
- The discounted cashflow approach reflects the time value of money in setting out periodic cashflows of expenditure from development and revenue from site sales. The net cashflow is discounted at an appropriate rate of return to reflect a present or current value. This is effectively the price that the developer can afford to pay and meet the required return relative to the risk perception. The valuation outcome must be supported through comparison with sales of other subdivisible blocks, however with consideration to differing utility, efficiency and subdivisional difficulty.
- The static hypothetical subdivision approach seeks to determine a residual land value a prudent purchaser would expect to pay for the land in its current state having regard to the costs and risks associated with development and profit. An explicit allowance for a return of capital (opportunity cost of capital) and return on capital (profit and risk allowance) are adopted to mimic the time value of money in arriving at the conclusion on value. This methodology struggles to produce meaningful results when considering developments with an extended timeframe.

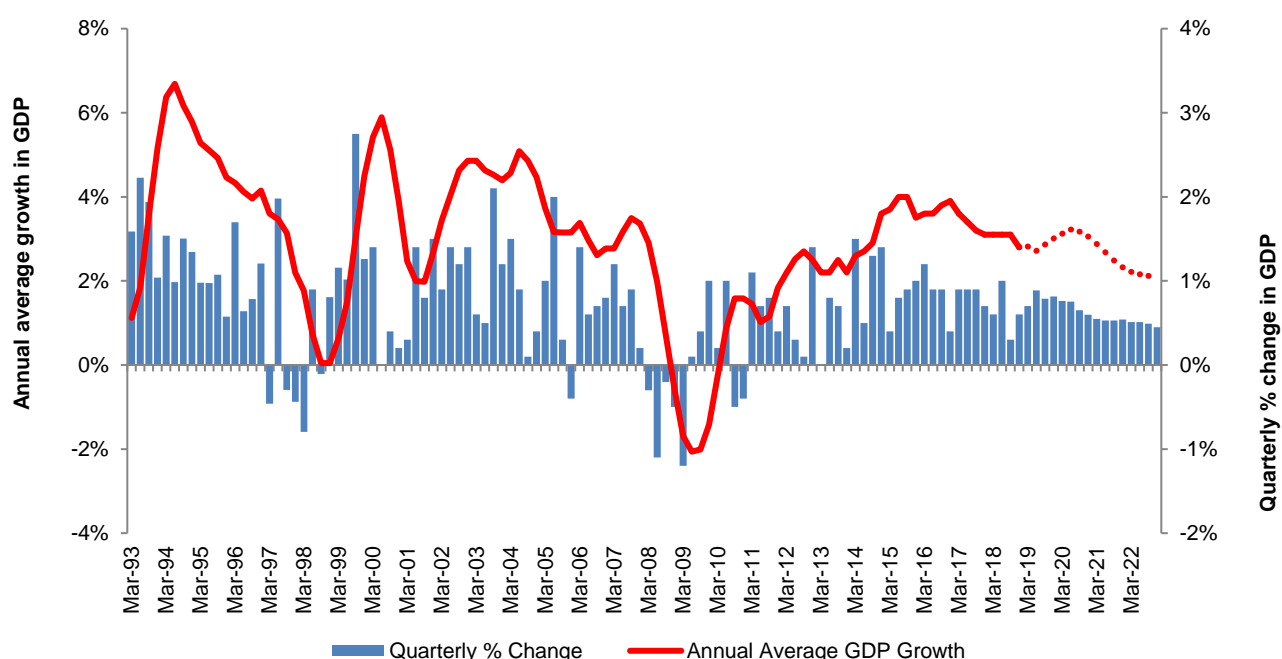
-
- The sales comparison approach is whereby the subject land is benchmarked against land involved in recent sales of comparable block land. Appropriate adjustments are made to reflect relativity to the subject land such as characteristics in terms of; location, size, yield, realisation values and development costs. This is often the principal approach adopted by developers of larger tracts of development land in the market.
 - The approaches adopted herein include discounted cashflow and sales comparison approach applied on a zonal approach. Further, we have assessed the valuation on the basis of freehold title. This valuation is determined on the basis that the property, the title thereto and its use are not affected by any matter other than that mentioned in this report. Furthermore, it has been assumed that reasonable resources are available in negotiating the sale and exposing the property to the market.

7 Market Commentary

7.1 Economic Commentary

New Zealand has continued its period of sustained economic growth which began back in 2010 although the rate of increase in economic activity has started to slow. Figure 1 presents the annual growth in New Zealand's GDP between 1993 and 2018 together with the expected growth to September 2022.

Figure 1: GDP Growth in New Zealand



Source: Statistics New Zealand & Westpac economic forecasts

New Zealand's economy grew in line with market expectations in the December 2018 quarter, increasing by 0.6% (2.8% annual average growth). Over the quarter there were strong gains activity in retail spending (up 2.5%), construction (up 1.8%), Government services (up 1.8%) healthcare (up 0.9%), transport (up 3.2%) and communications sector (up 1.6%). Growth in the service sectors was mixed.

Auckland region's economy is expected to continue to grow supported by strong population growth (currently 2.8% per annum), ongoing construction activity and infrastructure development, and a robust tourism sector.

The medium-term outlook for economic activity has softened with the economy expected to continue to grow albeit at a slower rate than in the recent past. Factors likely to support economic growth include:

- Inflation is continuing to be relatively benign and as a consequence RBNZ's monetary policy settings are likely to remain accommodative in the short to medium term. The accommodative policy settings are continuing to support growth in economic activity;
- Strong population is continuing to be a major driver of increased economic activity. Although the net level of overseas migration has eased from the peak of two years ago the country is still gaining over 50,000 people per annum;
- The construction sector in particular is benefitting from strong growth however is struggling with some capacity constraints and tight margins. Building consents are now at their highest level in the last 28 years and have exceeded 13,900 dwelling units in Auckland;
- The tourism sector has continued to grow attracting more visitors and increasing the spend per head;
- Commodity prices have improved in some sectors over the last year. Fonterra has upgraded its expected farm gate milk price to between \$6.30 to \$6.60 per kg of milk solids in the 2018/2019 year and more recent price trends suggest there maybe some upside to milk payouts.

Factors suggesting an easing in the rate of economic growth include:

- Slower economic growth in our key export markets could impact on our economy's ability to grow in the medium term. Potential trade wars between some of our key export partners is also a concern. In addition, the impact of the United Kingdom's vote to leave the European Union has increased uncertainty over the potential of both European and world economies to continue to expand as expected;
- The housing market is showing signs of stress with dwellings over valued relative to household incomes. Poor housing affordability may make it difficult for organisations to attract and retain staff in Auckland. Lending criteria has tightened for both dwelling purchasers and developers; and
- Business confidence has eased and reflects uncertainty over government policies and credit and capacity constraints limiting growth in business activity.

Table 1 presents a summary of key national economic trends and forecasts.

Table 1: Economic Outlook

	Year Ended	Average Last 5 Years	March 2020 (f)	March 2021 (f)
Economic Indicators	Dec 2018			
GDP (annual average growth)	+2.8%	2.7%	3.1%	2.9%
Current account as a % of GDP	-3.7%	-3.1%	-3.5%	-3.1%
Inflation rate (CPI All Groups)	+1.9%	0.9%	2.2%	2.0%
House prices	2.2%	8.5%	2.7%	1.2%
Labour Market	Dec 2018			
Employment growth (no. employed)	2.6%	3.6%	1.5%	1.6%
Unemployment rate	4.4%	5.1%	4.1%	4.0%
Interest Rates & Money Supply	May 2019			
Official cash rate (OCR)	1.50%	2.8%	1.75%	2.0%
90-day bank bills	1.79%	3.0%	1.9%	2.4%
10-year gvmnt stock yields	1.86%	3.9%	2.9%	3.0%
	Dec 2018			
Broad money (annual growth)	6.4%	+7.2%	-	-
Domestic credit	5.3%	+4.1%	-	-
Exchange Rates (end of period)	May 2019			
NZD / USD	0.661	0.716	0.64	0.68
NZD / AUD	0.944	0.930	0.90	0.89

Source: Reserve Bank of NZ, Statistics New Zealand and Westpac

The Reserve Bank decided to drop the official cash rate (OCR) to 1.50% at their 8th May 2019 announcement and commented:

“The Monetary Policy Committee decided a lower OCR is necessary to support the outlook for employment and inflation consistent with its policy remit.

Global economic growth has slowed since mid-2018, easing demand for New Zealand’s goods and services. This lower global growth has prompted foreign central banks to ease their monetary policy stances, supporting growth prospects.

However, there is uncertainty about the global economic outlook. Trade concerns remain, while some other indicators suggest trading-partner growth is stabilising.

Domestic growth slowed from the second half of 2018. Reduced population growth through lower net immigration, and continuing house price softness in some areas, has tempered the growth in household

spending. Ongoing low business sentiment, tighter profit margins, and competition for resources has restrained investment.

Employment is near its maximum sustainable level. However, the outlook for employment growth is more subdued and capacity pressure is expected to ease slightly in 2019. Consequently, inflationary pressure is projected to rise only slowly.

Given this employment and inflation outlook, a lower OCR now is most consistent with achieving our objectives and provides a more balanced outlook for interest rates.”

Summary record of meeting – May 2019 Statement

“The Monetary Policy Committee agreed on the economic projections outlined in the May 2019 Statement in order to provide a sound basis on which to form its OCR decision.

The Committee noted that inflation is currently slightly below the mid-point of the inflation target, and that employment is broadly at the targeted maximum sustainable level. However, the members agreed that given the recent weaker domestic spending, and projected ongoing growth and employment headwinds, there was a need for further monetary stimulus to meet its objectives.

The Committee agreed that the risks to achieving its consumer price inflation and maximum sustainable employment objectives were broadly balanced around the projection. Possible alternative outcomes were noted on the upside and downside.

A key downside risk relating to the growth projections was a larger than anticipated slowdown in global economic growth, particularly in China and Australia, New Zealand’s largest trading partners. The Committee agreed that the projections adequately captured the observed global slowdown and its impact on domestic employment and inflation.

The Committee noted that additional stimulus from central banks had underpinned growth and reduced the likelihood of a more-pronounced slowdown. With some indicators of global growth improving in recent months, a faster recovery in global growth was possible. However, on balance, the Committee was more concerned about a continued slowdown rather than a faster recovery.

The Committee discussed other potential risks to domestic spending. The members acknowledged the importance of additional spending from households, businesses, and the government, to meet their inflation and employment targets. However, they noted several important uncertainties.

The Committee noted upside and downside risks to the investment outlook. Capacity pressure could see investment increase faster than assumed. On the downside, if sentiment remained low as profitability remains

squeezed, investment might not increase as anticipated over the medium term. It was also noted that firms' ability to invest is constrained by the current competition for resources.

A potential source of additional demand discussed by the Committee included government spending being higher than currently projected, in view of the current strength of the Crown balance sheet. This view was balanced by the impact of any increase in government investment being delayed, for example due to timing of the implementation of new initiatives and current capacity constraints in the construction sector. The implications for monetary policy remain to be seen.

Some members noted that with lower mortgage rates and easing of loan-to-value requirements, any possible pick-up in the housing market could support household spending growth more than anticipated.

The Committee noted that employment is currently near its maximum sustainable level. However, it was agreed that the outlook for employment growth is more subdued and capacity pressure is expected to ease slightly in 2019.

The Committee agreed that overall risks to the inflation projection were balanced. The Committee noted the outlook for inflation is below the target mid-point for longer than projected in the February Statement.

The recent period of rising domestic inflation was discussed. The Committee noted that the near-term outlook was more subdued due to lower capacity pressure. It was also noted that cost pressures remain elevated, and that there is a risk firms may pass these costs on as higher consumer prices by more than assumed. However, it was agreed that inflation expectations remain well anchored at the mid-point of the target range.

The Committee also noted the relatively subdued private sector wage growth, despite businesses suggesting that the inability to find labour is a significant constraint on their growth. The Committee noted the limited pass-through of the nominal wage growth to consumer price inflation.

Some members noted slower global growth reducing imported inflation was a downside risk to the inflation outlook.

The Committee reached a consensus that, relative to the February Statement, a lower path for the OCR over the projection period was appropriate. The lower path reflected the economic projections and the balance of risks discussed, and is consistent with both inflation and employment remaining near the Committee's objectives.

After discussing the relative benefits of holding the OCR and committing to a downward bias, versus cutting the OCR now so as to establish a more balanced outlook for interest rates, the Committee reached a consensus to cut the OCR to 1.50 percent."



The Labour led coalition's kiwi build programme is likely to continue to support growth in residential construction activity. However, the rate of growth in new supply continues to fall below the rate of population growth. Affordability is poor particularly for first home buyers with the current low interest rates masking some of the imbalance between income and house value growth rates. Banks have also tightened their lending criteria to both developers and home buyers.



8 Sales Commentary

The scope of this valuation involves a wide range of land components which are utilised for a range of purposes. In order to benchmark a market value for the subject landholding on a direct comparison basis we have had regard to block land transactions which involve commercial, industrial and residential land considered suitably comparable to the various components that constitute the subject land. We provide a cross section of those transactions considered in the Annexures.

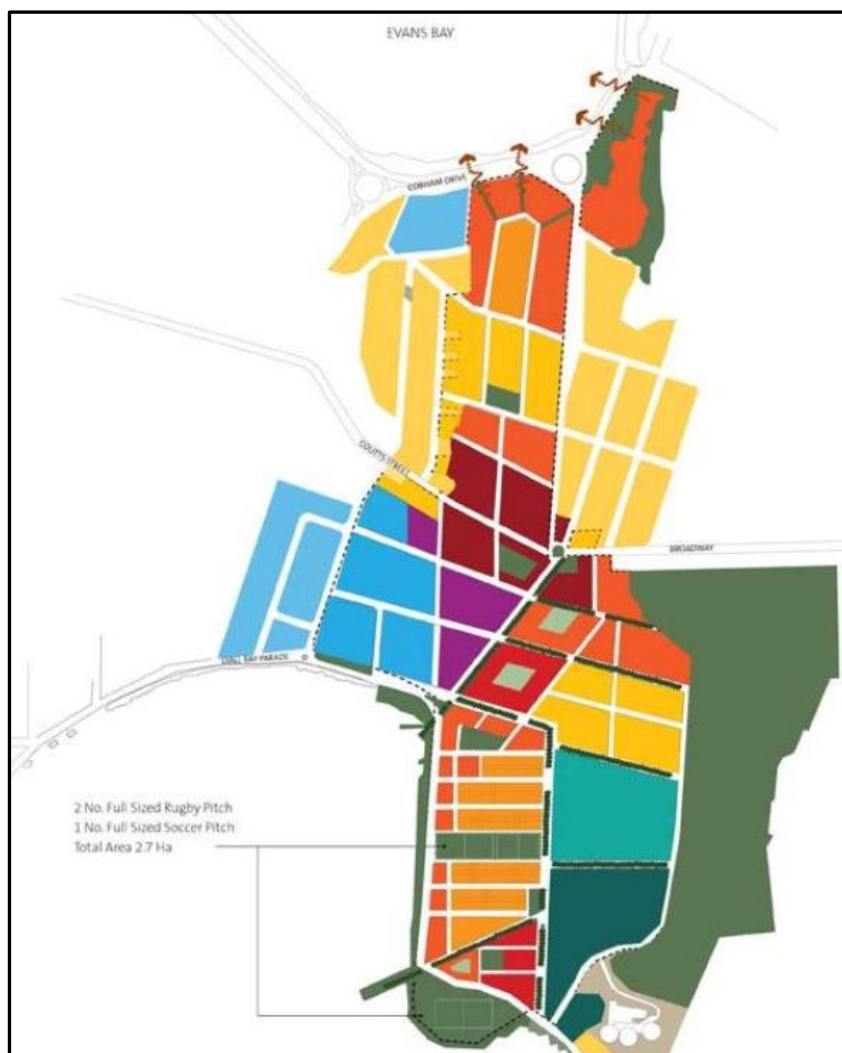
9 Market Value Alternative Use

Our primary approach to valuation of the land is the building block approach whereby we assess the Market Value Alternative Use (MVAU).

MVAU considers that if the subject land is not utilised for Airport purposes the likely use of the land would be for a mixed use development. Boffa Miskell authored a report entitled Wellington Airport Master Plan – Alternative Land Use Options – April 2018 (updated from 2014) [referenced as ALUP herein] to inform the MVAU land uses. This report was prepared in conjunction with the appended report from Property Economics entitled Alternative Land Use Assessment Update dated April 2018. We received written confirmation from Marc Bailey of Boffa Miskell that the advice remains appropriate at April 2019, *“I see no requirement at this time to change that plan from 2018 as the basis for the valuation”*.

Boffa Miskell confirms the ALUP from 2014 still holds and is the basis of our valuation. Property Economics indicated the demographics and market drivers have strengthened in the intervening period from 2016 to 2018. The position to end March 2018 remains relevant through to April 2019.

The plan separates the land into various land uses and precincts, generally, each being identified as containing areas of residential development at various density, non-residential (commercial) land, open space and roads.



In summary, the 2014 master plan remains an appropriate alternative land use for the area. The quantum of change in city planning dynamics does not warrant the need to change the 2014 in 2018. The mix of uses represents a contemporary approach to a sustainable community that includes residential, community, retail, employment, and open space within a well connected movement network. There remains good provision for households (some 1460) on the densities set out on page 6.

Key	Typology	2014 gross/ha
	Town Centre	7.3
	Business Park	7.3
	Light Industrial	7.5
	Large Format Retail	8.6
	Perimeter Block Apartments/Retirement Housing	4.1
	Apartments	20.1
	Community	4.3
	Townhouses	7.9
	Detached Family Housing	12.2
	Headland Park	10.0
	Public Space	
	Roads	20.5
	TOTAL	109.8

Note that the total area within the plan above is 109.8 hectares gross which comprises PPE land, IP land and excludes the Moa Point Land. From the total land area an area of 89.3 hectares net of roads (20.5 hectares) is identified and this reflects a net-net area of 73.9 hectares without the IP land. Further deductions are made to this amount to remove commercial areas not included in the RAB area, leaving a net development area of 57.0730 hectares.

The plan also considers that the land may be developed by multiple competing parties and breaks the land down into five superlots. These areas would align to a staging plan should a single or multiple developer(s) undertake a development of the land. We have prepared our valuation with an allocation of the land areas within each stage (superlot) as identified below and have modelled the timing of each stage being ripe to align with the forecast completion of each stage with focus on both construction completion and development selldown. The premise is that the developer would solely develop the land and sell without undertaking any construction of buildings.

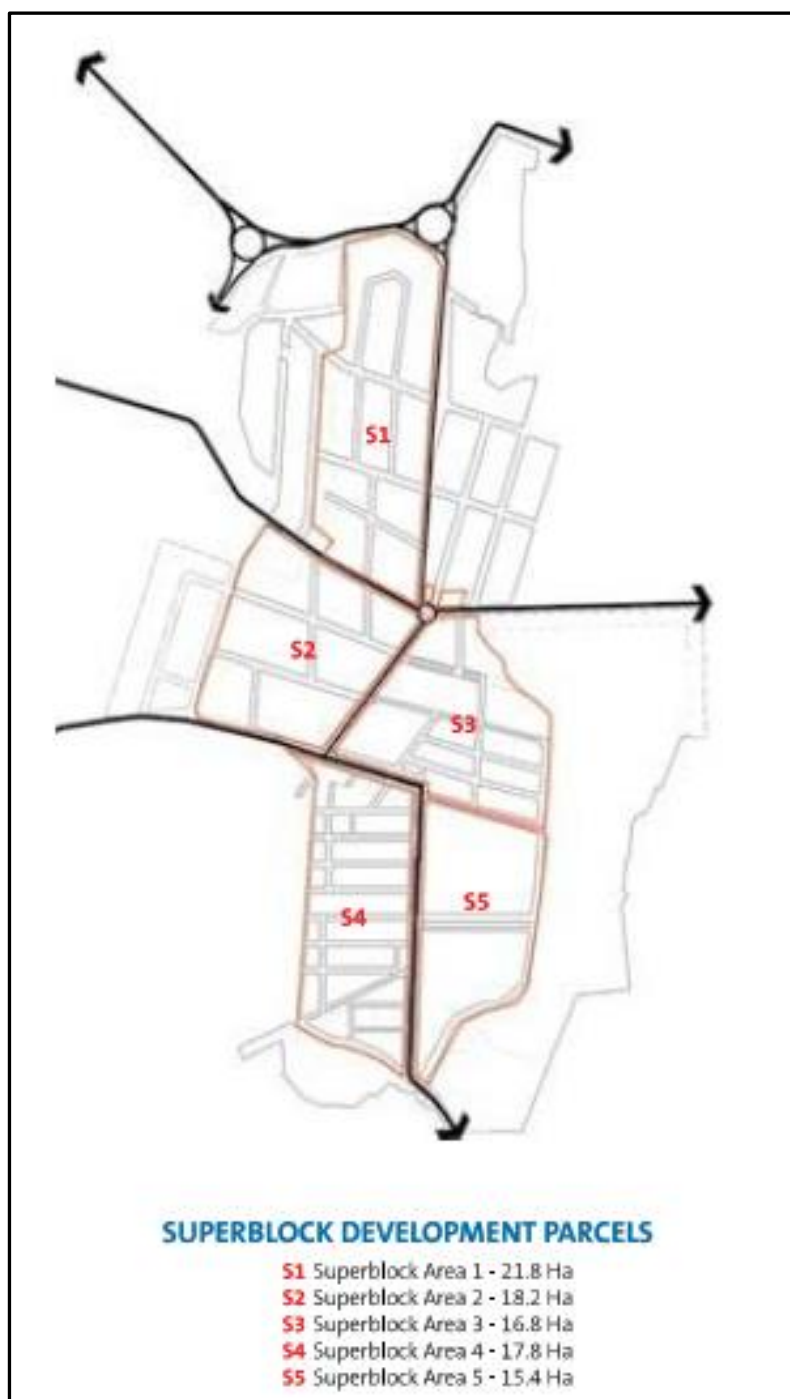
The staging plan results in the following allocation of land uses within each staging area.

Typology	Gross Area ha	Gross Area sqm	Portion	Site Coverage	Sites	Avg Area Per Site sqm	Superblock Area 1	Superblock Area 2	Superblock Area 3	Superblock Area 4	Superblock Area 5	Total Area
Town centre	7.30	73,000	6.65%	50%	20	3,431	2.92	2.92	1.46	-	-	7.30
Light Industry	7.50	75,000	6.83%	40%	1	2,405	-	-	-	-	7.50	7.50
Business Park	7.30	73,000	6.65%	50%	10	4,965	-	-	-	-	7.30	7.30
Community	4.30	43,000	3.92%	50%	2	21,500	-	4.30	-	-	-	4.30
Large Format Retail	8.60	86,000	7.83%	40%	5	10,423	-	8.60	-	-	-	8.60
Perimeter Block Apartments/Retirement	4.10	41,000	3.73%	65%	15	2,733	2.87	-	-	1.23	-	4.10
Apartments	20.10	201,000	18.31%	65%	34	4,059	8.04	-	8.04	4.02	-	20.10
Townhouses	7.90	79,000	7.19%	50%	158	500	-	-	-	7.90	-	7.90
Detached Housing	12.20	122,000	11.11%	35%	147	667	6.10	1.22	4.27	-	0.61	12.20
Public Space (Headland+Neighbourhood)	10.00	100,000	9.11%				1.50	1.00	2.50	5.00	-	10.00
Roads	20.50		18.67%									
	109.8		100%		392		21.43	18.04	16.27	18.15	15.41	89.3

From the total Alternative Land Use Plan areas we deduct the non aeronautical land parcels which reduce the amount of net saleable land to:

Typology	Gross Area ha	Superblock Area 1	Superblock Area 2	Superblock Area 3 Gross	Less Non Aero Superblock 3	Superblock Area 3	Superblock Area 4	Superblock Area 5 Gross	Less Non Aero Superblock 5	Superblock Area 5	Total Area
Town centre	7.30	2.92	2.92	1.46	- 0.44	1.02	-	-	-	-	6.86
Light Industry	7.50	-	-	-	-	-	-	6.50	- 6.26	0.24	0.24
Business Park	7.30	-	-	-	-	-	-	7.30	- 2.34	4.96	4.96
Community	4.30	-	4.30	-	-	-	-	-	-	-	4.30
Large Format Retail	8.60	-	5.21	-	-	-	-	-	-	-	5.21
Perimeter Block Apartments/Retirement	4.10	2.87	-	-	-	-	1.23	-	-	-	4.10
Apartments	20.10	8.04	-	8.04	- 6.30	1.74	4.02	-	-	-	13.80
Townhouses	7.90	-	-	-	-	-	7.90	-	-	-	7.90
Detached Housing	12.20	5.40	1.22	4.27	- 1.81	2.46	-	0.61	-	0.61	9.69
Public Space (Headland+Neighbourhood)	10.00	1.50	1.00	2.50	-	2.50	5.00	-	-	-	
Roads	20.50										
	109.8	20.73	14.65	16.27	-8.54	7.73	18.15	14.41	-8.59	5.82	57.073

Overleaf we include the staging area.



The staging plan provides a notional break down of the campus into portions of development to ensure the efficient use of recycled capital. The intention of any development scenario would seek a balance between delivery of completed inventory to meeting with an orderly sell-down. We have modelled a development scenario to meet the expectations of market absorption. Superblock S5 comprises Business Park and Light Industry land



uses which are not found in other stages. Stage S5 can therefore fall prior to S4 as it will not comprise competing land uses contained within S4.

The areas set out above is the total area in the Boffa Miskell Alternative Land Use Plan Area, deductions from this amount are made to exclude land identified as Investment Property and commercial property.

10 Property Economics Report

We have been provided with a report prepared by Property Economics entitled Wellington Airport Alternative Land Use Assessment Update prepared in April 2018. The report is an update of a similar report prepared in January 2014 and 2016.

Local population is identified at 46,450 being 17,350 households within the identified primary catchment. The lack of suitable residential development opportunities are credited for low population growth relative to wider Wellington City. Considerable pent up demand is identified. Wellington City is forecast to grow over the 20 years from 2018 to 2038 by approximately 31,800 persons or 14.94% which calls for 14,400 new homes.

During the same 20 year horizon the report identifies the need for an additional 33,000 sqm of retail within the primary catchment being a 30% increase and 273,100 sqm across Wellington City. For commercial activity Property Economics identifies that 60% of the region's employment is located within Wellington City and yet only 40% of the population. The projections indicate that just under 12,000 jobs will be created over a 20 year horizon calling for 281,000 sqm of commercial space being circa 29.3 hectares of land (assuming density of 2.4 levels per building).

The report identifies a compelling scenario identifying pent up demand for well located and flat development land of a mixture of land uses.

11 Wellington Land Supply Considerations

A key value consideration for a development of the scale the airport would offer within the Wellington region is competing supply and the likely demand in terms of market absorption for such a development. We investigate these elements as follows:

Population has continued to increase due to net migration both internal and external throughout the last 12 years. An imbalance in housing supply has reached significant levels during this period. As the Global Financial Crisis set in capital constraints saw a material decline in new housing supply reflecting record low building consent numbers. Pressure on housing supply has been a result of internal migration coupled with external immigration and New Zealanders returning home from abroad. Prices have increased placing pressure on housing affordability from approximately 2013 onward. Issues relating to affordability have become a focus for Central and Local Governments.

11.1 Wellington Demand Driver - Population Growth

The most recent census was undertaken in March 2013, the results from this census underpin the updated projections included in the table below for the Wellington Region and Wellington City and Surrounds (Wellington City, Kapiti Coast District, Porirua City, Upper Hutt City and Lower Hutt City). We note that there is a census being undertaken Tuesday, 6 March 2018, however, the results from these investigations are unlikely to be available for some time.

Population Projections Projection		Years Jul-05	Years				
		2013 - 2018	2018 - 2023	2023 - 2028	2028 - 2033	2033 - 2038	2038 - 2043
Wellington Region							
High	486,700	526,300	555,500	582,100	606,900	629,600	650,300
Medium		515,200	532,500	546,200	557,400	565,600	571,300
Low		504,000	509,200	510,000	507,500	501,700	492,800
High - Change		39,600	29,200	26,600	24,800	22,700	20,700
Medium - Change		28,500	17,300	13,700	11,200	8,200	5,700
Low - Change		17,300	5,200	800	-2,500	-5,800	-8,900
High - % Change		8.1%	5.5%	4.8%	4.3%	3.7%	3.3%
Medium - % Change		5.9%	3.4%	2.6%	2.1%	1.5%	1.0%
Low - % Change		3.6%	1.0%	0.2%	-0.5%	-1.1%	-1.8%
Wellington City & Immediate Surrounds							
High	444,400	480,900	508,000	532,600	555,800	577,100	596,500
Medium		470,900	487,300	500,100	511,000	519,100	525,100
Low		460,700	466,300	467,400	465,900	461,400	454,100
High - Change		36,500	27,100	24,600	23,200	21,300	19,400
Medium - Change		26,500	16,400	12,800	10,900	8,100	6,000
Low - Change		16,300	5,600	1,100	-1,500	-4,500	-7,300
High - % Change		8.2%	5.6%	4.8%	4.4%	3.8%	3.4%
Medium - % Change		6.0%	3.5%	2.6%	2.2%	1.6%	1.2%
Low - % Change		3.7%	1.2%	0.2%	-0.3%	-1.0%	-1.6%

Projections made based on the most recent census data envisage that the population of the Wellington Region will grow to approximately 515,200 by 2018 (medium projection). This equates to a projected growth in the order of 28,500 people or 5,700 people per annum. Projections for Wellington City and Surrounds indicate this slightly smaller area will grow to approximately 470,900 by 2018. This equates to a projected growth in the order of 26,500 people or 5,300 people per annum.

The low projections for 2028 onward for both series anticipate a negative movement in population. For the medium and high projections, population is forecast to continue to grow in the coming years. This growth is likely to be driven by net migration, immigration as well as natural population growth amongst those living in Wellington.

11.2 Considerations of Supply

The National Policy Statement requires that relevant local authorities must work together to agree data and projections, and ensure co-ordinated land use planning and infrastructure provisions, including expected levels of service for infrastructure. In the medium to long term this means amending plans and policy statements to provide more development capacity and provide a broad indication of timing, location and sequencing of development to demonstrate that it will be sufficient. Sufficient demand is defined in the NPS as 'the provision of enough development capacity to meet demand, plus take account of the likelihood that not all capacity will be developed, an additional margin of at least 20% over and above projected short and medium term demand;

15% over and above projected long term demand". Long term is defined as within 30 years, medium within 10 years and short term is three years. Councils are also required to take account of enabling development in areas where there is highest demand and that is commercially feasible. NPS compliance requirements began in October 2016.

Wellington City Council anticipates that a good amount of the future household units to meet future demand for housing will be in the form of apartments, most likely to be situated within the central city growth areas. Additionally, future dwelling supply in central areas is likely to comprise townhouses and dwellings upon compact sites. Given the land constraints of Wellington City, the bulk of development for the provision of future housing stock is likely to involve brownfield development, the redevelopment of improved landholdings and the repositioning of existing improvements. However, where land is available, greenfield development is also anticipated to occur.

We provide an overview of residential supply within Wellington and the wider Wellington Region.

Wellington City

The availability of land within Wellington City for development is highly fragmented. Generally, land being marketed comprises infill development opportunities in a variety of locations around Wellington. Disbursed therein, are various multi-unit development opportunities, however, these are generally of a limited scale, 5 – 10 units.

Sites that have recently sold for development of single and multiple household units are typically steep. Associated costs of development would be greater as a result and have likely rendered these very intermittent development opportunities infeasible until recent times.

A current offering of scale within the confines of Wellington City comprises a 131 lot subdivision located to the north-west periphery of Crofton Downs. Crofton Downs is an elevated suburb, located to the north-west of Wadestown, to the south-west of Ngaio. The proposed sites are located to and around an elevated plateau and have useable land areas ranging from 415 sqm to 689 sqm. Marketing material suggests that since the development commenced marketing in October 2016 a total of 57 sites have been sold. Current asking prices in Stage 4 range from \$405,000 to \$440,000.

Additionally, Point 360, a residential development surrounding an extension of Spenmoor Street in Newlands is continuing to be advertised. A range of section sizes are available, these having been created due to the geographical constraints of the original hill top farm. Outlooks are afforded from parts of the subdivision, with lot sale prices being advertised as ranging from \$230,000 to \$370,000. The development is to comprise in excess of 90 sites when complete.

Churton Park is located to the north of Johnsonville and comprises a suburb that was originally developed from the 1970s onward. The lots are of a larger size, generally ranging from 600 sqm to 1,200 sqm. The residential sites are positioned to an elevated valley, part of which is traversed by high voltage power lines. Current asking prices range from \$350,000 to \$380,000.

Lower Hutt

The market offerings of sites within Lower Hutt largely comprise single sites, with no significant developments of scale currently being undertaken. We are aware of a number of developments comprising in the order of 5 – 10 lots.

Porirua

Porirua is located to the north of Wellington City Proper, accessed via State Highway 1. The Porirua City Council area extends from the suburbs of Kenepuru and Ranui in the south through to the suburbs of Paekakariki and Pukerua Bay in the north.

The suburb of Aotea, positioned relatively centrally within Porirua, essentially comprises a large master planned subdivision which has been and continues to be undertaken by Carrus Corporation. To date, approximately 25 stages, including sub-stages, have been undertaken. According to information currently detailed on their website, a total of approximately 1,170 residential lots have been successfully absorbed by the market to date. On a high level basis, there appears to be approximately one quarter of the development to be undertaken, with Stage 14 being the latest stage currently being advertised for sale. This would equate to a further future supply to be made available to the market of approximately 300 residential lots. The product is relatively generic, however, variations in geography provide a range of outlooks and aspects, with some of the more elevated lots overlooking Porirua Harbour. During the last year, of the sites that have been subject to transactions, the average size is in the order of 620 sqm with an average sale price of \$305,000.

Classic Developments is currently undertaking 2 Greenfield residential developments in Whitby. Whitby is located to the north-east of Aotea and Porirua City Centre, with its north boundary defined by the Pauatahanui Inlet. Brookfield comprises a residential development upon the land that formerly formed 9 holes of the Duck Creek Golf Course. The development comprises approximately 164 lots with house and land packages currently being advertised with asking prices from \$569,000. Navigation heights has been reported in the past as having capacity for 103 residential lots, with the first stage of 53 lots currently being advertised for sale. Generally, lots have land areas in the order of 500 sqm with asking prices starting from \$315,000.

Carrus has also entered into agreement with local iwi Ngati Toa to undertake a development of approximately 50 hectares of land surrounding Porirua's old hospital. Ngati Toa received the land as part of a Crown Treaty settlement and the joint venture intends to create approximately 800 dwellings upon the land. The development site is located in close proximity to Porirua's City Centre. The first stage of 150 lots is likely to be in approximately 6 months time.

Lastly, Plimmerton Farm has long been mooted as an option for further residential development. Plimmerton Farm comprises a 386 hectare block to the north side of Porirua. Media suggests that historic plans for the land included 1,600 residential lots, 90 lifestyle blocks and 11 hectares of commercial land. The land was proposed to be utilised for urban purposes prior to the global financial crisis and was recently offered to the market.

12 Absorption Considerations - MVAU

Market Value of the land on the basis of proposed development is underpinned by a balance between capital outlay required to develop the land, capital inflows derived from disposal of the developed product and the timing of each. This not only has an impact in the dynamic Discounted Cashflow Valuation Approach but also affects the direct comparison valuation approach.

The timing of cash inflows and total time horizon of the project are contingent upon the market's ability to absorb the developed residential product. We have sought to consider a market absorption profile appropriate to any development of the subject land on 3 bases:

1. Historic Building Consent Volume Analysis;
2. Sale Volume Analysis;
3. Implied Demographic Demand Analysis.

12.1 Wellington Housing Supply

The number of new housing units in the Wellington Region has continued to grow. With increased population growth, the Region has seen continued development of new housing in both the form of high density as well as medium to low density developments.

We look below to the building consent numbers that have occurred between 1995 and 2019. The following table details consent volumes within Wellington over the previous 10 years to April, total volumes and annual growth.

Residential Building Consent Volumes - New Only										
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Wellington Region	1,269	1,374	1,164	1,203	1,658	1,626	1,614	2,076	2,558	2,708
% Change	-	8.27%	-15.28%	3.35%	37.82%	-1.93%	-0.74%	28.62%	23.22%	5.86%
Wellington City	482	546	479	457	682	579	605	716	946	1,084
% Change	-	13.28%	-12.27%	-4.59%	49.23%	-15.10%	4.49%	18.35%	32.12%	14.59%
% Captured by WCC	38%	40%	41%	38%	41%	36%	37%	34%	37%	40%

From 2010 through to 2019, new residential building consents for the Wellington City Council Area exhibit an average of approximately 658 consents per annum. Consent volumes range from 457 to 1,048, and therefore exhibit a relatively volatile range with the trend improving in recent years. Since 2010, consent volumes for the Wellington Region range from 1,164 to 2,708, with an average of approximately 1,725 per annum. Consent volumes for the Wellington Region show more consistent growth through the time series and have now overtaken those recorded in 2008, at the beginning of the GFC.

Overall, Wellington City has captured a market share of the Wellington Region's consents ranging from 35% to 41%, with an average of 38%.

12.2 Sale Volume Analysis

Analysis of the historical development trends and sale volumes achieved within existing Greenfield development areas provide a guide as to absorption characteristics that can be anticipated for a proposed development.

On this basis we have considered a development area of a comparable scale to that of the subject, taking in sales data from Aotea (Carrus Developments) as a case study. The development is discussed in Section 11.2 of the report.

On a high level basis, a total of approximately 1,170 sites have been absorbed by the market within Aotea, with approximately one quarter of the development still to be undertaken. The first titles were issued within Aotea in approximately September 2004, 13.3 years prior to the date of valuation. This reflects approximately 53.3 (yearly) quarters, over which time a long term sell down volume of approximately 22 sites per quarter is illustrated.

12.3 Implied Demographic Growth

The overarching principle that underpins this analysis is that as the population grows there is an increased requirement for housing, resulting in an ongoing uptake of greenfield development land within various forms of residential accommodation.

This form of analysis requires certain assumptions and utilisation of data prepared by external sources. We provide an overview of parameters adopted and information sources as follows:

- Statistics New Zealand population projections 2013 – 2043. We have utilised within calculations low, medium and high population growth projections.
- Statistics New Zealand household characteristics, specifically, low, medium and high persons per household.

We provide an overview of our calculations in this regard as follows.

Implied Demographic Growth Calculation							
Growth	Year	Persons Per Household Low		Persons Per Household Med	Persons Per Household High		
		Growth	New HHU p.a.		Growth	New HHU p.a.	
Stats NZ Low	2018	3,509	1,349	3,509	1,403	3,509	1,462
	2019	1,036	398	1,036	414	1,036	432
	2020	1,038	399	1,038	415	1,038	432
	2021	1,040	400	1,040	416	1,040	433
	2022	1,042	401	1,042	417	1,042	434
	2023	1,044	402	1,044	418	1,044	435
	2024	160	61	160	64	160	67
	2025	160	62	160	64	160	67
	2026	160	62	160	64	160	67
	2027	160	62	160	64	160	67
Stats NZ Medium	2018	5,830	2,242	5,830	2,332	5,830	2,429
	2019	3,414	1,313	3,414	1,366	3,414	1,423
	2020	3,437	1,322	3,437	1,375	3,437	1,432
	2021	3,460	1,331	3,460	1,384	3,460	1,442
	2022	3,483	1,340	3,483	1,393	3,483	1,451
	2023	3,506	1,348	3,506	1,402	3,506	1,461
	2024	2,712	1,043	2,712	1,085	2,712	1,130
	2025	2,726	1,048	2,726	1,090	2,726	1,136
	2026	2,740	1,054	2,740	1,096	2,740	1,142
	2027	2,754	1,059	2,754	1,102	2,754	1,147
Stats NZ High	2018	8,170	3,142	8,170	3,268	8,170	3,404
	2019	5,715	2,198	5,715	2,286	5,715	2,381
	2020	5,777	2,222	5,777	2,311	5,777	2,407
	2021	5,839	2,246	5,839	2,336	5,839	2,433
	2022	5,903	2,270	5,903	2,361	5,903	2,459
	2023	5,967	2,295	5,967	2,387	5,967	2,486
	2024	5,221	2,008	5,221	2,088	5,221	2,175
	2025	5,270	2,027	5,270	2,108	5,270	2,196
	2026	5,320	2,046	5,320	2,128	5,320	2,216
	2027	5,370	2,065	5,370	2,148	5,370	2,237

No adjustment has been made to the data above to reflect anticipated division between high density living and demand for traditional residential product. Data above is therefore purely on the basis of anticipated demand for household units.

High, Medium and Low scenarios of population growth and persons per household have been considered with the shaded area reflecting the medium level of each. This is considered to be the most likely level of demand and within which a hypothetical development of the subject land will share.

Where Wellington City captures demand of 38%, based on building consents issued, this would equate to an average demand over the proceeding 10 year period of 655 household units per annum.

13 Discounted Cashflow Approach – Market Value Alternative Use

We have adopted a discounted cashflow residual feasibility modelled in Estate Master Software for various parts of the hypothetical development of the subject land on an Alternative Use basis. We have utilised the discounted cashflow approach on a staged basis, in order to determine the market value of the 'Superblocks' in isolation.

Our principal parameters are set out as follows:

13.1 Yield & Gross Realisation

The Boffa Miskell Alternative Land Use plan informs the valuation with the land use typologies and the appropriate allocation of each. From the total amount of net saleable land area we have made a market based assumption of the probable average land parcel sizes.

Gross realisations or retail values for the residential product hypothetically to be developed have been adopted on average bases, with reference to sale prices being achieved for comparable quality product within the wider Wellington area.

Retail sale prices for the various facets of the hypothetical development have been adopted on the basis of an average rate per allotment for the generic residential typologies and an average rate per sqm for apartment land and commercial land. The following table refers.

Stage	Typology	Area ha	Lots	Average Lot Size	GR Rate	Gross Realisation	Lots Per qtr	HHU Per qtr	Qtr	Years	Ripe
Stage 1	Tow n Centre	2.92	12.00	2,433	\$1,300	\$37,960,000	2.00	N/A	6.00	1.50	31-Mar-19
Stage 1	Perimeter Block Apartments/Retirement	2.87	11.00	2,609	\$825	\$23,677,500	2.00	20.87	5.50	1.38	31-Mar-19
Stage 1	Apartments	8.04	20.00	3,940	\$800	\$64,320,000	2.00	32.16	10.00	2.50	31-Mar-19
Stage 1	Detached Housing	5.40	91.00	593	\$700	\$36,450,000	20.00	20.00	4.55	1.14	31-Mar-19
Stage 2	Tow n Centre	2.92	12.00	2,433	\$1,300	\$37,960,000	2.00	N/A	6.00	1.50	30-Sep-19
Stage 2	Community	4.30	2.00	21,500	\$600	\$25,800,000	1.00	N/A	2.00	0.50	30-Sep-19
Stage 2	Large Format Retail	5.21	9.00	5,889	\$600	\$31,267,800	1.00	N/A	9.00	2.25	30-Sep-19
Stage 2	Detached Housing	1.22	18.00	678	\$700	\$8,235,000	18.00	18.00	1.00	0.25	30-Sep-19
Stage 3	Tow n Centre	1.02	4.00	2,433	\$1,300	\$13,280,800	2.00	N/A	2.00	0.50	30-Mar-20
Stage 3	Apartments	1.74	4.00	3,940	\$800	\$13,935,200	2.00	32.16	2.00	0.50	30-Mar-20
Stage 3	Detached Housing	2.46	36.00	678	\$700	\$16,623,495	20.00	20.00	1.80	0.45	30-Mar-20
Stage 4	Perimeter Block Apartments/Retirement	1.23	5.00	2,460	\$825	\$10,147,500	1.00	9.84	5.00	1.25	30-Sep-21
Stage 4	Apartments	4.02	10.00	3,940	\$800	\$32,160,000	1.00	16.08	10.00	2.50	30-Sep-21
Stage 4	Tow nhouses	7.90	158.00	500	\$750	\$59,250,000	20.00	20.00	7.90	1.98	30-Sep-21
Stage 5	Light Industry	0.24	1.00	1,970	\$400	\$962,000	2.00	N/A	0.50	0.13	31-Dec-20
Stage 5	Business Park	4.96	10.00	4,867	\$700	\$34,754,020	1.00	N/A	10.00	2.50	31-Dec-20
Stage 5	Detached Housing	0.61	10.00	678	\$700	\$4,117,500	20.00	20.00	0.50	0.13	31-Dec-20
		57.073	413.0			\$450,900,815					

13.2 Development Costs

We have been provided development costs for the hypothetical development of the subject land as prepared by Opus Consultants. We have allocated the costs by land area to each of the stages as follows:

Component	Opus Total Cost 109.8 ha Gross	RAB Total Cost 88.364 Ha	RAB On Cost	RAB Contingency	RAB Net Cost	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
Neighbourhood Open Space	\$1,677,225	\$1,677,225	\$205,975	\$279,538	\$1,191,713	\$288,659	\$240,991	\$222,453	\$235,694	\$203,915
Roads	\$45,829,520	\$36,836,374	\$4,523,765	\$6,139,396	\$26,173,213	\$6,339,734	\$5,292,805	\$4,885,666	\$5,176,480	\$4,478,528
Water, Wastewater & Stormwater	\$47,850,550	\$38,460,817	\$4,723,258	\$6,410,136	\$27,327,422	\$6,619,309	\$5,526,212	\$5,101,119	\$5,404,757	\$4,676,026
Telecom & Gas	\$15,336,420	\$12,326,948	\$1,513,836	\$2,054,491	\$8,758,621	\$2,121,533	\$1,771,188	\$1,634,943	\$1,732,261	\$1,498,697
Site Preparation	\$6,088,170	\$4,893,486	\$600,954	\$815,581	\$3,476,950	\$842,195	\$703,117	\$649,031	\$687,664	\$594,945
Development Levies	\$8,175,035	\$6,570,844			\$6,570,844	\$1,980,175.14	\$1,653,173.74	\$693,398.87	\$1,616,840.26	\$564,521.46
	\$124,956,920	\$100,765,694	\$11,567,789	\$15,699,142	\$73,436,029	\$18,191,604	\$15,187,486	\$13,186,610	\$14,853,695	\$12,016,632

Opus advise the costs from 31 March 2018 to 1 April 2019 increased by 4.5%. The costs are allocated as follows:

Stage	Description	Amount
1	Neighbourhood Open Space	\$288,659
1	Roads	\$6,339,734
1	Water, Wastewater & Stormwater	\$6,619,309
1	Telecom & Gas	\$2,121,533
1	Site Preparation	\$842,195
2	Neighbourhood Open Space	\$240,991
2	Roads	\$5,292,805
2	Water, Wastewater & Stormwater	\$5,526,212
2	Telecom & Gas	\$1,771,188
2	Site Preparation	\$703,117
3	Neighbourhood Open Space	\$222,453
3	Roads	\$4,885,666
3	Water, Wastewater & Stormwater	\$5,101,119
3	Telecom & Gas	\$1,634,943
3	Site Preparation	\$649,031
4	Neighbourhood Open Space	\$235,694
4	Roads	\$5,176,480
4	Water, Wastewater & Stormwater	\$5,404,757
4	Telecom & Gas	\$1,732,261
4	Site Preparation	\$687,664
5	Neighbourhood Open Space	\$203,915
5	Roads	\$4,478,528
5	Water, Wastewater & Stormwater	\$4,676,026
5	Telecom & Gas	\$1,498,697
5	Site Preparation	\$594,945
4	Headland Park	\$525,000
Aggregate Cost		\$67,452,919

We have adopted 2018 costs prepared by OPUS in undertaking this current valuation. The total costs were estimated at \$98 million and we have allocated the costs based on area to reflect the RAB valuation is a smaller land area than the 109.8 hectare total ALUP area. Savills (NZ) Limited are not experts in the quantification of development costs. However, based on our experience with development opportunities the cost parameters detailed above appear to be at market levels, excluding council contributions and ancillary costs.

Additionally, an allowance of 1.0% of construction cost for development management has been incorporated within valuation calculations. Allowances for marketing, agency fees and rates during construction and holding have been adopted. For details of inputs refer to the valuation input sheet in the annexures.

13.3 Council Contributions

Anticipated council development contributions have been informed via Opus advice at a combined sum total of \$7,823,000 plus GST. We are aware of many developments of a similar scale to that of the potential where Private Developer Agreements have been struck with Council. These agreements typically recognise the contribution that the development is to make in terms of increased infrastructure, reserves, etc, and seek to compensate the developer by levying a lower development contribution payable to Council. This may be able to be achieved in undertaking the hypothetical development, however, is not a guarantee. We have therefore adopted the full amount of potential contributions as being payable, as detailed above.

We have modelled development contributions to fall payable upon completion of the sections, prior to uplift of 224(c) to allow for the issue of titles.

13.4 Development Timing & Selldown

Market Value of development land is underpinned by a balance between capital outlay required to develop the land, capital inflows derived from disposal of the developed product and the timing of each. Valuation conclusions drawn under the discounted cashflow approach are particularly sensitive to variations in capital outlay and sell down.

Absorption is one of the most important residual valuation inputs and is difficult to forecast. The valuer seeks to reflect how a potential purchaser would anticipate the timing of the development and selldown. The absorption timing is typically benchmarked to the historic performance of other developments but with recognition of the unique characteristics and variations of the subject proposal.

As a guide to sell down volumes that could be anticipated for the subject development we have considered:

- Resource consent data within the greenfield development areas in the region;
- Historical sale volumes within greenfield development areas in the region;
- Underlying implied demand for HHUs (household units) derived by population growth.

We have adopted our sell down profile based on the trends indicated and outlined within section 12.

Our timing profile is set out below:

Stage	Typology	Area ha	Lots	Average Lot Size	Lots Per qtr	HHU Per qtr	Qtr	Years	Ripe
Stage 1	Tow n Centre	2.92	12.00	2,433	2.00	N/A	6.00	1.50	31-Mar-19
Stage 1	Perimeter Block Apartments/Retirement	2.87	11.00	2,609	2.00	20.87	5.50	1.38	31-Mar-19
Stage 1	Apartments	8.04	20.00	3,940	2.00	32.16	10.00	2.50	31-Mar-19
Stage 1	Detached Housing	5.40	91.00	593	20.00	20.00	4.55	1.14	31-Mar-19
Stage 2	Tow n Centre	2.92	12.00	2,433	2.00	N/A	6.00	1.50	30-Sep-19
Stage 2	Community	4.30	2.00	21,500	1.00	N/A	2.00	0.50	30-Sep-19
Stage 2	Large Format Retail	5.21	9.00	5,889	1.00	N/A	9.00	2.25	30-Sep-19
Stage 2	Detached Housing	1.22	18.00	678	18.00	18.00	1.00	0.25	30-Sep-19
Stage 3	Tow n Centre	1.02	4.00	2,433	2.00	N/A	2.00	0.50	30-Mar-20
Stage 3	Apartments	1.74	4.00	3,940	2.00	32.16	2.00	0.50	30-Mar-20
Stage 3	Detached Housing	2.46	36.00	678	20.00	20.00	1.80	0.45	30-Mar-20
Stage 4	Perimeter Block Apartments/Retirement	1.23	5.00	2,460	1.00	9.84	5.00	1.25	30-Sep-21
Stage 4	Apartments	4.02	10.00	3,940	1.00	16.08	10.00	2.50	30-Sep-21
Stage 4	Tow nhouses	7.90	158.00	500	20.00	20.00	7.90	1.98	30-Sep-21
Stage 5	Light Industry	0.24	1.00	1,970	2.00	N/A	0.50	0.13	31-Dec-20
Stage 5	Business Park	4.96	10.00	4,867	1.00	N/A	10.00	2.50	31-Dec-20
Stage 5	Detached Housing	0.61	10.00	678	20.00	20.00	0.50	0.13	31-Dec-20
		57.073	413.0						

13.5 Growth & Cost Escalations

Given the development and sell down of the subject development is forecast to occur over an extended timeframe, our assessment of the developed product's Gross Realisation (retail value) will be subject to market fluctuations during this time. Similarly, development costs will be affected by market forces, typically anticipated to escalate over time. Civil costs and earthworks are at 4-4.5% per annum and sales price growth has adopted a long run average of 3% per annum.

13.6 Discount Rate

The discount rate is the return that discounts the future cashflows to present day values and is implicit of the perceived asset risk by reference to the variable inputs. Discount rates vary across asset classes dependent upon associated risk of future cashflows and anticipated growth. Examples of analysed discount rates, or internal rates of return, associated with differing classes of assets include:

- Secondary Industrial Property: 10% – 12%
- Prime Industrial Property: 7% – 9%
- Secondary CBD Office: 8% – 10%
- Prime CBD Office: 7% – 9%
- Shopping Centres: 7% - 9%
- Retirement Housing & Healthcare: 16% – 18%
- Development Land: 17.5% - 30%

We are aware of analyses of various land developments, based upon what was in the mind of the developer at the time of purchase rather than what actually transpired by reference to cashflow returns from the project, to indicate discount rates at between 17.5% and 30%.

In reaching a conclusion as to the appropriate discount rate for the subject property, it is necessary to recognise the risk and reward associated with the varying components of the project. The risks associated with the proposed development are the areas of uncertainty that are inherent in the property and proposed development. Identified areas of risk are:

Asset Risk is that related to the specific class of property, including locality, ownership, resource management, age and condition, liquidity of the asset, income earning ability and annual and capital expenditure profiles.

Development Risk is the uncertainty embodied in project timing, delivery, construction costs, and labour related issues such as industrial relations, health and safety etc.

Market Risk comprises all those areas that influence the value of the property including supply and demand, rates of uptake in the case of multiple lots, consumer confidence, affordability and demographics.

Financial Risk relates to sourcing of funds and capital funding.

Economic Risk relates to change in economic forces which can influence future projections and forecasts.

Environmental Risk relates to community and political influences that may affect the development / performance of the property, along with risks related to the physical environment.

Risks remaining include; Planning Risk, Construction Risk, Market Risk (Sales and Absorption), Financial Risk and Economic Risk. The construction in the form of earthworks is established given the works to prepare the land as is and geotechnical constraints are better known than if the land was unimproved.

In consideration of the above, we have adopted a discount rate of 22.5% for the various facets of the subject hypothetical development.

13.7 Conclusion Discounted Cashflow

Our DCF calculations are appended, which indicate current market values, as if ready for development, of the individual precincts that constitute the WIAL's land that falls within the scope of the Alternative Land Use Plan (excluding IP, Moa Point, residential, commercial and WANT land) as \$173,800,000 plus GST, if any.

13.8 Sensitivity Analysis

We have undertaken a sensitivity analyses to illustrate the influence of each key parameter by changing the input in isolation as set out below:

▲ARGUS EstateMaster Development Feasibility		SENSITIVITY ANALYSIS				
WIAL						
WIAL MVAU						
MVAU 1						
Licensed to: Savills (NZ)						

	Change %	Net Dev. Profit	NPV	Project IRR	RLV (Target Margin)	RLV (Target IRR)
Base Case (No Variation)	0.00%	98,599,303	(1,057,528)	22.29%	160,192,391	172,748,850
Land Acquisition Costs	-5.00%	108,945,833	7,685,203	24.07%	168,616,060	181,840,894
	-3.00%	104,807,221	4,188,110	23.34%	165,146,437	178,091,598
	3.00%	92,391,385	(6,303,167)	21.28%	155,526,441	167,717,330
	5.00%	87,169,081	(9,800,260)	20.63%	152,566,921	164,522,715
Construction Costs	-10.00%	106,501,401	4,486,466	23.39%	166,592,304	178,259,406
	-5.00%	102,550,352	1,714,469	22.84%	163,394,645	175,504,128
	5.00%	94,648,254	(3,829,526)	21.74%	156,995,417	169,993,572
	10.00%	90,697,205	(6,601,523)	21.20%	153,784,282	167,238,294
Construction Period *	-20.00%	113,925,544	19,093,224	26.77%	173,725,514	192,774,951
	-10.00%	104,152,334	7,332,439	24.02%	166,063,323	181,088,214
	10.00%	87,693,938	(8,862,142)	20.82%	153,609,449	164,991,309
	20.00%	76,192,767	(18,564,816)	19.17%	143,784,501	155,344,224
End Sale Values	-5.00%	76,006,222	(13,336,073)	19.83%	148,068,923	160,544,362
	-3.00%	85,834,786	(8,424,655)	20.82%	152,919,448	165,426,157
	3.00%	110,839,056	6,309,599	23.73%	167,456,105	180,071,543
	5.00%	119,110,828	11,221,017	24.68%	172,320,119	184,953,338
Sales Span **	-30.00%	108,288,834	10,317,902	24.73%	168,173,510	184,055,670
	-20.00%	105,258,555	5,761,058	23.70%	165,084,812	179,526,311
	20.00%	94,664,854	(7,541,846)	21.08%	157,629,156	166,303,643
	30.00%	92,643,494	(12,323,723)	20.26%	156,568,468	161,550,607
Discount Rate	20.00%		12,221,643			
	22.50%		(1,057,528)			
	25.00%		(13,072,013)			
	30.00%		(33,900,453)			

* Variation to Construction Period delays span for Construction and start/span for Pro Fees, Statutory Fees and Misc. Costs. Delays start for Sales, Rental and Other Income. Delays span for Land Holdi

** Varies span date for Pre-Sale Exchange and Settlement periods, but not commencement dates.

The increase or decrease in NPV is relative to the concluded value of \$173.8 million plus GST.

14 Deferred Direct Comparison Approach – Market Value Alternative Use

The fair value of the land on a Market Value Alternative Use basis has been assessed within each stage “As If Ripe” for development. Each stage within the Alternative Land Use Plan has been considered in isolation, subject to the full scope of demand anticipated for the development of the land. Were each of these stages being developed at the same time, demand/absorption would be anticipated to be shared between precincts, in effect, they would compete for purchasers. As such we have undertaken a deferred land value approach which assumes that the land would be released for development on a progressive staged basis. This approach reflects the reality of large scale development and from a valuation approach provides for a size adjustment between larger scale development and smaller parcel development sales.

Market Value Alternative Use for each stage has been adopted on the basis that each part of the land is ripe for development today. This amount is grown until the land would be hypothetically released to the market to reflect long run appreciation at a rate of 3.5% per annum. The future value is then deferred (discounted) at an opportunity cost of capital of 10% per annum (or holding cost) for a period until the land is considered ripe for development. The deferral period is an allowance of time to achieve the optimal realisation for land parcels by releasing them for sale on a progressive and measured basis to ensure prices are not materially affected. The deferral is akin to the overall absorption but will not necessarily align perfectly as the potential purchasers would make their decision based on the share of market absorption they believe they can achieve rather than an equitable share. That is pricing of land is based on the commodity of raw land and many of the key aspects of the use of the land (absorption, growth, costs to develop) are asymmetric information. Given each stage is deferred into the future, the present value of each additional stage diminishes. We have adopted a period of 12 months prior to commencement of construction for each stage as the period of being ripe. The timing of construction commencement aligns to that of our discounted cashflow approach.

Within this approach we have compared the subject land to residential, commercial and industrial block land involved in recent market transactions. The broad mix of proposed land uses would be complementary to the absorption of one another and they will not compete, for example commercial and residential activity can occur concurrently without competition for purchasers.

We have considered a range of such transactions as outlined in the annexures of the report.

In adopting an appropriate market value we have been particularly cognisant of the following:

- Relatively central location;
- Adjoining suburbs are affected by the influence of the airport noise;

-
- Proximity to Evans Bay and Lyall Bay frontages;
 - Master-planned development opportunity of significant scale;
 - The land embodies significant development/subdivision potential;
 - Current good demand for large scale development opportunities;
 - Historical and projected absorption considerations.

We detail our Deferred Direct Comparison Approach to valuation overleaf.



Having had regard to the above and market evidence, in conjunction with the characteristics of the subject property, we provide our direct comparison calculations for the subject land on an “As If Ripe for Development”. Market value has been determined on the basis of rate per HHU which reflects the applicable rates per sqm in the following schedule.

Stage	Typology	Area ha	Lots	Average Lot Size	Lots Per qtr	HHU Per qtr	Qtr	Years	Ripe	Deferred Years	Block Rate	Indicated	Growth	Deferred	Effective Rate
Stage 1	Town Centre	2.92	12.00	2,433	2.00	N/A	6.00	1.50	31-Mar-19	0.00	\$500	\$14,600,000	\$14,600,000	\$14,600,000	\$500
Stage 1	Perimeter Block Apartments/Retirement	2.87	11.00	2,609	2.00	20.87	5.50	1.38	31-Mar-19	0.00	\$360	\$10,330,000	\$10,330,000	\$10,330,000	\$360
Stage 1	Apartments	8.04	20.00	3,940	2.00	32.16	10.00	2.50	31-Mar-19	0.00	\$350	\$28,140,000	\$28,140,000	\$28,140,000	\$350
Stage 1	Detached Housing	5.40	91.00	593	20.00	20.00	4.55	1.14	31-Mar-19	0.00	\$275	\$14,850,000	\$14,850,000	\$14,850,000	\$275
Stage 2	Town Centre	2.92	12.00	2,433	2.00	N/A	6.00	1.50	30-Sep-19	1.00	\$500	\$14,600,000	\$15,110,000	\$13,736,364	\$470
Stage 2	Community	4.30	2.00	21,500	1.00	N/A	2.00	0.50	30-Sep-19	1.00	\$225	\$9,680,000	\$10,020,000	\$9,109,091	\$212
Stage 2	Large Format Retail	5.21	9.00	5,889	1.00	N/A	9.00	2.25	30-Sep-19	1.00	\$245	\$12,770,000	\$13,220,000	\$12,018,182	\$231
Stage 2	Detached Housing	1.22	18.00	678	18.00	18.00	1.00	0.25	30-Sep-19	1.00	\$275	\$3,360,000	\$3,480,000	\$3,163,636	\$259
Stage 3	Town Centre	1.02	4.00	2,433	2.00	N/A	2.00	0.50	30-Mar-20	1.50	\$500	\$5,110,000	\$5,380,000	\$4,663,299	\$456
Stage 3	Apartments	1.74	4.00	3,940	2.00	32.16	2.00	0.50	30-Mar-20	1.50	\$350	\$6,100,000	\$6,420,000	\$5,564,754	\$319
Stage 3	Detached Housing	2.46	36.00	678	20.00	20.00	1.80	0.45	30-Mar-20	1.50	\$275	\$6,770,000	\$7,130,000	\$6,180,171	\$251
Stage 4	Perimeter Block Apartments/Retirement	1.23	5.00	2,460	1.00	9.84	5.00	1.25	30-Sep-21	2.50	\$360	\$4,430,000	\$4,830,000	\$3,805,971	\$309
Stage 4	Apartments	4.02	10.00	3,940	1.00	16.08	10.00	2.50	30-Sep-21	2.50	\$350	\$14,070,000	\$15,330,000	\$12,079,819	\$300
Stage 4	Townhouses	7.90	158.00	500	20.00	20.00	7.90	1.98	30-Sep-21	2.50	\$300	\$23,700,000	\$25,830,000	\$20,353,668	\$258
Stage 5	Light Industry	0.24	1.00	1,970	2.00	N/A	0.50	0.13	31-Dec-20	1.75	\$250	\$600,000	\$640,000	\$541,680	\$225
Stage 5	Business Park	4.96	10.00	4,867	1.00	N/A	10.00	2.50	31-Dec-20	1.75	\$300	\$14,890,000	\$15,810,000	\$13,381,188	\$270
Stage 5	Detached Housing	0.61	10.00	678	20.00	20.00	0.50	0.13	31-Dec-20	1.75	\$275	\$1,680,000	\$1,780,000	\$1,506,547	\$247
		57.073	413.0									\$185,680,000	\$192,900,000	\$174,024,371	\$305

15 Reconciliation – Market Value Alternative Use

The resulting values under the Direct Comparison and Discounted Cashflow Approaches are reconciled as follows:

MVAU Land Reconciliation	Amount \$NZD
Discounted Cashflow Residual	\$173,800,000
Zonal Approach MVAU	\$174,000,000
Midpoint	\$173,900,000
Adopt	\$173,900,000

The above values are stated plus GST, if any.

The valuation amount contains land identified as 'shared assets' which comprise a total land area of 1.3701 hectares of the gross area of 87.5729 hectares or 1.56% of the RAB area.

16 WANT Properties

An additional category of assets within the portfolio owned by WIAL is referred to as the Wellington Airport Noise Threshold (WANT) properties. Four residential properties have been acquired and are held as WANT properties. Each of the homes have been removed and they are currently vacant sections.

These properties have been valued on a sales comparison basis. As they are residential they are assessed including GST if any, in keeping with the sales evidence analysed.

Address	Suburb	Land Area (sqm)	Adopted Land Value
6 Bridge Street	Rongotai	443	\$390,000
8 Bridge Street	Rongotai	444	\$390,000
10 Bridge Street	Rongotai	444	\$390,000
16 Bridge Street	Rongotai	445	\$390,000
WANT Total (Incl GST, if any)			\$1,560,000
Total Less GST (rounded)			\$1,360,000

17 Pecuniary Interest

We hereby certify that the Valuer and valuation firm does not have any direct, indirect or financial interest in the property or clients described herein that would conflict with the proper Valuation of the property.

18 Company Qualifications

Where this report has not been prepared by a senior executive of this Company the report has been countersigned to verify the report is issued by this Company. Any reliance upon this report should therefore be based upon the actual possession or sighting of an original document duly signed and countersigned in the before mentioned manner.

This valuation is prepared for **Regulatory Asset Base Reporting Purposes** on the specific instructions of **Wellington International Airport Limited**. This report should not be relied upon by anyone other than **Wellington International Airport Limited** whether for that purpose or otherwise.

Savills (NZ) Ltd accepts no responsibility to third parties nor does it contemplate that this report will be relied upon by third parties. We invite other parties who may come into possession of this report to seek our written consent to them relying upon this report and we reserve our rights to review the contents in the event that our consent is sought.

This valuation represents our opinion of value at the date of valuation. It must be recognised that the real estate market fluctuates with internal and external influences and this valuation should therefore be reviewed at regular intervals.

19 Valuation

We assess the rounded **Market Value Alternative Use of Wellington Airport's Aeronautical Land Assets plus the WANT residential properties**, as at 1 April 2019 and subject to the details referred to herein, to be:

\$175,260,000

(One Hundred Seventy Five Million Two Hundred Sixty Thousand Dollars)

All valuation amounts above are rounded and are stated are plus GST, if any.

We have assessed the market value of the property in accordance with the Market Value definition referred to in Section 1.5 of this report. In the event that a sale was to occur in circumstances not reflecting that Market Value definition, the price realised may be at a substantial discount to the Market Value assessed.

Prepared by **Savills (NZ) Ltd**

A handwritten signature in blue ink, appearing to be "SD", with a horizontal line extending from the end of the signature.

Steven Dunlop, FNZIV, FPINZ
Registered Valuer
Head of Valuations
Valuation & Advisory Division



Annexures



Calculations

[illegible]



Sales Comparisons

Market Transactions

An increased number of transactions, with increased pricing and overall improved market sentiment was evident during the 2018 to 2019 financial year for the Wellington Region.

In arriving at the Market Value Alternative Use for the Aeronautical land we have benchmarked against a broad range of evidence.

Transactions that helped to inform the valuation method are tabled below and are used to inform the value levels for completed commercial, industrial and residential sites to varying densities and sizes.

We commenced by looking to vacant residential sales throughout inner Wellington City as set out overleaf.

Address	Suburb	Date	Price	Rate \$/m ²	Land Area	Category	Titles	Zoning
9A Homewood Crescent	Karori	26/01/2019	\$905,000	\$724	0.1250	Vacant Residential	WN19B/460	Outer Residential
47A Tauhinu Road	Miramar	16/08/2018	\$390,000	\$1,296	0.0301	Vacant Residential	817550	Outer Residential
28 Ira Street	Miramar	2/05/2018	\$277,000	\$942	0.0294	Vacant Residential	93936	Outer Residential
36 Maupua Road	Miramar	9/10/2018	\$225,000	\$606	0.0371	Vacant Residential	796258	Outer Residential
13 Twomey Grove	Houghton Bay	3/05/2018	\$431,250	\$473	0.0912	Vacant Residential	WN15B/811	Outer Residential
38A Frobisher Street	Island Bay	2/07/2018	\$375,000	\$381	0.0983	Vacant Residential	311066	Outer Residential
160 McIntock St N	Johnsonville	27/11/2018	\$400,000	\$964	0.0415	Vacant Residential	702375	Outer Residential
175A McIntock St N	Johnsonville	6/10/2018	\$301,600	\$584	0.0516	Vacant Residential	835606	Outer Residential
23 Mallam Street	Karori	27/06/2018	\$420,000	\$411	0.1023	Vacant Residential	1D/341 WN486/71 WN81	Outer Residential
69D Chamberlain Road	Karori	30/09/2018	\$300,000	\$338	0.0888	Vacant Residential	473214	Outer Residential
41 Domett Street	New lands	6/12/2018	\$450,000	\$518	0.0869	Vacant Residential	720355	Outer Residential
46 Domett Street	New lands	8/10/2018	\$430,000	\$629	0.0684	Vacant Residential	720326	Outer Residential
29 Promontory Crescent	New lands	19/02/2019	\$350,000	\$435	0.0805	Vacant Residential	720353	Outer Residential
34 Domett Street	New lands	25/10/2018	\$340,000	\$633	0.0537	Vacant Residential	720332	Outer Residential
30 Domett Street	New lands	12/10/2018	\$320,000	\$648	0.0494	Vacant Residential	720334	Outer Residential
18 Domett Street	New lands	9/10/2018	\$320,000	\$699	0.0458	Vacant Residential	720340	Outer Residential
18 Oriental Terrace	Oriental Bay	21/05/2018	\$3,750,000	\$2,251	0.1666	Multi-unit	WN416/26 WNF4/970	Inner Residential
37A Cheshire Street	Wilton	7/05/2018	\$300,000	\$682	0.0440	Vacant Residential	835637	Outer Residential
117 Melksham Drive	Churton Park	13/07/2018	\$450,000	\$739	0.0609	Vacant Residential	835271	Outer Residential
8 Farnworth Terrace	Churton Park	28/09/2018	\$435,000	\$697	0.0624	Vacant Residential	835146	Outer Residential
22 Prestbury Grove	Churton Park	29/08/2018	\$410,000	\$775	0.0529	Vacant Residential	804872	Outer Residential
119 Melksham Drive	Churton Park	13/08/2018	\$390,000	\$685	0.0569	Vacant Residential	835272	Outer Residential
19 Prestbury Grove	Churton Park	7/09/2018	\$380,000	\$402	0.0946	Vacant Residential	804864	Outer Residential
93 Melksham Drive	Churton Park	18/02/2019	\$375,000	\$196	0.1916	Vacant Residential	813598	Outer Residential
5 Ririro Close	Crofton Downs	15/01/2019	\$455,000	\$964	0.0472	Vacant Residential	845818	Outer Residential
8 Ririro Close	Crofton Downs	14/01/2019	\$440,000	\$863	0.0510	Vacant Residential	845808	Outer Residential
11 Porokaiwhiri Street	Crofton Downs	6/11/2018	\$435,000	\$973	0.0447	Vacant Residential	845802	Outer Residential
98 Silverstream Road	Crofton Downs	23/11/2018	\$410,000	\$851	0.0482	Vacant Residential	811405	Outer Residential
110 Silverstream Road	Crofton Downs	13/11/2018	\$345,000	\$1,042	0.0331	Vacant Residential	811417	Outer Residential
3 Phippi Way	Crofton Downs	9/09/2018	\$340,000	\$701	0.0485	Vacant Residential	811416	Outer Residential
17 Havana Rise	Grenada Village	29/10/2018	\$320,000	\$571	0.0560	Vacant Residential	653237	Outer Residential
Block Sales								
383 Ohiro Road	Brooklyn	1/10/2018	\$3,500,000	\$104	3.3607	Residential Block Sale	WN16B/137	Outer Residential
92 Tinakori Road	Thorndon	27/07/2018	\$3,400,000	\$2,901	0.1172	Industrial	WN31D/588	Inner Residential
264 Queens Drive	Lyall Bay	3/04/2018	\$677,857	\$1,418	0.0478	Industrial	WNF2/330	Outer Residential
296 The Parade	Island Bay	2/07/2018	\$1,100,000	\$1,692	0.065	Commercial	WN39D/453	Outer Residential
85 Amritsar Street	Khandallah	26/04/2018	\$850,000	\$168	0.5051	Residential Block Sale	268368	Outer Residential
20 Harbour Park Terrace	Khandallah	6/09/2018	\$1,075,000	\$360	0.2983	Residential Block Sale	WN47D/284	Outer Residential

These sales reflect varying site specific factors such as contour, shape, access and services. Notably the price paid for standard lots in outer neighbourhoods such as Crofton Downs and Churton Park rose to over \$400,000 including GST for 450-500 m² sites. These transactions are inferior by way of location (if the airport no longer operates) and they are approaching the levels adopted for the Townhouse sites which reflect a net area of 500 m² average including lanes or local roads which would distil to 350 to 400 m² net site areas within the subject land.

A number of small and steep sites sold in Miramar however these are steep and are affected by the influence of airport noise which must be disregarded for the purpose of assessing MVAU.

The higher density land uses are more akin to Inner Residential land uses.

We have additionally undertaken to review sales of improved residential properties within surrounding neighbourhoods of Kilbirnie and Miramar with appropriate adjustments to allocate the price to a notional land value. These sales represent properties with suitable building platforms without considerable cost to prepare the land for use. The transactions are affected by the influence of the airport proximity. Notably the sales reflect land value indications that support our concluded values well. This form of transaction analysis is subjective due to the allocation being opinion based so it is considered secondary evidence. It is helpful for the purpose of a check method.

The columns entitled; CV, LV and IV relate to the September 2018 rating valuation which is included solely as a guide as to WCC valuation service provider's opinion of the land and

Address	Suburb	CV	LV	IV	Price	Date	Land Allocation	Rate \$/m ²	Floor Area m ²	Land Area ha	Category	Title
47 Kemp Street	Kilbirnie	\$700,000	\$680,000	\$20,000	\$750,000	19/11/2018	\$730,000	\$1,199	120	0.0609	Residential, Dw elling, average	WN51D/643
24 Rodrigo Road	Kilbirnie	\$680,000	\$640,000	\$40,000	\$719,400	13/12/2018	\$680,000	\$451	130	0.1507	Residential, Dw elling, poor	WN272/222
34A Rodrigo Road	Kilbirnie	\$540,000	\$430,000	\$110,000	\$522,000	12/10/2018	\$420,000	\$365	70	0.1152	Residential, Dw elling, average	WNE1/486
6 Queens Drive	Kilbirnie	\$710,000	\$500,000	\$210,000	\$720,000	29/08/2018	\$510,000	\$1,723	140	0.0296	Residential, Home and Income, average	WN171/249
57 Childers Terrace	Kilbirnie	\$710,000	\$490,000	\$220,000	\$752,222	12/09/2018	\$520,000	\$1,316	92	0.0395	Residential, Dw elling, average	WN323/284
46 Duncan Terrace	Kilbirnie	\$760,000	\$500,000	\$260,000	\$760,000	2/11/2018	\$500,000	\$924	120	0.0541	Residential, Dw elling, average	WN324/58
28 Queens Drive	Kilbirnie	\$780,000	\$500,000	\$280,000	\$770,000	3/07/2018	\$490,000	\$1,279	150	0.0383	Residential, Dw elling, average	WN23D/263
36 Crawford Road	Kilbirnie	\$710,000	\$425,000	\$285,000	\$671,000	1/10/2018	\$400,000	\$1,423	100	0.0281	Residential, Dw elling, average	WN197/204
5 Tully Street	Kilbirnie	\$770,000	\$480,000	\$290,000	\$756,500	19/06/2018	\$470,000	\$1,044	130	0.0450	Residential, Dw elling, average	WN131/10
8 Salek Street	Kilbirnie	\$660,000	\$365,000	\$295,000	\$744,000	1/11/2018	\$410,000	\$1,475	80	0.0278	Residential, Dw elling, average	WN322/207
36 Yule Street	Kilbirnie	\$680,000	\$365,000	\$315,000	\$761,000	11/10/2018	\$410,000	\$1,449	100	0.0283	Residential, Dw elling, average	WN430/230
40 Crawford Road	Kilbirnie	\$770,000	\$450,000	\$320,000	\$790,500	8/06/2018	\$460,000	\$1,011	140	0.0455	Residential, Dw elling, average	WNF3/747

Address	Suburb	CV	LV	IV	current_rev_date	Sale Price	Date	Land Value Allocation	Rate \$/m ²	Floor Area	Land Area	category_type	Title
47A Tauhinu Road	Miramar	\$405,000	\$405,000	\$0	\$41,882	\$390,000	16-Aug-18	\$390,000	\$1,296	0	0.0301	Residential, Vacant Site	817550
28 Ira Street	Miramar	\$300,000	\$300,000	\$0	\$41,882	\$277,000	2-May-18	\$277,000	\$942	0	0.0294	Residential, Vacant Site	93936
378 Broadway	Miramar	\$650,000	\$355,000	\$295,000	\$41,882	\$695,000	7-Mar-19	\$380,000	\$1,757	95	0.0216	Residential, Dw elling, average	377965
10 Houston Grove	Miramar	\$650,000	\$440,000	\$210,000	\$41,882	\$651,100	27-Feb-19	\$440,000	\$871	130	0.0506	Residential, Dw elling, average	WN317/257
24 Camperdown Road	Miramar	\$830,000	\$570,000	\$260,000	\$41,882	\$878,000	25-Feb-19	\$600,000	\$712	160	0.0847	Residential, Dw elling, average	WN10B/1433
426 Broadway	Miramar	\$730,000	\$520,000	\$210,000	\$41,882	\$930,000	22-Feb-19	\$660,000	\$981	160	0.0675	Residential, Dw elling, average	WN358/175
152 Darlington Road	Miramar	\$670,000	\$360,000	\$310,000	\$41,882	\$808,000	21-Feb-19	\$430,000	\$897	90	0.0484	Residential, Dw elling, average	WN560/221
113 Miramar North Road	Miramar	\$720,000	\$360,000	\$360,000	\$41,882	\$820,000	11-Feb-19	\$410,000	\$752	110	0.0545	Residential, Dw elling, average	WN809/6
78 Rotherham Terrace	Miramar	\$800,000	\$440,000	\$360,000	\$41,882	\$860,000	20-Dec-18	\$470,000	\$860	120	0.055	Residential, Dw elling, average	WN747/18
9 Crawford Green	Miramar	\$700,000	\$500,000	\$200,000	\$41,882	\$950,530	14-Dec-18	\$680,000	\$1,276	100	0.0532	Residential, Dw elling, average	WN390/66
53 Townsend Road	Miramar	\$750,000	\$460,000	\$290,000	\$41,882	\$875,000	6-Dec-18	\$540,000	\$875	120	0.0613	Residential, Dw elling, average	WN316/154
89 Hobart Street	Miramar	\$660,000	\$400,000	\$260,000	\$41,882	\$675,000	28-Nov-18	\$410,000	\$1,140	110	0.0359	Residential, Dw elling, average	773573
89 Hobart Street	Miramar	\$810,000	\$475,000	\$335,000	\$41,882	\$947,507	14-Nov-18	\$560,000	\$1,098	120	0.0506	Residential, Dw elling, average	WN381/236
36 Devonshire Road	Miramar	\$780,000	\$475,000	\$305,000	\$41,882	\$856,000	20-Sep-18	\$520,000	\$1,022	140	0.051	Residential, Dw elling, average	WN70/317
378 Broadway	Miramar	\$760,000	\$520,000	\$240,000	\$41,882	\$768,420	6-Sep-18	\$530,000	\$1,123	130	0.0468	Residential, Converted Flat, average	WN388/64
24 Camperdown Road	Miramar	\$770,000	\$425,000	\$345,000	\$41,882	\$915,000	10-Aug-18	\$510,000	\$1,100	130	0.0459	Residential, Dw elling, average	WN84/1408
163 Townsend Road	Miramar	\$770,000	\$425,000	\$345,000	\$41,882	\$775,000	12-Jul-18	\$430,000	\$386	140	0.1109	Residential, Dw elling, average	WN577/208
157 Darlington Road	Miramar	\$730,000	\$395,000	\$335,000	\$41,882	\$742,000	25-Jun-18	\$400,000	\$932	180	0.0431	Residential, Dw elling, average	WN84/1433
16 Liverpool Street	Miramar	\$640,000	\$550,000	\$90,000	\$41,882	\$595,000	21-Jun-18	\$510,000	\$1,001	130	0.0511	Residential, Dw elling, average	WN367/47
139A Hobart Street	Miramar	\$770,000	\$430,000	\$340,000	\$41,882	\$791,000	15-Jun-18	\$440,000	\$1,273	96	0.0347	Residential, Dw elling, 2010/2019, ave	791101
152 Darlington Road	Miramar	\$710,000	\$460,000	\$250,000	\$41,882	\$540,000	8-Jun-18	\$350,000	\$682	100	0.0513	Residential, Dw elling, average	WN311/22
19 Hobart Street	Miramar	\$830,000	\$475,000	\$355,000	\$41,882	\$833,000	6-Jun-18	\$480,000	\$842	130	0.0506	Residential, Dw elling, average	WN381/236
63 Kauri Street	Miramar	\$850,000	\$700,000	\$150,000	\$41,882	\$865,000	25-May-18	\$710,000	\$1,408	100	0.0506	Residential, Dw elling, average	WN301/31
75 Devonshire Road	Miramar	\$470,000	\$330,000	\$140,000	\$41,882	\$433,000	18-May-18	\$300,000	\$742	56	0.041	Residential, Dw elling, poor	121035
59 Darlington Road	Miramar	\$660,000	\$430,000	\$230,000	\$41,882	\$673,000	11-May-18	\$440,000	\$842	100	0.0521	Residential, Dw elling, average	WNE2/741
102 Park Road	Miramar	\$640,000	\$300,000	\$340,000	\$41,882	\$647,000	4-May-18	\$300,000	\$1,213	70	0.025	Residential, Dw elling, average	WN55B/869
36 Darlington Road	Miramar	\$850,000	\$500,000	\$350,000	\$41,882	\$825,000	3-May-18	\$490,000	\$720	110	0.0674	Residential, Dw elling, average	WN24C/93

Moving to the non-residential portions, we have considered commercial sales in Wellington which were either vacant to under developed and purchased with an expectation of change of use to the highest and best use.

The Business 1 and 2 sales are most like the industrial and bulk retail asset components in the Alternative Master Plan. The Centre and Central Area sales considered are more akin to the Town Centre and Business Park categories.

Address	Suburb	Price	Date	Land Price Allocation	Rate \$/m ²	Floor Area m ²	Land Area ha	Category	Title	Zoning
15 Pirie Street	Mount Victoria	\$2,200,000	24/01/2019	\$2,200,000	\$3,349	830	0.0657	Industrial, Service, CBD	WN30D/185	Central Area
131 The Parade	Island Bay	\$705,000	6/12/2018	\$705,000	\$1,846	290	0.0382	Commercial, Retail, Suburban, average	WN4D/614	Centre
29 Vivian Street	Te Aro	\$2,040,000	28/09/2018	\$2,004,460	\$4,082	296	0.0491	Industrial, Service, CBD	WN51/164	Central Area
30 Kent Terrace	Mount Victoria	\$800,000	4/09/2018	\$800,000	\$2,083	1957	0.0384	Commercial, Multiple/Other, CBD	WN51/164	Central Area
92 & 106 Hutt Road	Kaiwharawhara	\$3,411,000	3/09/2018	\$3,411,000	\$880	3350	0.3876	Industrial, Other/Mixed, suburban	WN57C/303	Business 1
260 Wakefield Street	Te Aro	\$3,375,000	11/08/2018	\$3,375,000	\$4,061	650	0.0831	Commercial, Motor Vehicle, CBD	WN188/116	Central Area
8 Drummond Street	Mount Cook	\$357,244	6/07/2018	\$357,244	\$1,412	130	0.0253	Industrial, Vacant, Suburban	WN24/294	Centre
21 Vivian Street	Te Aro	\$2,000,000	31/05/2018	\$1,990,244	\$3,420	400	0.0582	Industrial, Other/Mixed, CBD	WN5/168	Central Area
6 Dekka Street	Khandallah	\$1,100,000	4/05/2018	\$1,100,000	\$1,449	370	0.0759	Commercial, Retail, Suburban, average	WN202/3	Centre
32 Miramar Avenue	Miramar	\$1,600,000	4/05/2018	\$1,600,000	\$1,921	630	0.0833	Commercial, Multi/Other, Suburban	WN14B/489	Business 2
117 Riddiford Street	Newtown	\$1,062,000	12/04/2018	\$1,062,000	\$2,744	420	0.0387	Commercial, Retail, Suburban, average	WN91/164	Centre
189 Vivian Street	Te Aro	\$1,251,000	11/04/2018	\$1,251,000	\$2,818	730	0.0444	Commercial, Multiple/Other, CBD	WN22B/181	Central Area
179 Vivian Street	Te Aro	\$2,600,000	28/03/2018	\$2,600,000	\$2,392	2050	0.1087	Industrial, Other/Mixed, CBD	WN31C/36	Central Area
43 Tasman Street	Mount Cook	\$1,210,000	22/03/2018	\$1,205,000	\$3,324	120	0.0364	Commercial, Vacant, CBD	WN83/296	Central Area
26-28 Constable Street	Newtown	\$1,771,000	7/03/2018	\$1,771,000	\$2,047	700	0.0865	Industrial, Warehouse, Suburban	WN19C/901	Centre

We have considered a number of residential block transactions below. We have firstly considered sales from within the Wellington area and its surrounds. We have additionally considered block transactions from other large scale development areas of Hamilton, Tauranga and Auckland.

Block Land Sales Address	Location	Price	Sale Date	Area ha	Zone	Rate per sqm
Wellington & Surrounds						
212 Sutherland Road	Lyall Bay	\$600,000	Nov-18	0.8013	Outer Residential	\$75
383 Ohiro Road	Brooklyn	\$3,513,013	Oct-18	3.3607	Outer Residential	\$105
6 - 12 Bluff Road	Porirua	\$6,176,003	Jun-18	2.8713	Suburban Zone	\$215
23 Hinai Road	Tawa	\$757,000	Apr-18	0.0809	Outer Residential	\$936
3 Rotiti Street	Johnsonville	\$1,200,000	Dec-17	0.0994	Medium Density Residential	\$1,207
26 Donald Street	Karori	\$25,658,500	Dec-17	3.1030	Outer Residential	\$827
124 - 126 Briarmart Street	Berhampore	\$2,150,000	Nov-17	0.2026	Inner Residential	\$1,061
429 Jackson Street	Petone	\$3,000,000	Jul-17	0.7851	Medium Density General Residential	\$382
6 Oswald Crescent	Paparangi	\$1,597,500	Jun-17	0.3003	Outer Residential	\$532
48 Rangiora Avenue	Kaiwharawhara	\$1,000,000	Feb-17	0.8790	Outer Residential	\$114
Other - Hamilton						
2A Primrose Street	Raglan	\$1,117,391	Nov-18	0.9729	General Residential	\$115
256 Brymer Road	Rotokauri	\$7,800,000	Oct-18	16.7197	General Residential	\$47
10A & 18A Shakespeare Avenue	Enderley	\$1,200,000	Jul-18	0.3545	General Residential	\$339
365 Rotokauri Road	Rotokauri	\$1,250,000	May-18	1.1733	General Residential	\$107
47 Tennyson Road	Enderley	\$1,500,000	Apr-18	0.5316	General Residential	\$282
15 Onukutara Place	Huntington	\$2,000,000	Mar-17	0.4124	General Residential	\$485
19 North Ridge Drive	Rototuna	\$2,430,000	Jan-17	1.0005	General Residential	\$223
Other - Tauranga						
35 Alice Lane	Papamoa Beach	\$1,130,000	Apr-18	0.2965	Suburban Residential	\$381
29 Caribbean Place	Papamoa Beach	\$1,150,000	Aug-17	0.6547	Suburban Residential	\$176
Classic - Tauriko West	Tauriko West	\$40,000,000	Jan-17	132.048	Rural - Future Urban	\$30
93 Hastings Road	Pyes Pa	\$3,750,000	Sep-17	4.541	Suburban Residential	\$83
Other - Auckland, Sales of Scale						
Confidential	Confidential	\$35,616,000	Jun-19	31.8000	Mixed Housing Urban, Single House & Large Lot	\$112
Grand View Estate	Orewa	\$62,800,000	Sep-18	84.5070	Future Urban	\$74
				<i>Normalised Land Area</i>	38.3333	\$164
Stevenson SHA Land	Drury	\$61,400,000	May-18	35.0330	Mixed Housing Suburban, Mixed Housing Urban & THAB	\$175
Bellfield Park	Papakura	\$36,000,000	Feb-18	21.6775	Mixed Housing Suburban, Mixed Housing Urban & Neighbourhood Centre	\$166
Westgate Estate	Westgate	~\$140,000,000	~ Oct 2016	42.2606	Mixed Housing Urban & THAB	\$331
92 Fred Taylor Drive	Westgate	\$27,019,600	Aug-17	6.7549	Mixed Housing Urban & THAB	\$400
9 McRobbie Road	Kingseat	\$23,753,250	Jun-17	27.9450	Mixed Housing Suburban, Single House & Local Centre	\$85
321-333 Bremner Road	Karaka	\$25,500,000	Oct-16	10.9635	Mixed Housing Suburban & Urban	\$233
264 & 280 Hingaia Road	Karaka	\$31,800,000	Jun-16	14.4360	Mixed Housing Suburban & Urban - Operative	\$219

The first tranche of sales tabulated above refer to the Wellington area and its surrounds. As previously mentioned there are limited residential block transactions of scale within the subject locality and so we have tabulated sales from a number of localities with a number of different characteristics.

Key transactions of scale included above are 383 Ohiro Road, 6 – 12 Bluff Road and 26 Donald Street. 383 Ohiro Road is an irregular shaped site of some 3.3 hectares with a moderate contour. Publicly available information indicates a developable area of some 6,024 sqm over the site, which reflects approximately \$500 per sqm upon analysis after adjusting for existing improvements on site. 6 – 12 Bluff Road is situated within Porirua is an Outer Residential zoned site of some 2.87 hectares. The site has been sold for \$6,176,003 in June 2018, reflecting \$215 per sqm. 26 Donald Street is a property comprising a former teachers college in Karori. Sale price for this property was \$25,658,500 plus GST, indicating an analysed residual land rate of \$827 per sqm after adjusting for demolition of existing improvements.

Remaining sales tabulated above within the Wellington and surrounds area range in size from 809 sqm to 8,790 sqm. Associated sale prices range from \$600,000 through to \$3,000,000 plus GST. Overall, sale rates reflect from between \$75 per sqm to \$1,207 per sqm.

2A Primrose Street is positioned relatively centrally within Raglan proper and comprises a 9,729 sqm site zoned Residential that has been historically utilised as the Raglan Hire Centre. The property features a range of improvements including a generously sized industrial structure and a 6 bedroom dwelling which appears to present in average condition. The land has a range of contours descending from the south-east to north-west, and has two road frontages, the secondary frontage to Manukau Road. After adjustment for improvements, the land is considered to reflect a rate per hectare of approximately \$1.15 million.

256 Brymer Road comprises a large scale raw, greenfield development site positioned to the south periphery of the Rotokauri Structure Plan area. The property was recently subject to an active marketing campaign by Colliers International, with sale by way of Deadline Treaty closing in October 2018. We have been reliably informed that this land has been sold for \$7.8 million. The land is situated adjacent to Waiwhakareke Natural Heritage Park, and there is a good amount of the land in 256 Brymer Road that was viewed by a prospective purchaser as being unusable. It was this party's view that approximately 8 hectares of the land was available for residential development, with the October sale reflecting \$975,000 per hectare over the gross useable land. Additionally, the Hamilton City Council website indicates that Development Contributions for this land are in the order of approximately \$70,000 for a standard residential dwelling.

Shakespeare Avenue is located within the suburb of Enderley, which is positioned relatively centrally, to the north-east of the Hamilton CBD. 10A & 18A Shakespeare Avenue comprises two adjoining titles which have had their historic improvements removed, with the property being identified as having sold in July 2018 for \$1.2 million. The property at 11A and 13 Shakespeare Avenue is located to the opposite side of the road from the 10A & 18A Shakespeare Avenue. This property is identified as having sold in May 2016 for \$518 per sqm.

93 Hastings Road comprises a 4.5410 hectare landholding located at the now northern termination of Hastings Road. Hastings Road once connected to State Highway 29, however, road access is now conveyed through the Neighbouring Lakes Development. 93 Hastings Road is a highly irregular shaped landholding which has a moderate to steep contour descending from south to north, elevated above State Highway 29. The majority of the site is zoned residential, with a small area of large lot residential at its northern boundary. The land adjoins Classic Group's Hastings Heights subdivision at its south boundary and is identified as having sold to another development company in September 2017 for \$825,809 per hectare.

Grand View Estate has recently received media coverage, and is identified in Overseas Investment Office Decisions as having transacted for \$62.8 million, with the decision having been issued in September 2018. However, we acknowledge that the transaction would have been negotiated prior to this time, potentially a year previously. However, the purchaser, AVJ Hobsonville Pty Limited, has continued through with the arduous overseas investment office approval process. The vendor has recently appeared in the media stating that the land was originally purchased 4 years previously for \$4 million. The land has a relatively low yield of only 6.8 sites per hectare. A more normalised gross land area based on 15 lots per hectare reflects \$1,638,261 per hectare.

Classic Group has contracted to purchase the residential land component of the Stevenson Quarry aggregation of land in Drury South. The significant parcel of zoned residential land is to be afforded access to urban infrastructure as part of the transaction. The land is intended for a generic form of subdivision comprising circa 400 sqm lots across the majority of the site, with a degree of affordable housing required. The land area above comprises the net gross land area. Where the purchase price is considered over the gross gross land area, a rate of approximately \$1.2 million per hectare is reflected. Additionally, the above reflects the face rates of the pending transaction, with deferred terms in place, reducing net effective parameters.

Bellfield Park comprises a 26.7697 hectare landholding which was historically utilised as a nine hole golf course and a lifestyle property. The landholding is positioned to the south of Bellfield Road, to the east of Great South Road and west of Opaheke Road. The land was awarded Special Housing Area status in 2014 and is proposed to be developed into a large scale master planned residential development known as Bellfield Park. The development shall comprise a commercial area, 514 residential lots with 2 and 3 bedroom terrace homes, and 3 to 5 bedroom standalone homes. Opaheke Park is to be developed of land adjoining the southern boundary of the landholding, providing a range of park facilities. 29 Bellfield Road was historically subject to an encumbrance in favour of Auckland Council to secure the preservation of the land for use as a golf course, however, this has since been uplifted. The property sold (yet to settle) in early 2018 for \$36 million which reflects a rate of \$1,660,632 per hectare over the gross useable land area, approximately \$70,000 per potential HUE and an IRR of approximately 21.32%.

The sale of the property identified as Westgate Estate (Joint Venture) to Universal Homes was given Overseas' Investment Office approval in a December 2017 decision. The property was marketed for sale by Jones Lang Lasalle toward the end of 2016, with the agreement likely to date from approximately this time. The landholding comprised a number of lots, held by 10 different landowners and was initially marketed with an asking price of \$150 million. We have been advised that the sale of the 42.2606 hectares of land has occurred at approximately \$140 million, reflecting a sale price of \$331 per sqm. The land is zoned a combination of Terraced Housing and Apartment Buildings, and Mixed Housing Suburban. This land is subject to the Memorandum of understanding with Watercare, being identified as being the majority of the Westgate Joint Venture (Excluding 2 Dunlop Road) group of properties. Further analysis of this sale, allowing for identifies non-useable land areas, reflects gross net (useable) land areas of approximately 11.9100 hectares of THAB land and 18.3500 hectares of Mixed Housing Urban land. After adjusting for "non-useable" land, the \$140 million transaction reflects approximately \$6.25 million per hectare over the useable THAB land and \$3.75 million per hectare over the useable Mixed Housing Urban land.

We also have referenced some large scale developments in the Auckland Region which solely help to illustrate the scale of projects and the overall demand for industrial property at present.

Address	Location	Sale Date	Sale Price	Land Area (m ²)	Land Rate (\$/m ²)	Status	Comments
42, 60 & 70 Favona Road	Favona	Nov-2018	\$27,000,000	69,813	\$365	Settled	Market Garden Site (Improvements Excluded)
58 - 60 Roma Road	Mt Roskill	Aug-2018	\$93,000,000	131,200	\$709	Settled	Brownfield
350-420 Puhinui Road	Wiri	Jun-2019	\$200 million +	665,494	\$320	Conditional	Raw Rural Use
408 Puhinui Road	Wiri	Jun-2019	Confidential	8.0937	Confidential	Unconditional	Raw Rural Use
Section 20, Kakano Road	Westgate	Jun-2019	\$17,000,000	31,551	\$539*	Unconditional	Raw Rural Use
81 Fred Taylor Drive	Westgate	Jun-2019	\$14,600,000	39,546	\$417	Unconditional	Raw Rural Use
26 Ha Crescent	Wiri	Feb-2019	\$14,279,850	21,969	\$650*	Settled	Formed

*= Adjusted land value



Boffa Miskell - Alternative Land Use Plan

WELLINGTON AIRPORT MASTER PLANNING ALTERNATIVE LAND USE OPTIONS

For Land Valuation Purposes Only

By Boffa Miskell Limited April 2018 (updated from 2014)





Aerial photograph of the current Wellington International Airport

1. Introduction

Boffa Miskell were engaged in 2011 to prepare a master plan for the airport area, following the release of the Commerce Act (Specified Airport Services Input Methodologies) Determination on 22 December 2010 ('the determination'). The master plan is intended to describe alternative uses for the airport area assuming the airport was not on the site.

The purpose of the master plan is to assist with the process of establishing a "Highest and Best Alternative Landuse", and follows the process set out in Schedule A of the determination for establishing the alternative use component of the Maximum Value Alternative Use (MVAU).

The process of preparing the master plan was to:

- 1) Review the site and its context to understand the opportunities and constraints (such as existing and possible zoning and district plan requirements, contour and land area, surrounding land uses, as well as existing linkages) to alternative land use options;
- 2) Consider the review undertaken by Property Economics Ltd (PE) in their assessment of alternative land use options and market analysis;
- 3) Consider a range of land use options and provide preliminary options that describe road patterns, open space and density of development of those;
- 4) Workshop and refine options with representatives from valuers, PE and Wellington International Airport Limited; and
- 5) Complete and present the preferred master plan option in a form that allows valuation.

2018 Master Plan Review

The master plan prepared in 2011 was subsequently reviewed and updated in 2014 (dated 3 March 2014) and has been reviewed in 2018 to confirm its currency at this time. In considering the 2014 plan this has been retained as an appropriate representation of alternative use. The combinations of use types and their spatial layout remains appropriate. Further commentary with the 2014 plan is provided on page 5.

Note

The master plan has been prepared by Boffa Miskell Limited on the basis of the information provided by others and involves no detailed investigations as to services, infrastructure, hazards or risks associated with the area, or the commercial conditions in the market.

Boffa Miskell Limited provides this report as advice and accepts no commercial liability for the purposes to which it is put to use.

2. Urban Planning Context

Urban Development Strategy

This WCC strategy defines spatially a long term direction (30-50 years) for urban development in Wellington. It proposes to direct growth to where the benefits are greatest, where adverse effects are minimised and improve the quality of development. The growth scenario for long term planning purposes is 50,000 more people in the city by 2055.

This remains the city spatial strategy in principle. Contemporary 2018 projections for growth by Property Economics Ltd are for an additional 14,400 households (ie houses or apartments) to accommodate an additional 31,800 people within the next 20 years (ie by 2038). This projection suggests a ramping of population and consequent household growth from that indicated in the 2006 strategy (ie 1020 additional people per year as at 2006 versus 1590 additional people per year as at 2018).

The two key implications for the airport area from the urban development strategy in terms of how growth for the city is distributed and how it is supported by transport infrastructure are:

1. Improved transport connections to the airport. The location of the airport as the end point of a growth spine which is supported by a core public transport link and some road improvements implies the likelihood of enhanced accessibility from within the city to the airport and its surroundings.
2. Future growth along the spine. Both residential and employment growth is proposed to be directed along the growth spine providing opportunities to intensify current land uses at the nodes at each end (Johnsonville and Kilbirnie) an along the spine itself.

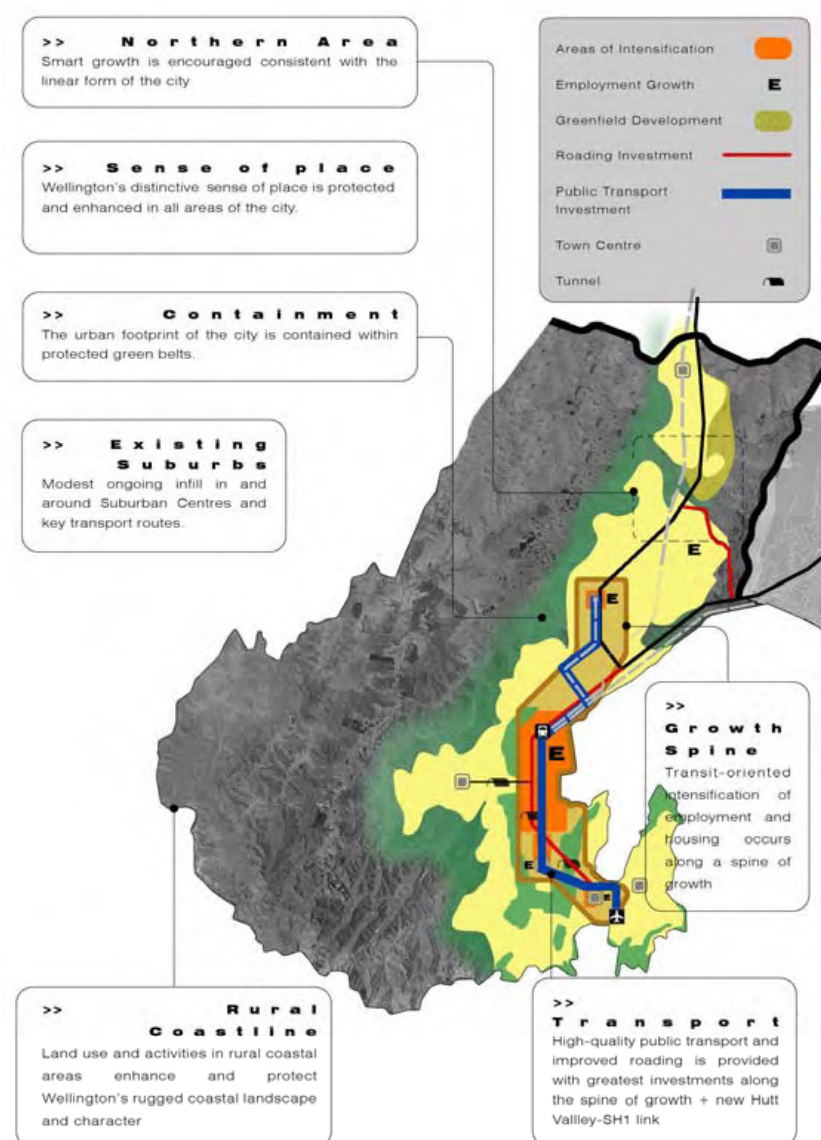
How and Where Will Growth Occur? A Discussion Paper

As part of the implementation of the Urban Development Strategy, Council initiated a major review of infill housing opportunities. This discussion document forms part of this review. The main initiative outlined in this discussion document is a targeted approach to infill housing - encouraging growth in and around key centres with good infrastructure and public transport. Council has determined from this strategy that intensification of development will be encouraged in three centres: Kilbirnie, Johnsonville and Adelaide Road. Kilbirnie is most proximate to the airport area, but suffers from the constraint (as do the existing centres) of existing land uses and typically (there are a few exceptions) small parcel sizes.

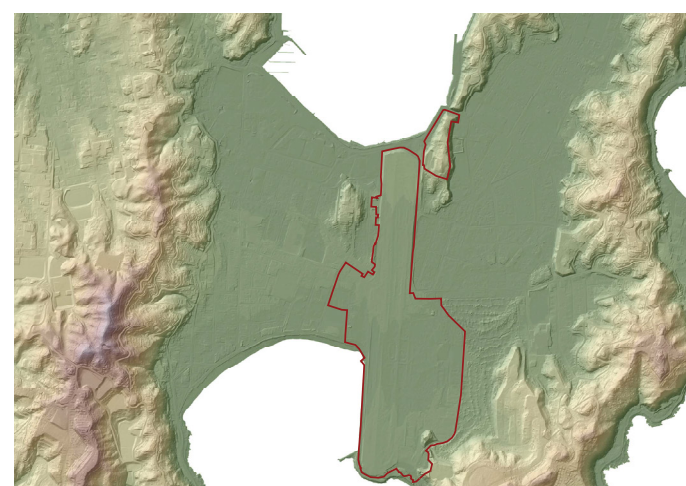
To achieve Council's growth strategy of intensification of land uses in existing urban areas the existing development has to be removed and parcels assembled that are large enough to make comprehensive development feasible. Precedents (eg Fort Dorset Seatoun, Kilbirnie Retirement Village and Greta Point) demonstrate that the large parcels are able to be feasibly developed and the growth strategy successfully given effect to.

In applying the Commerce Commission requirements for a hypothetical situation whereby the airport land can be developed, consideration has been given to how the Council Urban Development Strategy might underpin this approach. The subject land area is large with significant amenity values, transport linkages, flat topographical conditions, and is strategically located at the 'bridge' to the large catchment of the Miramar Peninsula. The land's availability would undoubtedly result in the development strategy's application to it and its embodiment in the District Plan (in policy, objectives, zones, standards and design guidelines). It is considered that this opportunity to achieve the city's development strategy is so significant that it would logically refocus the subject airport land to being the regional centre (rather than Kilbirnie) and allow for Council's objectives for an area with higher density and mixed uses, including local employment, to be significantly more practicably achieved for the southern part of the city.

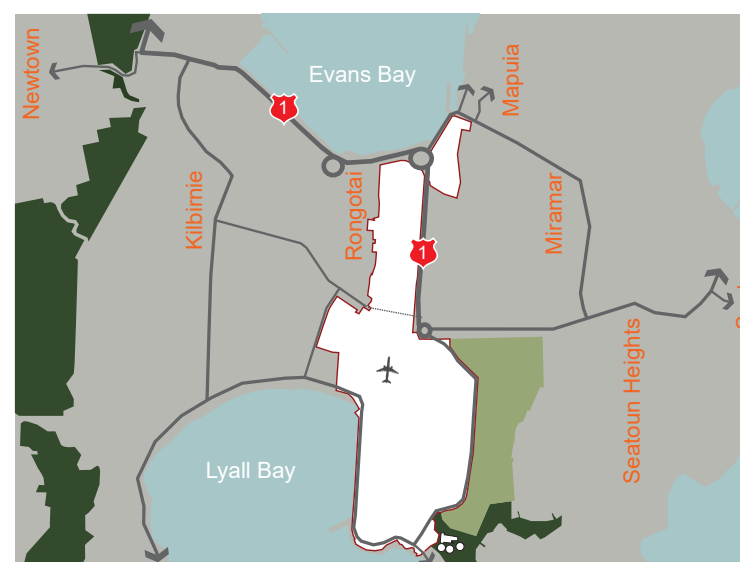
Our 50-year growth concept



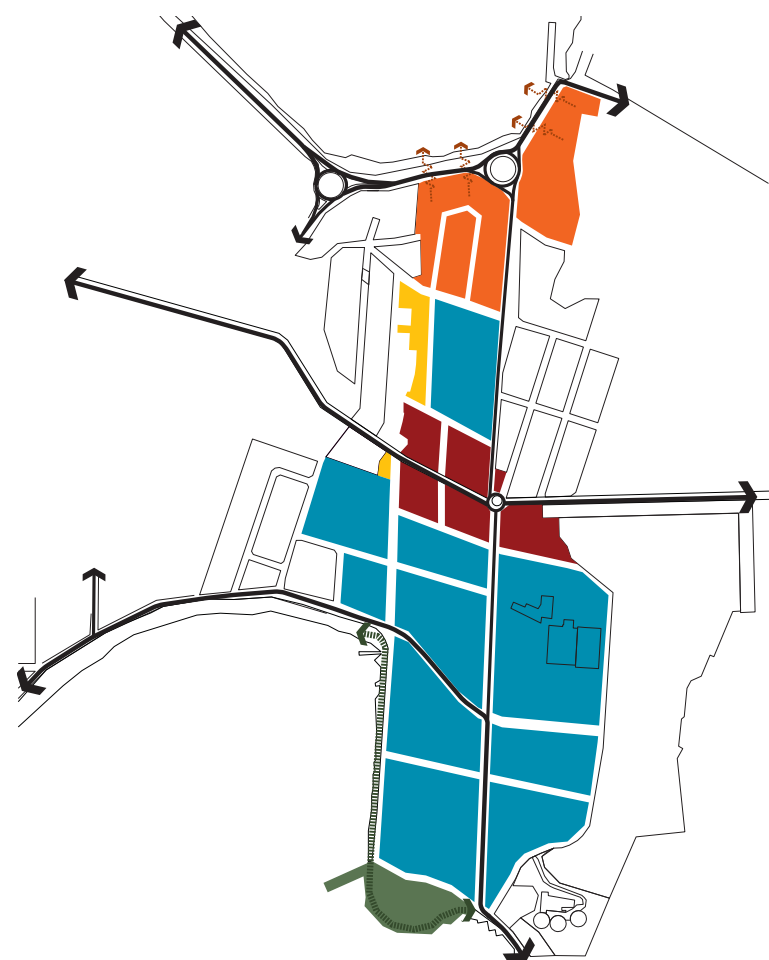
Wellington City Council 50 Year Growth Concept



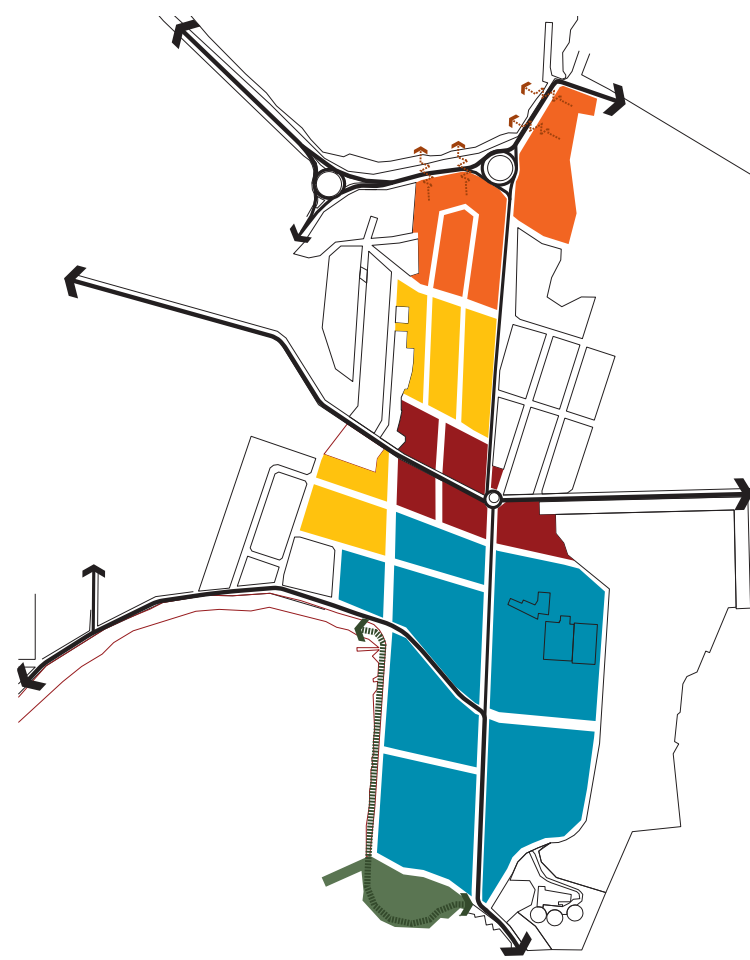
Elevation of airport and surrounding context highlighting the flat low lying topography of the reclaimed airport land



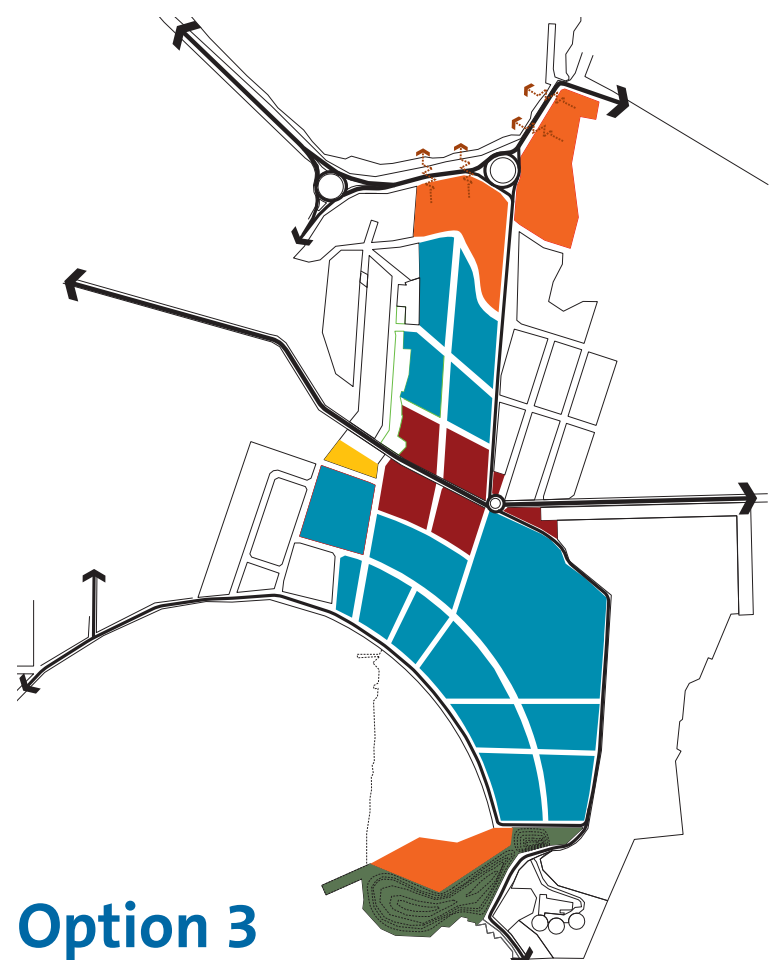
Analysis of the airport site in the context of surrounding communities & the primary movement routes



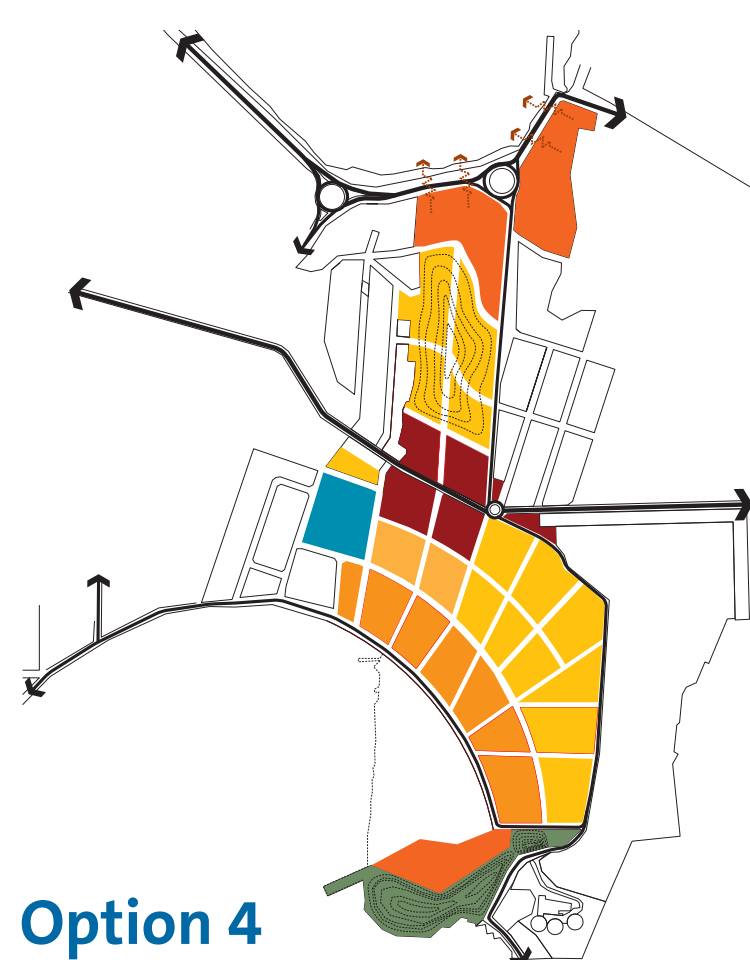
Option 1



Option 2



Option 3



Option 4

3. Preliminary Options

In 2011 four preliminary land use options were investigated with a mix of residential and commercial land uses.

Options 1-2 worked within the existing line of reclamation and essentially differ in the balance of commercial versus residential land, with Option 1 predominantly commercial and Option 2 providing greater residential development in the middle blocks.

Options 3-4 investigated the potential for wider ranging transformation involving declamation of the coast providing both recreational opportunities for the community generally and a setting and views for new residential development beside. The old bay line provided a reference for the recovery of the historical and more natural coastal landforms. Declamation fill was utilised to create elevated residential land in the middle blocks to recreate former dune landforms in a way that would provide greater shelter and afford coastal views to the north and south.

All four options included the provision of a new headland park on the South Coast and new road connection between Rongotai and Seatoun by connecting Coutts Street and Broadway. In all cases provision is made for a new town centre on this route where the passing traffic can generate commercial opportunities.

Evaluation

Options 3 - 4 were not preferred on the basis that the technical and economic feasibility of declamation is unknown and as such may be considered too large an assumption in terms of its impact upon future land valuation.

Option 2 was selected for further development and refinement with the need for further provision of residential land in the middle of the landholding, and greater refinement and distinction made between higher value business park land and lower end commercial and large format retail land.

The preferred plan was advanced to a further stage of master planning and development involving greater detail of local street network and finer grain of development of both commercial and residential lands and the types of development anticipated across the site.

The process outlined on page 2 resulted in a 2014 master plan as described on page 5.

Key

- Town centre on Coutts/Broadway connection
- Higher density residential development with a mix of apartments, townhouses and detached family dwellings
- Detached single family dwellings
- Large format commercial/business park uses
- South Coast headland park
- Arterial Street Network

4. 2014 Master Plan

The master plan described here was that issued in 2014. The explanation as to land use types and densities is provided on page 6.

Consideration has been given to the need to revisit this plan in response to any changes in city planning dynamics since 2014. The principal change that can be noted from the updated projections from PE has been a trend towards an increased rate of population and household growth in Wellington.

Some of that growth can reasonably be expected to locate at the subject land if it were available to accommodate it. The combinations of density that would enable the most efficient use of this land resource if it became available may also favour higher densities which follows the trends towards a more intensified urban form.

In summary, the 2014 master plan remains an appropriate alternative land use for the area. The quantum of change in city planning dynamics does not warrant the need to change the 2014 in 2018. The mix of uses represents a contemporary approach to a sustainable community that includes residential, community, retail, employment, and open space within a well connected movement network. There remains good provision for households (some 1460) on the densities set out on page 6.

Key	Typology	2014 gross/ha
	Town Centre	7.3
	Business Park	7.3
	Light Industrial	7.5
	Large Format Retail	8.6
	Perimeter Block Apartments/Retirement Housing	4.1
	Apartments	20.1
	Community	4.3
	Townhouses	7.9
	Detached Family Housing	12.2
	Headland Park	10.0
	Public Space	
	Roads	20.5
	TOTAL	109.8



	Town Centre
	Community
	Business
	Light Industrial
	Large Format Retail
	Perimeter Block Apts/Retirement Housing
	2-3 Storey Apts
	2 Storey Townhouses
	Detached Housing



New town centre on Coutts/Broadway connection. Provision for combination of building development, open space and surface car parking



New community uses to support southern suburbs and new population - library, education, health centre and public transport hub



Commercial providing opportunity for high value business park/research or other campus-style developments taking advantage of expansive coastal and golf course setting



Light industrial activities - non emitting activities that provide local services such as warehousing, workshops, repairs



Large format retail extension of existing retail park development



Medium density perimeter block housing development/retirement village development - existing precedents include Kilbirnie Ryman Healthcare complex

30-50 dw/ha (av 40dw/ha)



Coastal sites and outlooks such as to golf course with semi private open spaces - existing precedents include Greta Point and apartments on Evans Bay Parade

30-50 dw/ha (av 40dw/ha)



Townhouses with some shared spaces and private space courtyards - existing precedents include Fort Dorset, Seatoun

16-24dw/ha (av 20dw/ha)

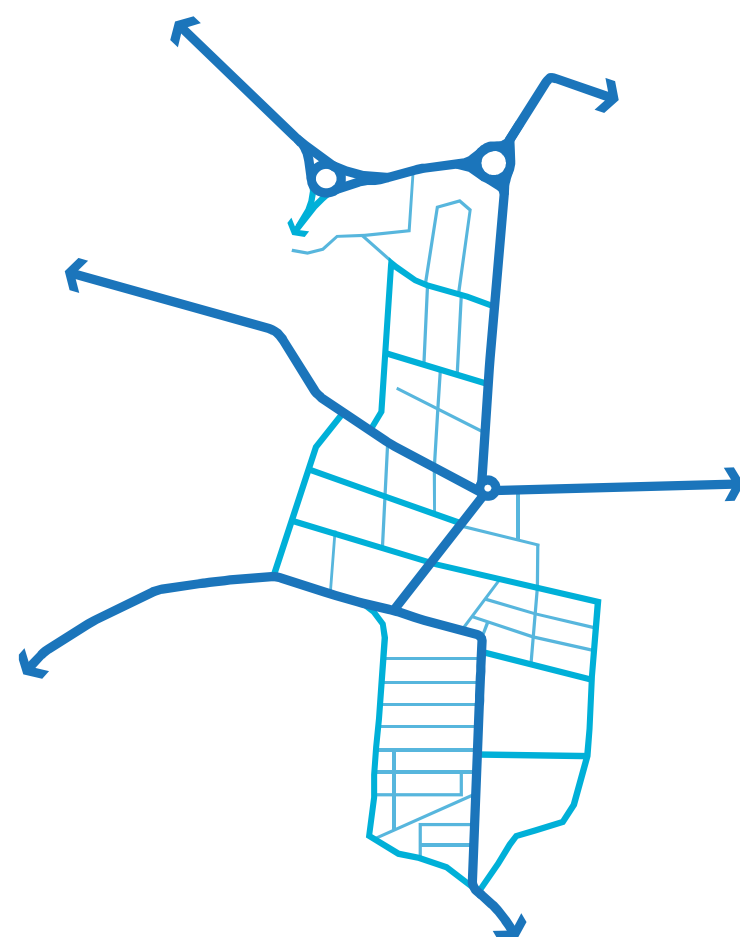


Detached dwellings on stand alone sites

12-18dw/ha (av 15 dw/ha)

5. Typologies

The range of different land uses are described here as 'typologies'. This includes an example photograph and indicative density. As noted previously the expectation is that if the land was available it would be packaged as large blocks for disposal (see superblocs on following page).



STREET HIERARCHY

- Arterial (30.0 metres)
- Collector (20.0 metres)
- Local (15.0 metres)

ALL IMAGES ARE DIAGRAMMATIC ONLY

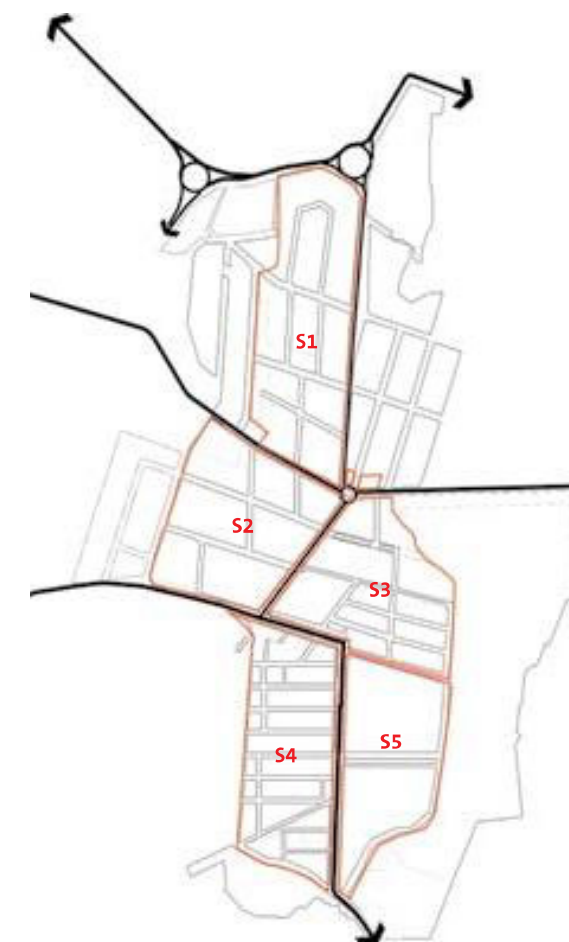


GREEN INFRASTRUCTURE



HIGHER AMENITY FRONTAGES

- Waterfront Frontage
- Open Space Frontage



SUPERBLOCK DEVELOPMENT PARCELS

- S1 Superblock Area 1 - 21.8 Ha
- S2 Superblock Area 2 - 18.2 Ha
- S3 Superblock Area 3 - 16.8 Ha
- S4 Superblock Area 4 - 17.8 Ha
- S5 Superblock Area 5 - 15.4 Ha

note: for simplicity areas include some edge properties excluded from Master Plan calculations



Property Economics Report

PROPERTY **E**CONOMICS



WELLINGTON AIRPORT ALTERNATIVE LAND USE ASSESSMENT UPDATE

Client: WIAL
Project No: 51732
Date: April 2018

SCHEDULE

Code	Date	Information / Comments	Project Leader
51732.3	April 2018	Report	Tim Heath / Phil Osborne

DISCLAIMER

This document has been completed, and services rendered at the request of, and for the purposes of Wellington International Airport Limited only.

Property Economics has taken every care to ensure the correctness and reliability of all the information, forecasts and opinions contained in this report. All data utilised in this report has been obtained by what Property Economics consider to be credible sources, and Property Economics has no reason to doubt its accuracy. Property Economics shall not be liable for any adverse consequences of the client's decisions made in reliance of any report by Property Economics. It is the responsibility of all parties acting on information contained in this report to make their own enquiries to verify correctness.

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1. INTRODUCTION

Property Economics has been engaged by Wellington International Airport Limited (**WIAL**) to undertake an assessment of the Wellington market, and in particular the southern Wellington urban area, in relation to assessing alternative land use options that are physically possible and appropriately justified on the basis Wellington Airport was no longer operating from the site and that its land holding was available for other development opportunities.

This proposition, while theoretical in nature at this juncture, is to assist in the valuation of the underlying Wellington Airport land, with this report determining what in our independent professional opinion is commercially realistic for the potential alternative land uses given the aforementioned proposition.

This assessment is an update to previous reports for WIAL completed by Property Economics for the same purpose dated January 2016 and January 2014 in light of changes in market growth, employment composition, and annual trend changes in the economy since 2016.

This report is to provide WIAL robust market intelligence on the commercial opportunities theoretically available that will assist in understanding the market requirements for alternative land uses and to guide any potential land use options for the associated site.

1.1. INFORMATION & DATA SOURCES

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

- Household and Population Projections – Wellington City Council, Statistics NZ
- Residential Dwelling Consent Data – Statistics NZ
- Household Economic Survey - Statistics NZ
- Retail Trade Survey - Statistics NZ
- Retail Floorspace Surveys 2011, Property Economics
- Business Frame Employment Data – Statistics NZ
- 10-Year Plan consultation document - WCC

1.2. OBJECTIVES

The central objectives of this report are to:

- Delineate and illustrate the geo-spatial extent of the likely principal commercial catchment for the Wellington Airport if the subject land were to be redeveloped for other land uses.
- Determine the catchment's current population and household base and forecast this over a forward planning period to 2038.
- Calculate the level of retail expenditure (demand) generated by the catchment by retail sector, and project this out to 2038 to assist in establishing forward retail demand.
- Based on existing Property Economics databases, estimate the level of retail supply (GFA) in the catchment and indicate at a broad level any over / under provision in the market at the commercial catchment level.
- Model the level of sustainable retail floorspace (current and future) for the identified catchment, based on retail expenditure forecasts and sustainable retail sector productivities to determine the opportunity for such a land use under the alternative land use proposition scenario.
- Determine the commercial office market potential within both Wellington City and the identified commercial catchment to quantify the opportunity for this type of land use development under the alternative land use proposition.

1.3. PRINCIPAL COMMERCIAL CATCHMENT

Figure 1 illustrates the likely principal commercial catchment for the Wellington Airport land under an alternative land use scenario. This has been based on the existing commercial centre network, demographic distribution (current and future), Statistics NZ meshblock boundaries for statistical analysis purposes, the roading network, other natural and physical geographic barriers, urban form and known shopping patterns and trade area dynamics for similar areas throughout NZ.

The catchment illustrated in Figure 1 represents the area where the Wellington Airport alternative land use scenario proposition would likely derive the majority of its retail and commercial customers, and areas of highest market penetration, but is not intended to represent the entire economic catchment Wellington Airport if commercially developed.

FIGURE 1: PRINCIPAL COMMERCIAL CATCHMENT

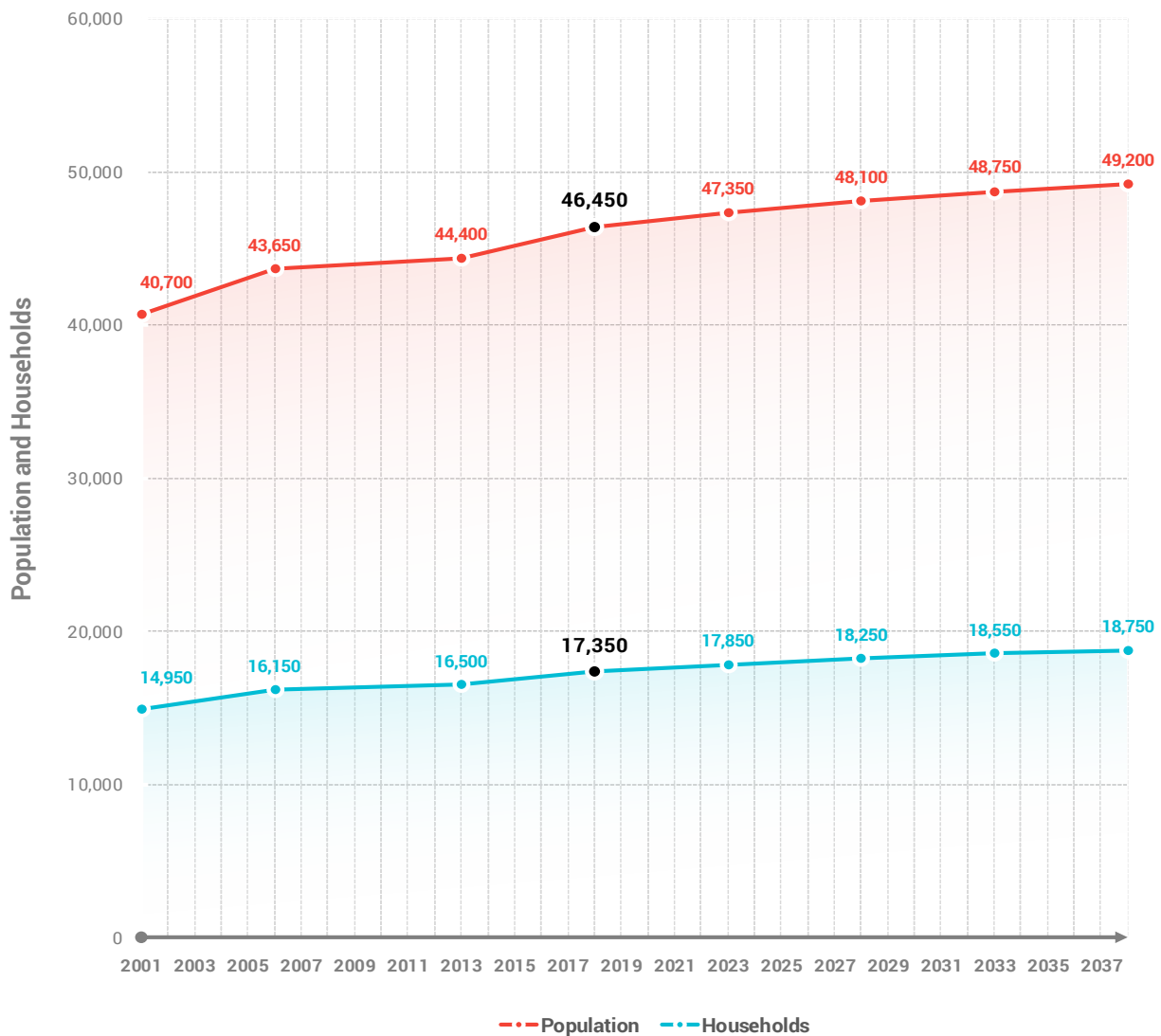


Source: Property Economics, Google Earth

2. POPULATION AND HOUSEHOLD FORECASTS

Figure 2 displays the latest population and household growth projections within the identified catchment. These projections are derived from the Property Economics Growth Model with the key inputs being the latest Statistics NZ medium series projections (2017 release).

FIGURE 2: CATCHMENT POPULATION AND HOUSEHOLD FORECASTS 2018 - 2038



Source: Property Economics, Statistics NZ

The core market is currently estimated to have a population base of around 46,500 people and contains around 17,400 households (rounded), with this projected to increase to 49,200 people and nearly 19,000 household respectively by 2038. This represents net localised catchment growth of around 2,600 people and 1,400 households over the assessed period.

Note, the 2018 population base and projection of the WIAL commercial catchment is marginally lower than Statistics NZ's previous 2013 medium series estimate utilised in the previous 2016 report, i.e. Statistics NZ have updated their base population estimates for NZ and its sub-markets since the 2016 report and this particular area had a slightly lower base population estimate. By itself, this adjustment is not of a scale to alter the recommendations or conclusions reached in original report.

Conversely, the base population of Wellington City is around 3% higher under Statistics NZ's latest population estimates (and future population base 4% higher) indicating the recent population growth within the city has been concentrated in other areas of Wellington.

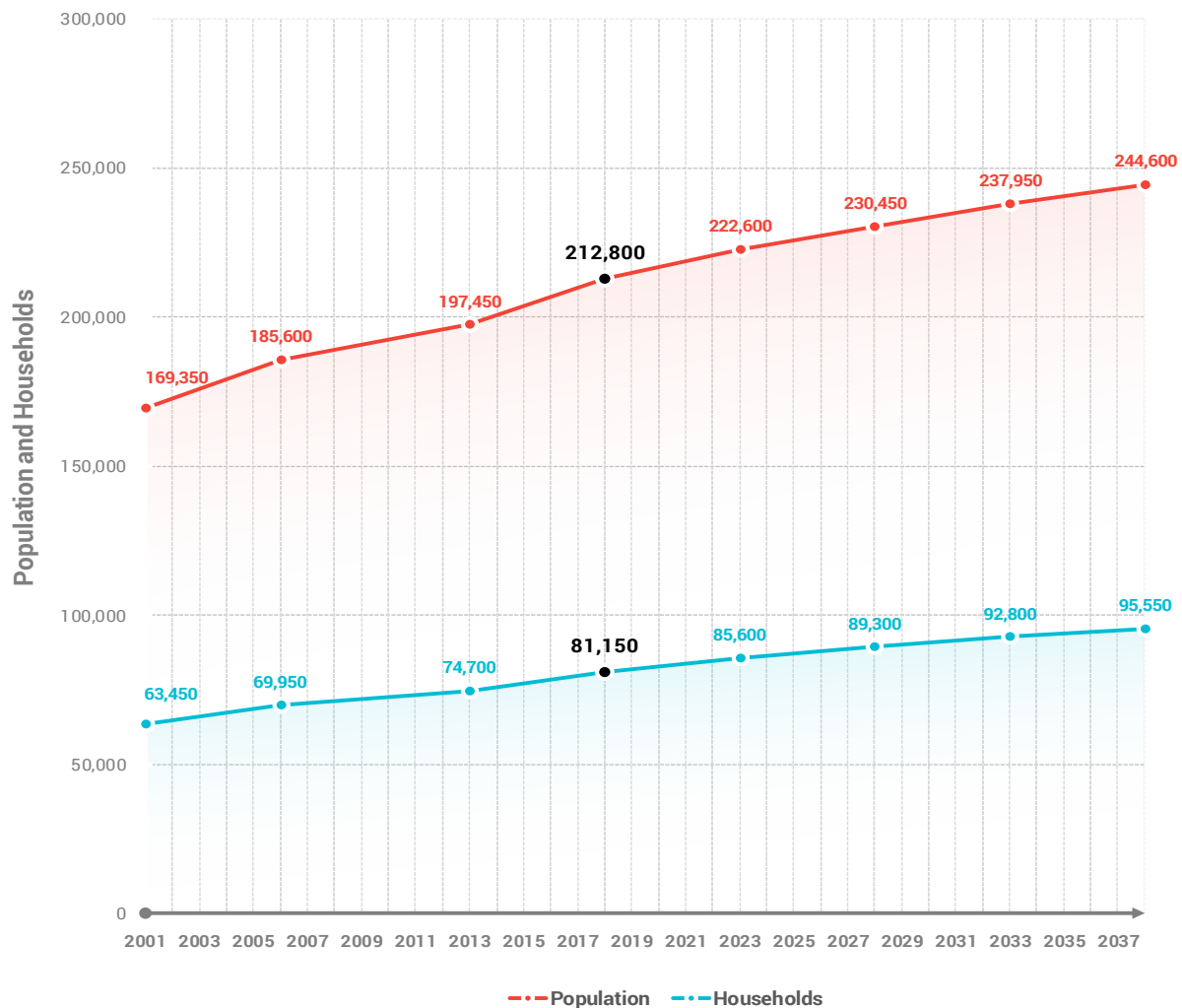
This is likely the result of the lack of suitable residential development opportunities within the localised catchment on a comparative basis to the balance of the Wellington City market. This signals a likely 'pent up' demand locally as a result of a short supply of new residential stock entering the local market.

Clearly the lack of developable residential land is hindering the local area's growth profile, however under the alternative land use scenario this issue would be rectified. Therefore, the Statistics NZ growth projection for the area is considered to low ball the likely growth under the alternative land use scenario, particularly given wider Wellington City's higher growth prognosis.

Figure 1 also indicates that growth in the number of households is to increase at a faster rate than the population due to a projected fall in the person per dwelling ratio over the forecast period. This trend is not isolated to the identified but projected to occur across the whole country due to an aging population, smaller families and a higher proportion of 'split' or single parent households.

Figure 3 following highlights the projected growth profile for Wellington City based on the medium growth scenario. This provides useful wider market context in which the alternative land use scenario can be considered.

FIGURE 3: WELLINGTON CITY POPULATION AND HOUSEHOLD FORECASTS 2018 - 2038



Source: Property Economics, Statistics NZ

Across the wider Wellington City market by 2038 the population base is forecast to reach nearly 245,000 people and contain around 95,600 households (rounded).

In terms of households, Wellington is forecast to experience net growth of approximately 14,400 new households over the 2018 – 2038 period, or conversely Wellington City is likely to require around 14,400 new dwellings to accommodate the city's projected population growth to 2038.

For context, under the Statistics NZ high growth scenario a total of nearly 21,000 new dwellings would be required in Wellington City by 2038 to accommodate projected high scenario growth.

It can be safely assumed in Property Economics view that a proportion of this, and at a minimum commensurate with the catchment projected in Figure 2, would be provided by the alternative use of the WIAL land.

Given these latest data trends, any residential development potential at the WIAL location is likely to take the form of a mix of higher density (apartment and terraced homes) and medium density (smaller lot stand-alone dwellings) for several reasons:

- The proximity to the Wellington CBD.
- The potential for master planned residential development.
- The objectives of the Wellington City Council on land use efficiencies.
- The ability for higher density residential product to provide a higher amenity area.
- Growing wider housing typology preferences from the market due to increasing divergence in household structures.
- A wider spread of a residential price points and house sizes can be provided to the market.
- A limited supply of suitable flat land in Wellington City for residential development.

Property Economics sees it as entirely appropriate that any residential development in this location allows for a variety of residential densities and housing typologies to provide a more comprehensive, efficient, and functional community that better meets the market's preferences.

This is aligned with Council's recently released 10-Year Term Plan consultation document which identifies housing as a priority area and seeks to invest in quality and affordable housing to accommodate the city's growing population. The consultation document states Council wants to actively take the steps to "*avoid an Auckland style housing crisis*" by identifying new land for development, undertaking mater planning work and leveraging surplus land for redevelopment. These priority actions support increasing residential densities and higher residential yields from the airport land under an alternative land use scenario.

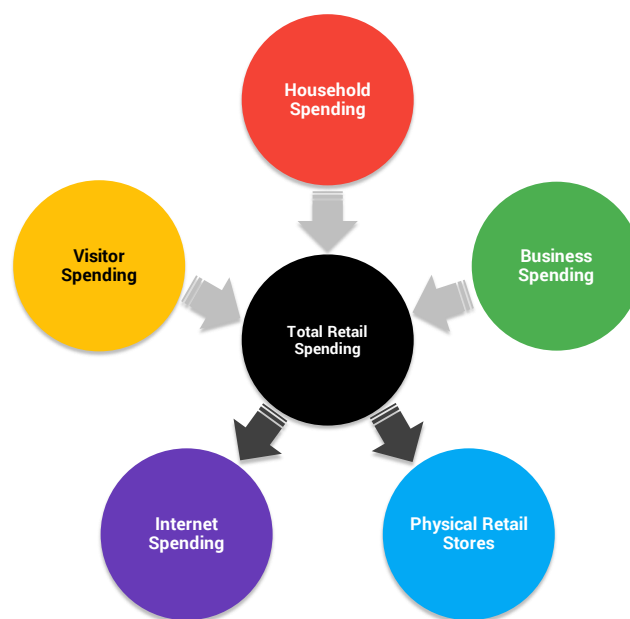
3. RETAIL EXPENDITURE PROJECTIONS

This section sets out the projected retail expenditure generated and sustainable GFA forecasts on an annualised basis for the identified Catchment. The forecasts have been based on the aforementioned population and household growth projections and have been prepared using Property Economics' Retail Expenditure Model.

3.1. RETAIL EXPENDITURE MODEL

A more detailed breakdown of the model and its inputs is set out in Appendix 1.

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



GROWTH IN REAL RETAIL EXPENDITURE

For the purposes of projecting retail expenditure, growth in real retail spend has been incorporated into the model at an average 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 market does 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.

For that reason, it is appropriate for modern retail markets to be assessed on the basis of “layered catchments”. This is where consumers spread their retail spending across a wider spectrum of centres, with the majority of their “higher order” spend going to “higher order” centres (predominantly large scale regional or main metropolitan shopping destinations). Meanwhile, convenience spend tends to remain more localised, triggering a layering of centre catchments across the city. In other words, a consumer could be in the primary catchment of numerous centres, not just one.

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, but simply represents normal commercial market mechanisms (competition) and is a consideration that needs to be appropriately accounted for in any retail analysis.

EXCLUDED ACTIVITIES

The retail expenditure figures below are in 2018 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 activities classified as retail by ANZSIC 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. 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 consequential trade competition effects rather than flow-on retail distribution effects. 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 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 and site sizes.

Trade orientated activities such as kitchen showrooms, plumbing stores, electrical stores, tile warehouses and paint stores are also excluded from the model for similar reasons. As such, demand for these store types is additional to the retail demand assessed in this analysis.

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 well-being and amenity.

It is 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 to 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 or toilets and other 'back office' uses.

These activities typically occupy around 25-30% of a store's GFA. 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.

Furthermore, retail stores in general can be split into Specialty and Large Format Retailing (LFR). Specialty retailing generally consists of smaller, boutique more specialised stores typically operating within, and offering products from, a specific retail sector. These are typically stores for items such as clothing, footwear, pharmaceuticals, and food and beverages, with the vast majority of store sizes for this type of retailing under 500sqm GFA.

LFR activity is typically identified as stores with a larger store footprint, generally over 500sqm GFA, and includes store types such as supermarkets, furniture, appliances, hardware and department stores. It is important to note that these store type examples are not mutually exclusive and can include a range of products across a number of retail sectors.

LFR stores, while large in floorspace terms comparatively, typically represent only a small proportion of physical stores nominally. These LFR store types, with the exception of supermarkets, generally trade at lower productivities on a per sqm basis relative to smaller Specialty stores, but are able to remain profitable by selling more in terms of volume, having superior 'purchasing power' (i.e. LFR stores can typically purchase goods at lower wholesale costs on a per unit basis due to the larger volumes bought, particularly for national retail chains), and typically lower per square metre rental rates.

Given the differences between Specialty and LFR retailing specifically, Table 1 illustrates the level of retail expenditure generated within the identified core market and sustainable GFA categorised by Specialty and LFR activity.

TABLE 1: CATCHMENT RETAIL EXPENDITURE AND SUSTAINABLE GFA FORECASTS

Retail Expenditure (\$m)	2018	2023	2028	2033	2038	Net Growth (2018 - 2038)
Speciality Retailing	\$267	\$290	\$311	\$333	\$359	\$91
LFR	\$291	\$313	\$331	\$351	\$373	\$82
Total	\$558	\$603	\$642	\$685	\$732	\$174

Sustainable GFA (sqm)	2018	2023	2028	2033	2038	Net Growth (2018 - 2038)
Speciality Retailing	45,100	48,900	52,400	56,200	60,500	15,400
LFR	64,800	69,500	73,500	77,700	82,400	17,600
Total	109,900	118,400	125,900	134,000	142,900	33,000

Source: Property Economics, Statistics NZ

The identified catchment currently generates an estimated \$558m per annum of retail expenditure. This market is projected to increase to around \$732m per annum by 2038. To put this into context, the catchment currently is attributable to 15% of all retail expenditure generated within the wider Wellington City market.

Note under the alternative land use scenario there is likely to be higher growth (than projected) which would increase the annual retail expenditure generated higher than shown in Table 1.

Sustainable retail GFA levels for Specialty retailing currently equates to around 45,100sqm and 64,800sqm for LFR. The proportional split in terms of GFA between these store types is assumed to remain relatively constant over the forecast period, remaining at around 42% Specialty and 58% LFR.

For the purpose of context, Table 2 shows the retail expenditure and sustainable GFA projections for the entire Wellington City market (identified commercial catchment inclusive) over the assessed period. This again highlights the wider Wellington market and any large-scale retail centre / destination developed on the Wellington Airport land under the alternative land use scenarios would compete in.

TABLE 2: WELLINGTON CITY RETAIL EXPENDITURE AND SUSTAINABLE GFA

Retail Expenditure (\$m)	2018	2023	2028	2033	2038	Net Growth 2016 - 2033
Specialty Retailing	\$1,714	\$1,895	\$2,057	\$2,232	\$2,426	\$712
LFR	\$1,888	\$2,074	\$2,234	\$2,405	\$2,589	\$701
Total	\$3,602	\$3,969	\$4,291	\$4,637	\$5,015	\$1,413

GFA (sqm)	2018	2023	2028	2033	2038	Net Growth 2016 - 2033
Specialty Retailing	289,300	319,800	347,200	376,800	409,500	120,200
LFR	421,100	462,100	497,100	534,100	574,000	152,900
Total	710,400	782,000	844,300	910,900	983,500	273,100

Source: Property Economics, Statistics NZ

Projected net Wellington City territorial authority retail expenditure growth equates to around \$1.4b higher annually by 2038 compared to the current 2018 base year, increasing the city's generated retail market to over \$5b per annum by 2038.

In terms of sustainable retail GFA, market growth over the period equates to an additional 273,000sqm GFA being sustainable by 2038 above the current base year, giving a total sustainable market size for the city if spend was internalised (i.e. excludes any net inflows / outflows of expenditure) of around 984,000sqm GFA.

4. CATCHMENT RETAIL AUDIT

To gauge the current level of over / under provision of retail GFA in the identified commercial catchment there is a need to quantify the current level of material retail provision in the identified area. Utilising Property Economics' existing in-house databases of retail audits undertaken in 2011/12 of centres within the identified catchment as a barometer enables the alternative land use scenarios commercial catchment current retail demand / supply equilibrium to be broadly estimated.

The 2011 / 12 audit data is still considered relevant today to utilise as basis of current supply given Property Economics understands cumulatively there has not been a material increase in new / additional retail GFA developed in the local area (not including airport terminal developments) subsequent to the audit and applying updated retail employment data as a proxy for quantifying any new retail GFA.

Assessment of retail employment shows that retail sectors experienced a net increase of around 200 employees since 2012, predominately in Food and Beverage Services. Further analysis into Retail and Commercial Service building consents shows that over this same period around 5,500sqm for new development within the WIAL commercial catchment was consented. This indicates that there has likely been some new retail development within the catchment albeit not to a level that changes the conclusions reached in this report, and also it may not all represent 'new' GFA but a conversion of some existing GFA from alternative commercial uses.

While there is a slight upshot since 2012, the level of retail employment change is considered immaterial in terms of its likely reflection on the net differential in retail GFA in the catchment since 2012 and its effects are likely within the margin of error of the original retail audit. On that basis Property Economics has maintained the 2012 supply data as a relevant broad representation of the current catchment retail supply, albeit with a caveat that the food and beverage sector is likely to be slightly higher than indicated.

The results of the original retail audit are displayed in Table 3, and highlight the GFA, number of retail stores, and the respective percentages by ANZSIC retail sector.

For transparency, the original retail audit involved measuring the net retail floorspace of all retail stores within the catchment centres by sector. These figures were then translated to GFA using an average 70% net to GFA ratio.

TABLE 3: ESTIMATED WIAL COMMERCIAL CATCHMENT RETAIL SUPPLY

ANZSIC06 RETAIL CLASSIFICATIONS	Store #	Store %	GFA #	GFA %
Supermarket Retailing	3	2%	6,500	14%
Food Retailing	13	10%	1,700	4%
Clothing, Footwear and Personal Accessories Retailing	14	11%	2,500	6%
Furniture, Floor coverings, Houseware and Textile Goods Retailing	6	5%	6,000	13%
Electrical and Electronic Goods Retailing	3	2%	1,600	4%
Hardware, Building and Garden Supplies	5	4%	2,400	5%
Pharmaceutical and Personal Care Goods Retailing	3	2%	500	1%
Department Stores	3	2%	11,400	25%
Recreational Goods Retailing	17	14%	5,500	12%
Other Goods Retailing	10	8%	2,000	4%
Food and Beverage Services	40	32%	4,300	9%
Vacant	6	5%	700	2%
Under Construction	1	1%	200	0%
Total	124	100%	45,300	100%

Source: Property Economics

Within the catchment there were approximately 125 retail stores with an estimated 45,300sqm of retail GFA. The vast majority of the retail provision is encompassed in two main retail centres - Kilbirnie and the Airport LFR Centre.

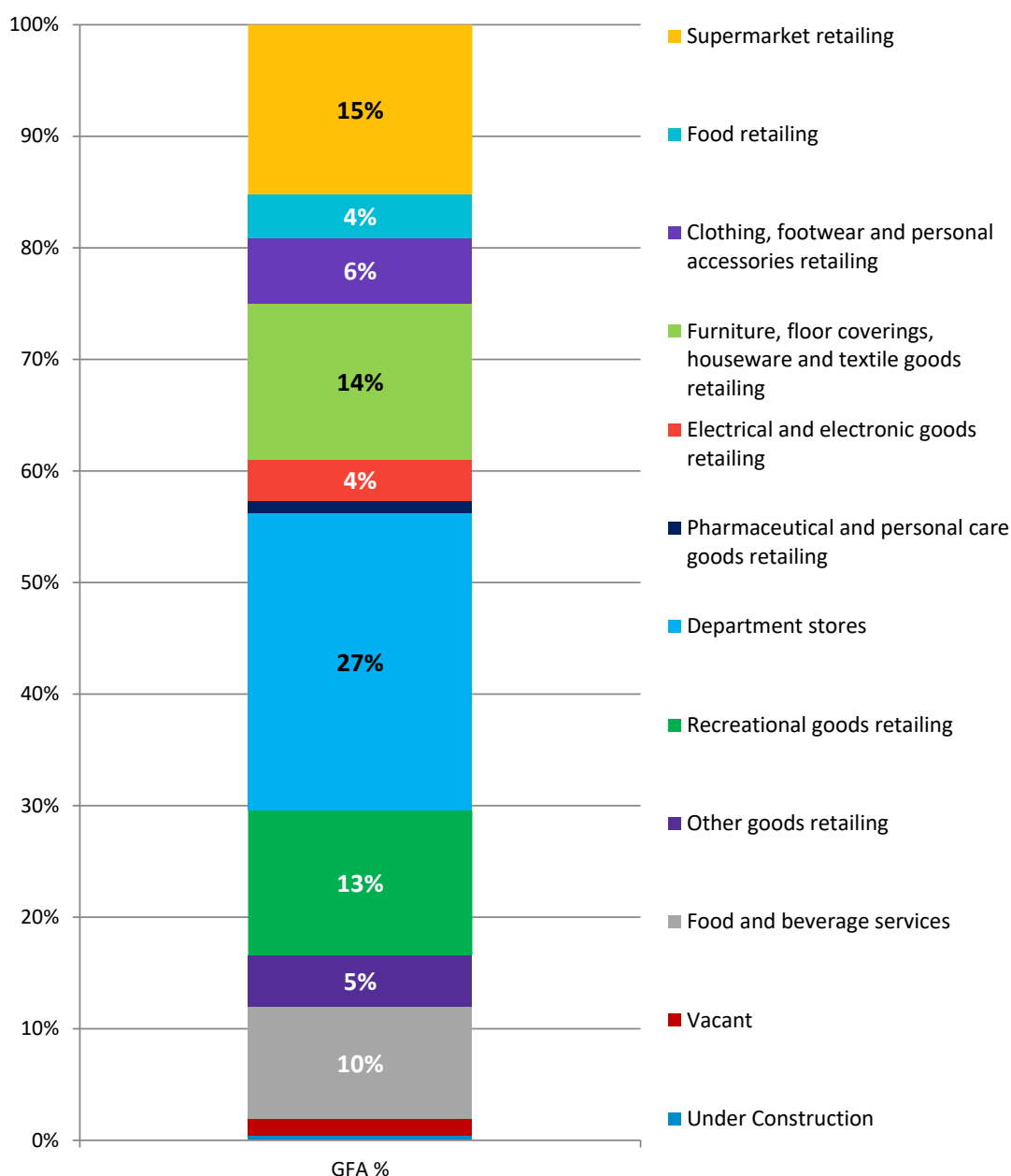
The vacancy level in the area at the time of the original audit was negligible at only 1% of total GFA and is illustrative of a market with tight supply. This is likely to still be the case today with the high food and beverage sector employment data. Given the recent 'recovery' in the retail market nationally (from the post-GFC market slowdown), and with retail market growth forecast over the coming years, this vacancy level is considered very low and will place upward pressure on retail rents and tighten investment yields unless additional supply is developed.

It is worth noting the supply data represent a 'snapshot' in time and retail stores are constantly opening, closing and relocating due to a variety of individual store circumstances. In this regard the retail market is fluid and undergoing constant change.

The retail sector representing the largest proportion of the market in terms of store count is Cafes, Restaurants & Takeaways with 37 stores, or 30% of the total catchment retail market by store number. This is likely higher today. This activity type will be an important component of any retail centre within the alternative land use scenarios. Department stores represent the largest sector by GFA (25%) and not unexpectedly supermarkets represent the second largest sector with retail GFA footprint of around 6,500sqm (14%). Both these sectors are key anchor store types for any higher order retail centre and likely to be important elements in any retail centre development on the airport land.

Figure 4 below illustrates the current retail GFA composition distributed by retail sector. This is a graphic representation of the GFA information in Table 3.

FIGURE 4: ESTIMATED WIAL COMMERCIAL CATCHMENT RETAIL GFA COMPOSITION



Source: Property Economics

While the Department Store sector represents 25% of GFA, there are only 3 stores in the catchment representing only 2% of the store count. In contrast there are 36 Cafes, Restaurants and Takeaway stores in the catchment that cover 8% of the catchment retail GFA, but account for 30% of the retail stores in the catchment. This is due to a lower average store size, which

when combined, the average store size per tenancy for Cafes, Restaurants and Takeaway stores is under 100sqm.

Table 4 breaks the original retail audit down further into store numbers in three store size categories, namely 0-499sqm, 500-999sqm and 1,000sqm GFA plus.

TABLE 4: CATCHMENT RETAIL STORE SIZE BREAKDOWN (SQM)

ANZSIC06 RETAIL CLASSIFICATIONS	Store Count				GFA (sqm)			
	0-499	500-999	1000+	Total	0-499	500-999	1000+	Total
Supermarket Retailing		1	2	3	900	5,600		6,500
Food Retailing	13			13	1,700			1,700
Clothing, Footwear and Personal Accessories Retailing	13		1	14	1,500		1,000	2,500
Furniture, Floor coverings, Houseware and Textile Goods Retailing	4		2	6	1,200		4,800	6,000
Electrical and Electronic Goods Retailing	2	1		3	700	900		1,600
Hardware, Building and Garden Supplies	3	1	1	5	300	600	1,500	2,400
Pharmaceutical and Personal Care Goods Retailing	3			3	500			500
Department Stores	1	1	1	3	400	600	10,400	11,400
Recreational Goods Retailing	14	3		17	3,200	2,300		5,500
Other Goods Retailing	9	1		10	1,100	900		2,000
Food and Beverage Services	40			40	4,300			4,300
Vacant	6			6	700			700
Under Construction	1			1		200		200
Total	109	8	7	124	15,600	6,400	23,300	45,300
Total %	88%	6%	6%	100%	34%	14%	51%	100%

Source: Property Economics

This sheds a different light on the catchment's retail composition. Currently, a significant 88% of the catchment retail stores are small (below 500sqm) specialty / finer grained retailers. However, these smaller boutique stores only represent 34% of catchment retail GFA. Average store GFA in the 0-500sqm category is 140sqm.

Interestingly, retail stores 500sqm GFA plus represents only 12% of store numbers but 65% of catchment retail GFA. Stores over 500sqm GFA are typically classified as LFR and within the catchment these stores have an average GFA of 2,000sqm.

This retail market composition is expected to be similar for any retail centre development on the airport land, albeit there is market potential for a slightly higher proportion of Clothing, Footwear, and Personal Accessories Retailing, and Food and Beverage stores than current exists in the catchment.

5. FUTURE RETAIL OPPORTUNITY

The retail supply data above of around of 45,000sqm GFA, when assessed against generated catchment demand as determined in the earlier sections, equates to a level of retail internalisation within the catchment at present of around 42%. This is considered low relative to market demand and is fuelled by the lack of retail provision within the catchment both in terms of scale and quality. Therefore, when assessing the potential retail market under the alternative land use scenarios, it is not simply a matter of assessing the future market growth within the catchment, but the current under provision within the catchment that any development on the WIAL land would have the potential to address.

Property Economics recognise not all retail demand should or could be satisfied within the catchment, as some of this demand would be met in the CBD for example. However, a higher level of retail internalisation can be sustained and would provide a more efficient retail network for the city, and therefore would provide an opportunity to better meet Council objectives and RMA principles. A current retail internalisation rate of around 60% is considered more appropriate for this catchment, which equates to current shortfall of around 20,000sqm GFA currently.

Adopting a 65% - 70% internalisation rate at the end of the forecast period, assuming that the catchment improves its economic competitiveness and standing within the catchment as its market critical mass grows, there is an additional market potential of around 55,000sqm within the market. Not all this 'demand' should be allocated to a single new centre, however the bulk of this demand would most efficiently be met within one centre (i.e. around 50,000sqm GFA).

The current Kilbirnie and Miramar centres have significant constraints on their ability to expand by any material degree and doing such would be difficult commercially given the small land parcels and multitude of land owners, and therefore a new centre on the WIAL land would provide an opportunity to efficiently cater for this demand in an effective and consolidated manner. It is worth noting there has been no material growth or change in the aforementioned centres despite market demand allowing such, and encouragement from a policy perspective within the District Plan.

While the current Wellington District Plan identifies Kilbirnie Town Centre as a regional centre, this is by virtue of default (i.e. the only centre in southern Wellington that comes close to such a status) rather than trading performance and market penetration. The alternative land use scenarios would provide a '*game changing*' proposition that would force the entire planning of southern Wellington to be reviewed. This would require the District Plan to be changed under such a scenario, and therefore looking at the current District Plan framework and specific provisions suite for southern Wellington is not considered the benchmark for such an exercise. The Regional Policy Statement and District Plan's higher order objectives would provide more useful guidance in this instance.

Further to the strategic direction likely to be adopted in this area is the issue of capacity in the existing centres of Kilbirnie and Miramar. In terms of retail development potential neither centre is considered to have a material level of at grade retail development capacity in the order required to support future demand. The level of growth expected in this area under the alternative land use scenarios is likely to continue to facilitate the exodus of retail spend from the identified catchment and local community unless a comprehensive alternative proposition was facilitated.

The alternative land use scenarios and WIAL land holding encompass such an extensive and significant piece of land in the context of Wellington that the District Plan would have to change to maximise the potential benefits the land could offer Council and the community. In essence, such a scenario could address many of the existing land use shortcomings in southern Wellington (of which only a few are outlined in this report), and leverage benefits to the community that might not otherwise materialise if the District Plan were not to change.

As such, the alternative land use scenario proposition in effect would provide an opportunity Council is likely to embrace to review its District Plan provisions rather than marginalise and confine development based on the current District Plan, as the current District Plan provisions would not be 'fit for purpose'. The alternative land use proposition allows Council to reposition its planning for southern Wellington and allow it to maximise opportunities generated under such a proposition.

Given the retail analysis above and in the preceding sections, an appropriate retail allocation for the alternative land use scenarios and the WIAL land is considered to be in the order of 50,000sqm GFA by 2038. This level of retail provision is best provided at ground level only from a retailer perspective, and given it would be a suburban environment, and therefore an appropriate land allocation is considered to be 11-13ha of developable land. This excludes other land uses such as community facilities, public parks, infrastructure, etc. typically often form part of a commercial centre.

6. COMMERCIAL OFFICE MARKET ASSESSMENT

6.1. CURRENT WELLINGTON MARKET

The Wellington City commercial (office) market has several attributes that make it unique in terms of employment growth and distribution. First, the location of Central Government within the City provides a comparatively disproportionate level of Public Administration employment, while the sitting Government and national economy dramatically influences the growth of this sector. Table 5 following illustrates this point with net growth in the Public Administration sector over 40% between 2000 and 2007, while growth over the past 10 years has more muted at around net 23%.

Second, the geography of Wellington City has resulted in a consolidated market approach to office activity with limited dispersal such as that seen in virtually all other major cities in New Zealand. This consolidation has meant that intensified centres have significant economic value to the City.

While Wellington City only accommodates 40% of the Region's population, over 60% of the Region's jobs (and in fact 75% of commercial office employment) are located within the City's boundaries. This illustrates the strength of the centres within the City and their competitiveness for this regional activity. Note employment is measured in ECs (Employment Count), which is Statistics NZ measure for employment within a defined geographic area.

Since 2008, total employment across all industries in Wellington City has increased a net 6%, with commercial (office sector) activity's net increase tracking at around the same level (6%). The Wellington City commercial office employment base in 2008 represented 12% of New Zealand's commercial office employment base. This is the same proportion as it is currently.

This shows while Wellington City has experienced commercial office employment growth since 2008 of a net 6%, this is the same rate of commercial office employment growth as that experienced across the rest of the country, i.e. Wellington City office employment growth over the 2008 – 2017 period has maintained its position and competitiveness relative to the balance of New Zealand with having a similar employment recovery profile (post-GFC) in commercial office sectors.

TABLE 5: WELLINGTON CITY COMMERCIAL EMPLOYMENT TRENDS (2000 – 2017)

	2000	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
A Agriculture, Forestry and Fishing	1,220	1,380	1,390	1,470	1,470	1,520	1,470	1,500	1,560	1,610	1,660
C Manufacturing	6,250	6,270	6,020	6,410	5,730	5,720	5,590	5,250	4,900	4,920	4,840
D Electricity, Gas, Water and Waste Services	9,210	8,730	9,500	9,380	8,750	8,620	10,350	10,220	9,310	10,630	10,630
E Construction	1,320	1,590	1,490	1,410	1,420	1,430	1,440	1,450	1,470	1,480	1,570
F Wholesale Trade	16,960	21,400	21,490	21,250	21,330	21,630	21,780	22,800	23,930	24,130	24,530
G Retail Trade	9,130	10,610	8,590	8,470	8,730	9,140	8,070	8,810	8,400	7,990	8,380
H Accommodation and Food Services	5,570	8,700	8,860	8,960	8,460	9,220	9,390	9,510	9,600	9,700	9,830
I Transport, Postal and Warehousing	1,110	1,500	1,490	1,550	1,570	1,580	1,550	1,620	1,740	1,770	1,770
J Information Media and Telecommunications	2,410	2,760	2,740	2,910	3,010	3,210	2,980	3,080	3,230	3,360	3,290
K Financial and Insurance Services	680	870	1,000	930	970	950	1,000	1,020	960	980	1,000
Total Commercial Industries	53,860	63,810	62,570	62,740	61,440	63,020	63,620	65,260	65,100	66,570	67,500
Total All Industries	120,410	143,190	141,270	140,980	139,490	143,070	142,790	145,500	146,220	149,050	151,170
Commercial Proportion	45%	45%	44%	45%	44%	44%	45%	45%	45%	45%	45%

Source: Property Economics, Statistics NZ

6.2. WIAL COMMERCIAL CATCHMENT

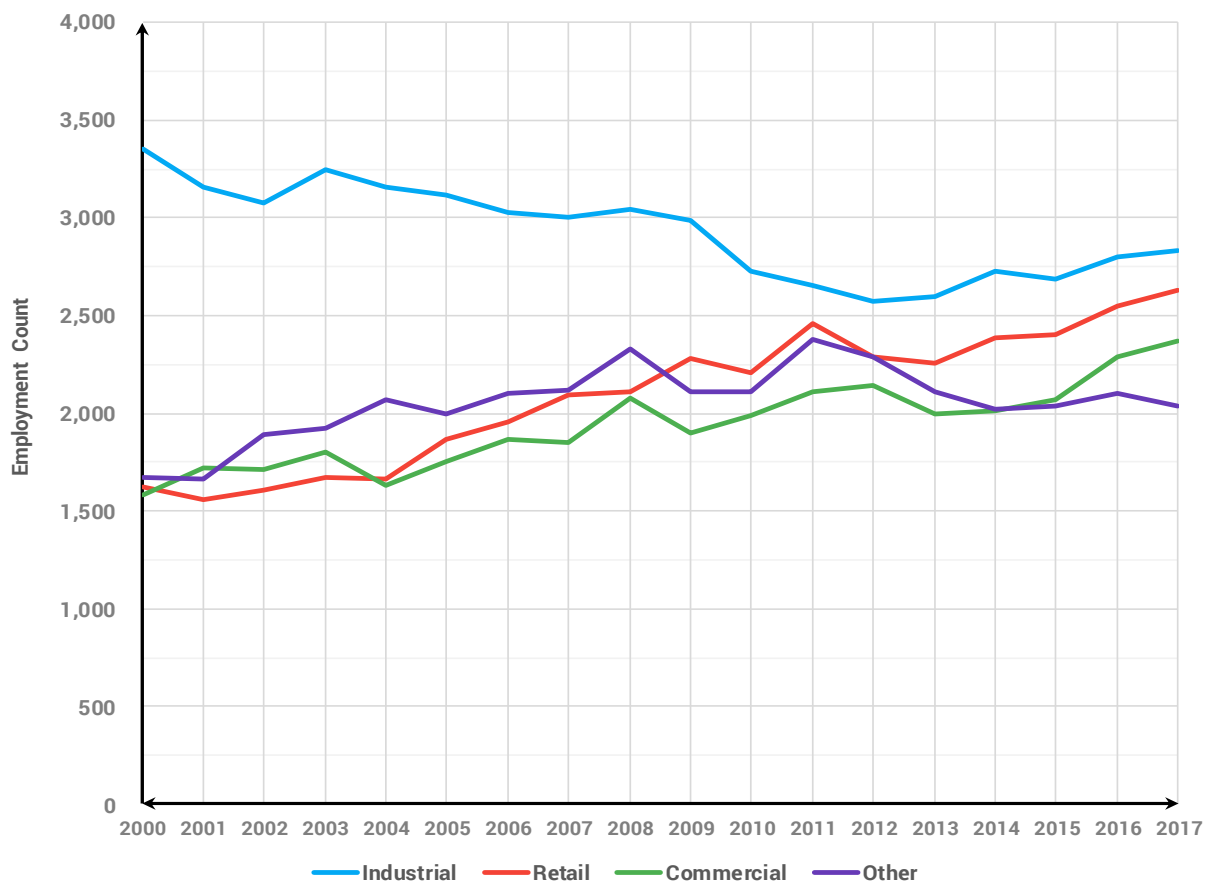
The commercial catchment for a potential re-use of the Wellington Airport land under the alternative land use scenarios has been outlined earlier in this report and is likely to form a similar area for the commercial competitiveness of a commercial centre located here.

Table 6 below shows the current employment composition for the catchment from 2000 to 2017. There has been a clear change from an area that was comprised of over 40% industrial activity to a more balanced area with a growing market for commercial and retail activities. This is not uncommon in areas where the underlying land value increases over time and land supply is constrained.

Of interest is the level of employment retention in this area (or employment internalisation). While the Wellington Region has an employment to population ratio of around 50% and the City over 70%, this Catchment is operating more as a dormitory suburb with just over 20% retention, i.e. there is significant employment leakage out of the identified WIAL commercial catchment. Even if this catchment exhibited the same average ratio as the Region it would accommodate over 23,000 more jobs.

Of note, the Catchment accommodates around 22% of the City's population but only 6.5% of its jobs, and only 3.5% of the city's commercial jobs. This suggests land availability constraints are affecting local employment provision (and development of it) and highlights compelling evidence to suggest this imbalance (or underperformance locally) would be corrected if Wellington Airport was no longer sited in its current location and opportunity for such provision provided.

TABLE 6: WIAL COMMERCIAL CATCHMENT EMPLOYMENT COMPOSITION (2000 - 2017 ECS)



Source: Property Economics, Statistics NZ

The 2017 data highlights the surge in growth within the WIAL Commercial Catchment over the last two years due to a recent surge in Media industries and Professional Service employment. Conversely 'Other' employment (Hospitals, Schools, Art Galleries and etc.) has remained relatively stagnant since 2013.

TABLE 7: WIAL CATCHMENT COMMERCIAL EMPLOYMENT TRENDS (2000 – 2017 ECS)

	2000	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
H Accommodation and Food Services	99	111	120	114	130	146	146	157	165	181	195
J Information Media and Telecommunications	54	188	187	180	184	204	183	154	176	251	266
K Financial and Insurance Services	56	119	95	95	113	125	97	76	67	72	71
L Rental, Hiring and Real Estate Services	146	185	195	180	192	205	208	211	198	198	236
M Professional, Scientific and Technical Services	429	625	569	570	573	585	572	639	692	882	890
N Administrative and Support Services	424	304	257	372	366	350	329	330	312	244	259
O Public Administration and Safety	70	141	128	138	99	96	77	70	80	83	87
P Education and Training	116	148	144	151	154	158	161	158	149	156	157
Q Health Care and Social Assistance	146	210	136	139	237	231	164	163	163	160	136
R Arts and Recreation Services	45	47	67	53	59	36	67	55	63	64	68
Total Commercial Industries	1,585	2,077	1,896	1,991	2,108	2,137	2,003	2,012	2,065	2,291	2,365
Total All Industries	8,232	9,559	9,277	9,036	9,593	9,285	8,966	9,155	9,192	9,748	9,860
Commercial Proportion	19%	22%	20%	22%	22%	23%	22%	22%	22%	24%	24%

Source: Property Economics, Statistics NZ

Table 7 drills down on the relevant commercial employment sectors in more detail to highlight employment composition on a temporal basis over the 2000-2017 period. The composition of commercial activity within the WIAL catchment proportionally is fairly indicative of Wellington City as a whole. It is important to note however that much of the activity identified here is located in this catchment due to the operation of the Airport itself.

It is clear from the level of activity indicated that this catchment is not providing an environment in which the majority of residents in this area can work. The catchment at present does not provide a competitive business environment that has the ability to accommodate jobs for these residents. As such, the alternative land use scenarios are likely to in effect create a more competitive business environment for commercial office activity to locate. This would improve market efficiencies and productivity, supporting an allocation of such in any alternative land use plan.

6.3. FUTURE PROJECTIONS

Using the earlier identified population forecasts, historical business demographic trends and the changing demographic profile of Wellington City, Property Economics have projected office employment for Wellington City out to 2038 factoring in changing labour force participation rates over the period.

The sector projected employment for the following areas is based on a variety of factors including:

- National and Regional GDP and employment projections
- Population projections – these are key both to labour force projections and population based employment.
- Labour Force projections (skilled / unskilled)
- Labour Force participation rates for Wellington City have been increased throughout the 2015 – 2033 period leading to a rate 8% higher than the current national average.
- Regional ability to accommodate growth, especially the potential relocation of business (industrial) activity from the wider area. Wellington City accommodates only 40% of the regional population but 60% of the regional jobs.
- Wellington City's sub-national relative business land supply and prices
- Trended growth from at least the past 17 years at an Census Area Unit level
- Economic development directions
- Locational criteria by sector
- National / Regional and local supply of inputted goods and location of market
- Business sector analysis
- Increasing working age

It is also important to note that these projections do not factor in changes in land prices resulting from changes to Wellington City's competitiveness and price changes in surrounding areas. These factors can influence where businesses decide to locate, however given the unpredictability of land values, for the purpose of this assessment it has been assumed that relative prices between Wellington City and surrounding region remain constant over the forecast period.

Table 8 outlines the projections for Wellington City from the process above. It is projected that by 2038 Wellington City will have employment base approximately 26,400 ECs higher than the current base year, of which nearly 12,000 will be in the office sectors. The large proportion of commercial activity is also driven by growth in the wider region and therefore represents a larger proportion of activity than would typically be expected.

TABLE 8: WELLINGTON CITY TOTAL EMPLOYMENT PROJECTIONS (2038 ECS)

Year	Total	Commercial	% of Commercial
2008	143,189	63,821	45%
2009	141,268	62,577	44%
2010	140,979	62,732	44%
2011	139,486	61,439	44%
2012	143,069	63,014	44%
2013	142,786	63,623	45%
2014	145,501	65,257	45%
2015	146,216	65,091	45%
2016	149,048	66,562	45%
2017	151,165	67,488	45%
2033	177,565	79,409	45%

Source: Property Economics

Table 9 translates the employment growth projected to the required floorspace and land area at given development levels. In total Wellington City is estimated to require an additional 281,000sqm of commercial floorspace by 2038 based on forecast growth (assuming the current market is in equilibrium). To facilitate this floorspace it would require around 70ha of land, if the commercial development were only one level or 'at grade'.

Typically, commercial development, over a citywide area inclusive of higher density development, will be accommodated at between 2 and 3 levels. Applying this average would necessitate around 30ha of land for Wellington across the entire City, with much of the activity locating in centres that will develop at greater densities.

TABLE 9: WELLINGTON CITY OFFICE FLOORSPACE AND LAND REQUIREMENTS (2038)

	Year 2038
Additional Commercial Floorspace	281,000
Additional 'At Grade' Land (Ha)	70.3
Additional 2.4 Level Average Land (Ha)	29.3

Source: Property Economics

6.4. POTENTIAL WIAL LAND OFFICE MARKET

The Wellington Airport location is highly accessible (due in part to the infrastructure provided for the Airport) and therefore could provide a highly competitive business location environment for office activity within Wellington City. Table 10 following illustrates the potential market that exists for office activity within the alternative land use scenario commercial catchment, in particular this location.

While highly accessible to the market, and with the potential to provide a commercial centre with significant agglomeration benefits, the competitive nature of the WIAL location will in large part be determined by the level of amenity that can be supported in this location. As such the level of supportable retail will play a substantial role in determining the level of competitiveness and therefore commercial office activity that could be supported here.

Given the preceding sections on sustainable retail indicating that around 50,000sqm GFA of retail activity (regional centre) could be sustained by 2038 in a single retail destination, Table 10 outlines the potential commercial activity range that could be accommodated within a commercial business park in this area.

It is important to note that even though the potential to accommodate over 2,000 commercial ECs in a comprehensive centre exists, thereby providing over 50,000sqm GFA, this would not 'equalize' the retention of employment within the area with the corresponding ratio only rising to 33% (with further growth experienced in other areas around the catchment). This underlines the commercial reality of the potential commercial provision outlined in Table 10.

TABLE 10: POTENTIAL WIAL CATCHMENT COMMERCIAL ACTIVITY (2038)

	WIAL (2%)	WIAL (3%)
Commercial Employment Capture	1,600	2,400
Additional Commercial Floorspace	40,700	61,000
Additional 'At Grade' Land (Ha)	10.2	15.2
Additional 2.4 Level Average Land (Ha)	4.2	6.4
Additional 4.7 Level Average Land (Ha)	2.2	3.2

Source: Property Economics

Adopting a 2%-3% range of the total Wellington City office market is considered a prudent approach given the wider influence on such a market. A commercial business park within any alternative land use scenario centre has the potential within the next 18 years to generate demand for an additional 40-61,000sqm GFA of commercial office activity within the catchment providing a competitive centre with a high degree of amenity is enabled and would provide the local economy with sustainable agglomeration benefits.

This is likely (and most appropriate) to be provided efficiently to the market in higher density multi-storied development rather than a more dispersed at-grade development that consumes land inefficiently, albeit a mix would be likely. If this level of commercial provision were developed at-grade only, this would absorb between 10 - 15ha of land.

However, given land supply is tight within Wellington and competition between land uses more intensive, it is considered more likely that the commercial provision is likely to be delivered to the market across higher density development. Therefore, adopting a 2.4 level average like across the city, this would result in a land requirement between 4 - 6ha (rounded). This is considered a more appropriate land allocation for such activity within the alternative land use scenarios for the WIAL land.

6.5. LIGHT INDUSTRIAL LAND USES

The lack of appropriately located and zoned industrial land in Wellington is a well-documented issue for the city. The topography of the city makes many areas either unsuitable or commercially impractical to develop for such activities which typically require flat or gently sloping land.

Like in many other parts of the country, Wellington has had large tracts of its industrial zoned land allocation consumed by non-industrial activities over the last few decades, particularly since the emergence of land hungry LFR activity which typically has larger site requirements. This has reduced the quantum of land available for industrial activity and also driven up land costs making the land economics of such development increasingly difficult in many parts of Wellington.

Wellington Regional Council has signed up to the WRS the region's economic development strategy which has the aim of:

To build a resilient, diverse economy – one that retains and creates jobs, supports the growth of high value companies and improves the region's position in relation to the national GDP and economy.

In 2007 Property Economics undertook a regional industrial land demand assessment indicating the need for over 300 hectares of additional industrial land by 2026. In 2010 Boffa Miskell undertook an assessment of vacant industrial land supply which showed that within Wellington City over 50% of all vacant industrial land supply had a slope over 15 degrees. These two pieces of information lead to an inherent demand for additional industrial land capacity within Wellington City over the medium to long-term, particularly with the higher growth profile for the city than a decade ago when the original work was completed.

The industrial market likely to be attracted to a location such as that provided by the WIAL site is more likely to take the form of light industrial. Requiring higher levels of amenity, access to semi to skilled labour, general accessibility and with higher land intensity, light industrial activity is more likely to be accommodated in more semi-centralised areas rather than seek cheaper land elsewhere.

Sectors that are likely to be attracted to this location include: Data storage, industrial services, industrial specific development warehouses (such as Weta Workshop and studio space), and technology sectors, along with the production of high value added goods.

In terms of the WIAL commercial catchment identified earlier in this report, there is a clear lack of industrial zoned land available for additional light industrial development, with industrial land vacancy non-consequential in the area. This is not for 'dirty / smokey' industry, but activity categorised as light industry by the ANZSIC classification system and similar to that seen in Miramar which can complement commercial centre activity.

A significant proportion of the WIAL land could be rezoned for light industrial activity given the current industrial market demand / supply imbalance in Wellington City, i.e. in the order of 50ha, based on the level of undersupply in the market and future growth requirements. However, a smaller proportion is considered more appropriate when balanced against the higher yielding alternative land uses discussed in this report, and the increasing demand for residential activity in the area.

7. SUMMARY

Property Economics have undertaken an assessment of the Retail, Commercial and Industrial markets within Wellington City and the economic environment within which it exists. This assessment was then refined to include the locational attributes of southern Wellington and in particular those that were exhibited by the Wellington International Airport area.

The market analysis showed:

- The current supply of retail floorspace in the identified catchment is significantly below the retail needs and potential of the current market.
- There existed a significant level of future demand (through population, household and real retail expenditure growth) for retail generated by this area.
- The existing supply underrepresented the market and the potential for the existing centres to growth was curtailed.
- There existed under these conditions the potential for sustaining a substantial (regional) retail centre within this catchment.
- The WIAL land represented an excellent opportunity for such a centre.
- There existed the potential to significantly reduce the retail leakage from this area allowing a retail offer of some 50,000sqm GFA.
- The current level of employment retention within the catchment was proportionately low.
- Demand estimates for commercial office space in the wider Wellington area called for an additional 30ha of land (at 2.4 levels on average).
- With a capture rate of only 2-3% of the City's office employment the catchment would need between 4-6ha of commercial land.
- The industrial market in Wellington City has suffered significantly from ill located sites and under supply of flat and viable locations. The WIAL location has the potential to offer flat large sites with significant degrees of amenity. This would likely result in high demand for industrial land in this location.

Overall the WIAL location offers a significant opportunity for the Wellington City (and Regional) market which is likely to be highly sought after.

APPENDIX 1: PROPERTY ECONOMICS RETAIL MODEL

This overview outlines the methodology that has been used to estimate retail spend generated at Census Area Unit (CAU) level for the identified catchment out to 2033.

CAU 2013 Boundaries

All analysis has been based on Census Area Unit 2013 boundaries, the most recent available.

Permanent Private Households (PPH) 2013

These are the total Occupied Households as determined by the Census 2013. PPHs are the primary basis of retail spend generation and account for approximately 71% of all retail sales. PPHs have regard for (exclude) the proportion of dwellings that are vacant at any one time in a locality, which can vary significantly, and in this respect account for the movement of some domestic tourists.

Permanent Private Occupied Household Forecasts 2006-2048

These are based on Rationale Area Unit (CAU) Medium Series Population Growth Projections, with this extrapolated to the year of concern.

International Tourist Spend

The total international tourism retail spend has been derived from the Ministry of Business, Innovation and Employment (MBIE) estimates nationally and cross referenced through Statistics NZ. This has been distributed regionally on a 'spend per employee' basis, using regional spend estimates prepared by the MEDTSC. Domestic and business-based tourism spend is incorporated in the employee and PPH estimates. 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 conservatively forecast in the model at 3% per annum for assessed period.

2016-2048 PPH Average Household Retail Spend

This has been determined by analysing the national relationship between PPH average household income (by income bracket) as determined by the 2013 Census, and the average PPH expenditure of retail goods (by income bracket) as determined by the Household Economic Survey (HES) prepared by Statistics NZ.

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 etc.

As some of internet spend is being made to on-the-ground stores, a proportion of internet expenditure is being represented in the Statistics NZ Retail Trade Survey (RTS) while a large majority remains unrecorded. At the same time this expenditure is being recorded under the Household Economic Survey (HES) as a part of household retail spending, making the two datasets incompatible. For this reason, Property Economics has assumed a flat 5% adjustment percentage on HES retail expenditure, representing internet retailing that was never recorded within the RTS.

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 5% in 2016 growing to 15% by 2048 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 floor space 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 significant 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 recent spending trends, with decreased employment and greater job security producing an environment where households were more willing to accept debt.

Over the last 8 years this has now reversed with the worldwide GFC recession causing a significant adjustment in consumer behaviour. As such, the economic environment has undergone rapid transformation. The national market is currently experiencing low interest rates (although expected to increase over this coming year) and a highly inflated \$NZ (increasing importing however disproportionately).

Recently there has been a rebound in the property market and an increase in general business confidence as the economy starts to recover from the post-GFC hangover. These factors will continue to influence retail spending throughout the next 5 or so years. Given the previous years' (pre-2008) substantial growth and high levels of debt repayment likely to be experienced by New Zealand households it is expected that real retail growth rates will continue to be subdued for the short term.

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 20-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 PPH retail spend and Tourist retail spend 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 26% 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 2013-2048

Business spend has been forecasted at the same rate of growth estimated to be achieved by PPH 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.



Opus Development Cost

19 April 2018

WSP Opus

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Dear Martin

2018 Update of MVAU: Civil Works Costs

WSP Opus has been commissioned by Wellington International Airport Ltd ("WIAL") to produce an estimate of the civil works costs associated with the development concept proposed for highest and best alternative use of airport land. The estimated costs and assumptions used in determining that estimate are as follows.

1. Land Area Budget

Development costs have been calculated using parameter costs applied on an area or length basis. The land area budget used for the cost calculation is tabulated below. There have been a change from the 2014 development master plan, primarily an increased relative mix of residential development with a corresponding increase in road area.

Total Land Area Budget

Land Use Category	2014 Area (m ²)	2018 Area (m ²)
Town Centre	73,000	75,300
Business Park	73,000	27,100
Light Industrial	75,000	0
Large Format Retail	86,000	106,800
Perimeter Block Apartments/Retirement Housing	41,000	22,000
Apartments	201,000	0
Community	43,000	242,000
Townhouses	79,000	190,000
Detached Family Housing	122,000	85,800
Headland Park	50,000	30,000
Public Space	50,000	52,600
Roads	205,000	267,400
TOTAL	1,098,000	1,099,000

The area assumed for the road corridor is tabulated below.

Area OF new road corridor

Type	Length (m)	Width (m)	Area (m ²)
Arterial	1,800	30	54,000
Collector	3,500	20	70,000
Local	9,560	15	143,400
TOTAL	14,860		26,740

2. Civil Works

The civil works components included in the development costs are as follows.

Earthworks

Earthworks include two components: an allowance for general site clearance and preparation plus the excavation for the roading/utility corridor. The cost for latter component is included in the roading cost.

Roading

The road estimate is based on the cost and component make-up of typical Wellington roads and include allowances for

- Sealed traffic lanes
- Centre Island
- Parking
- Cycleway
- Berm
- Footpath
- Kerb & Channel
- Signs & Road markings
- Street Lights

Utilities

Costs have been included for the installation of all public utilities within the roading corridor. These utility assets are:

- Water supply
- Storm water
- Sewerage
- Gas pipelines
- Power and Communication ducting

Neighbourhood open Space and Public Space

Development cost of these spaces includes allowance for the following:

- Grassed areas
- Landscaping (trees, shrubs and gardens)
- Park furniture (rubbish bins, seats)
- Playground furniture (swings, seesaws etc)
- Tracks and paths
- Gates, fences and walls
- Lighting
- Toilets and utility connections

3. Development Cost Estimate

Cost Rates

The cost rates used account for the degree of greenfield/brownfield associated with a development of this size, location and type. Also rates have been discounted to reflect cost savings from appropriate timing of work and where assets can be installed simultaneously (e.g. costs savings from shared trenching and from easier installation where utilities can be laid prior to areas being paved).

Development on-costs of 14% have been included for professional fees for investigation, design and construction supervision. An additional contingency allowance of 20% has been factored into the cost rates to cover all other costs not accounted for directly.

Resource Consents

No allowance has been included for the cost of obtaining resource consents. It is assumed that the whole development would be covered by a plan change so no resource consents would be needed to implement the works.

Development Levies

An allowance of 7% of the capital development costs has been included for Development Levies.

Exclusions

The costs of "on-site" development (e.g. landscaping, utility connections, paved areas etc.) have been excluded from the civil works estimate to reflect that the developer would be selling serviced bare land. Accordingly, the sale price of these properties has been established on this basis.

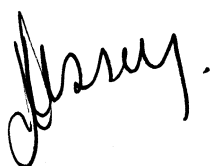
Cost Estimate

An estimate of development costs is tabulated below.

Development Cost Estimate

Item	Cost (\$)
Headland Park	\$392,000
Neighbourhood Open Space	\$1,213,000
Roads	\$43,856,000
Water, Wastewater & Stormwater Mains	\$45,790,000
Telecom, Gas and Electricity	\$14,676,000
Site Preparation	\$5,826,000
Development Levies	\$7,823,000
TOTAL	\$119,576,000

Yours Sincerely



John Vessey
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WSP Opus