



Final Report: 3 September 2021

## Economic Assessment of Fast-Track Application for Industrial Land in Whenuapai

Prepared for:  
Neil Group

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# 1. Executive Summary

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This report assesses the economic effects of a proposed COVID-19 Recovery (Fast-track Consenting) application by Neil Group for its land holding in Whenuapai, Auckland. The assessment starts by identifying and describing the subject site, which spans about 23 hectares. Then, it discusses how Whenuapai – including the subject site – were identified as being suitable for urban growth more than 20 years ago, but that progress on urbanisation recently stalled due to unforeseen airbase noise issues.

We then present the latest indicative subdivision plan for the subject site and describe the associated yields. These include 21 new industrial lots that span more than 15 hectares, and approximately 32 residential lots. While most of the industrial lots are between 2,800 and 6,000m<sup>2</sup>, the proposal also includes three larger lots, including one that spans 6.5 hectares. Collectively, these various industrial lots are expected to house more than 85,000m<sup>2</sup> of new business floorspace.

To help provide context for the proposal, we next review the current state of the industrial land market. We show that, despite the Council's latest analysis suggesting that there is ample supply to meet demand, that this conclusion reflects out of date assumptions and ignores many factors that will naturally limit market supply. At the same time, there is a strong and growing body of market evidence that conclusively reveals a distinct lack of available supply, which is underpinned in part by the rapid uptake of online shopping and the need for warehousing/logistics to support it. Amongst other things, this runaway demand has caused industrial land prices in the Northwest – where the subject site is located – to increase by an unprecedented 36% over the last 12 months.

Having set the scene, we then assess the proposal's impacts on the industrial land market. We show that it not only directly responds to the need for additional industrial zoned land, but that it does so in an area that has already identified as suitable for light industrial purposes and thus directly gives effect to the long-held planning vision for the site.

In addition, the proposal will help the industrial land market to be more responsive to growth in demand, which will help slow the rate at which land prices grow. This will not only improve industrial land affordability, which is important given the land hungry nature of many industrial land uses, but it will also help to control the costs (and thus prices) of the various goods and services provided by industrial land users to other parts of the regional economy. This, in turn, helps improve the overall competitiveness of the Auckland region. Moreover, the provision of three large lots will help rectify a glaring shortage of large lot availability in the Northwest

We then briefly discuss the impacts of providing an additional 32 residential sections in the northern extent of the subject site. We present recent data on regional dwelling prices, land values, and weekly rentals to confirm that the region's housing market remains in a state of crisis before acknowledging that the proposal will make a modest, but important, contribution towards addressing the shortfall.



Finally, we consider a range of broader economic effects of the proposal. They include:

- *One-Off Economic Stimulus* – the various processes associated with obtaining consents, finalising the subdivision plan, preparing the land for development, installing necessary infrastructure, and constructing the various buildings enabled by the proposal will generate significant one-off economic impacts. In fact, we estimated that they will provide direct employment for more than 335 FTE-years, provide \$25 million in household wages/salaries, and directly generate more than \$39 million in regional GDP.
- *Ongoing Employment Potential* – once operational, the various land uses enabled onsite could provide full-time employment for approximately 1,065 people.
- *Spatial Match with Population Growth* – not only will future businesses on the subject site provide permanent employment for many people, but they will also provide a close spatial match with projected household growth. This, in turn, will reduce the need for work commuting and therefore have important economic and environmental benefits.
- *Synergies with Other Land Uses* – the subject site is directly adjacent to the Whenuapai Cable Landing Station (WCLS), which is one of the key termination points for the Southern Cross internet cable. This proximity means that prospective future uses of the subject site will experience ultra-low latency, which is critically important for businesses that rely on extremely fast and reliable internet access, such as data centres.
- *Highest & Best Use of Land* – finally, we note that the proposal puts the land to its highest and best use, and hence maximises economic efficiency in the underlying land market. In addition, critically, it finally resolves the prolonged process delays that have thus far prevented it from being put to its intended urban uses.

Given the strong and enduring economic benefits of the proposal, as outlined above, and noting the absence of any material economic costs, we strongly support it on economic grounds.

## 2. Introduction

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### 2.1. Context & Purpose of Report

The Neil Group (“Neil”) is one of New Zealand’s largest property developers, with a strong track record of delivering quality developments across New Zealand. One of its current holdings is in Whenuapai, Auckland, on land that is zoned as Future Urban Zone (FUZ). The FUZ signals that future urbanisation of the land is imminent, but that it is currently unsuitable due to a lack of infrastructure or other constraints.

With the subject site now able to be serviced for bulk infrastructure, Neil is applying for subdivision consent under the COVID-19 Recovery (Fast-track Consenting) Act 2020 (“the Act”) to help bring it ‘to market’ sooner and meet a widely known shortfall in local industrial land supply.

This report assesses the likely economic effects of the proposed development, including its likely impacts on regional GDP, incomes, and employment.

### 2.2. Structure of Report

The remainder of this report is structured as follows:

- **Section 3** locates the subject site, describes its receiving environment, and summaries its broader strategic/planning context.
- **Section 4** describes the proposed development and associated yields.
- **Section 5** summarises the current state of the regional and local industrial land market to provide important context.
- **Section 6** assesses the proposal’s economic effects on the industrial land market
- **Section 7** briefly addresses its impacts on the residential land market.
- **Section 8** considers a range of broader economic effects of the proposal.

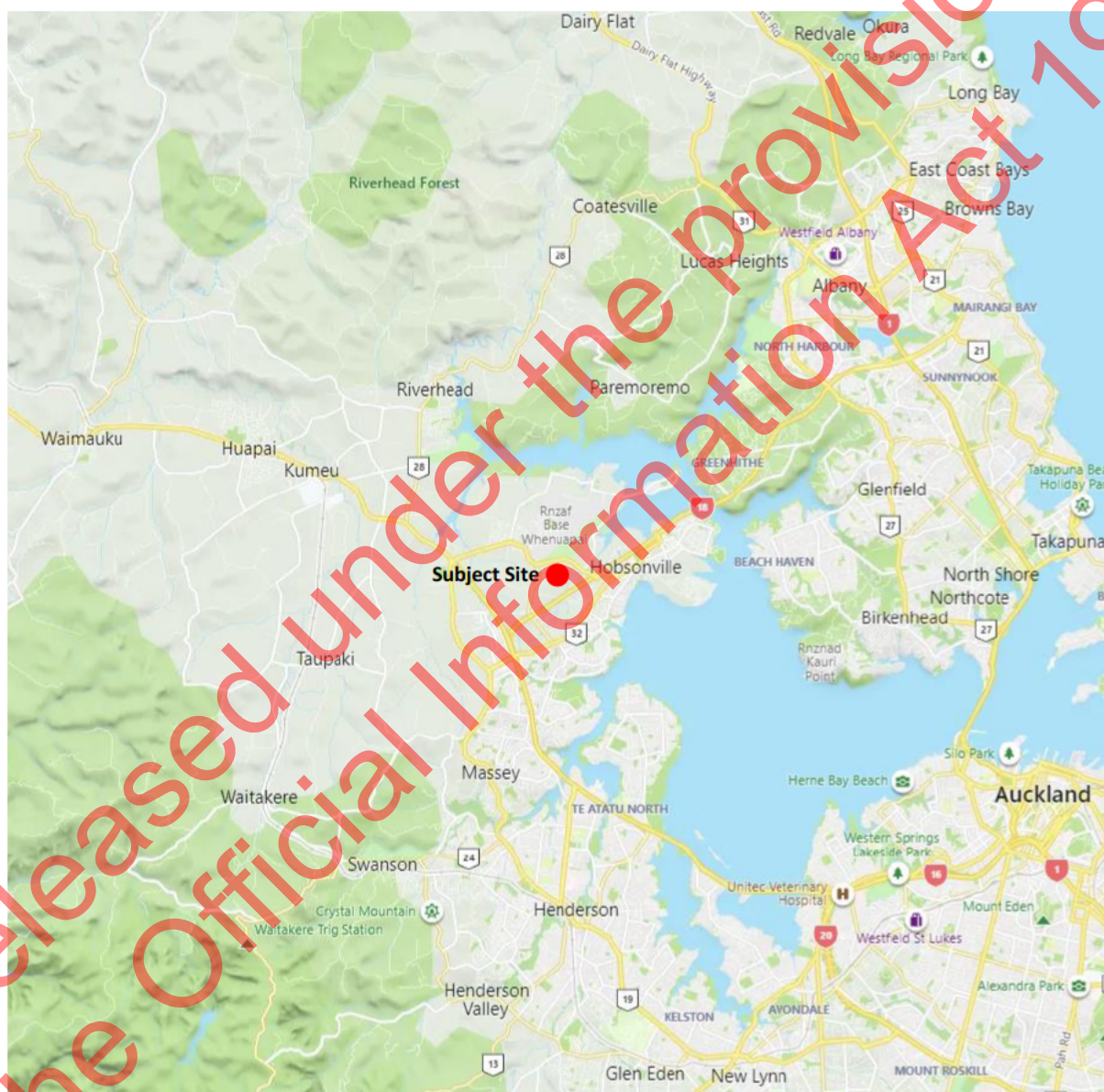
### 3. About the Subject Site & Location

This section provides background information about the subject site.

#### 3.1. Site Location & Description

The subject site is situated in Whenuapai, in the upper reaches of the Waitemata harbour, approximately 22 kilometres north-west of the Auckland CBD (by road). The red dot in the map below denotes its location.

Figure 1: Location of Site within broader Northwest Subregion



The site is bound by Brigham Creek Road to the north, farmland to the east and south, and Trig Road to the west. The Royal New Zealand Air Force's (RNZAF) Whenuapai airbase is located immediately to the north on the other side of Brigham Creek Road.



The site itself spans approximately 23 hectares and slopes gently in the direction of the Waiarohia Stream. It is currently in rural use.

### 3.2. Current Use & Receiving Environment

Figure 2 zooms in to provide a closer look at the site, which is outlined in red, and its immediate receiving environment. In addition to the airbase and some residential development just to the north, Figure 2 shows that there is also a new industrial subdivision to the south just over the state highway. That aside, however, the immediate receiving environment is largely just low intensity rural uses and a small number of existing rural-residential dwellings.

Figure 2: Outline of Subject Site



### 3.3. Strategic/Planning Context

As noted above, the site is currently zoned “Future Urban Zone” (FUZ) under the AUP. This zoning represents the culmination of several years of planning for urban growth in the northwest. In fact, Whenuapai has been recognised as a key growth location in Council planning documents since the late 1990s, when it was first earmarked for urbanisation in the ARC’s regional growth



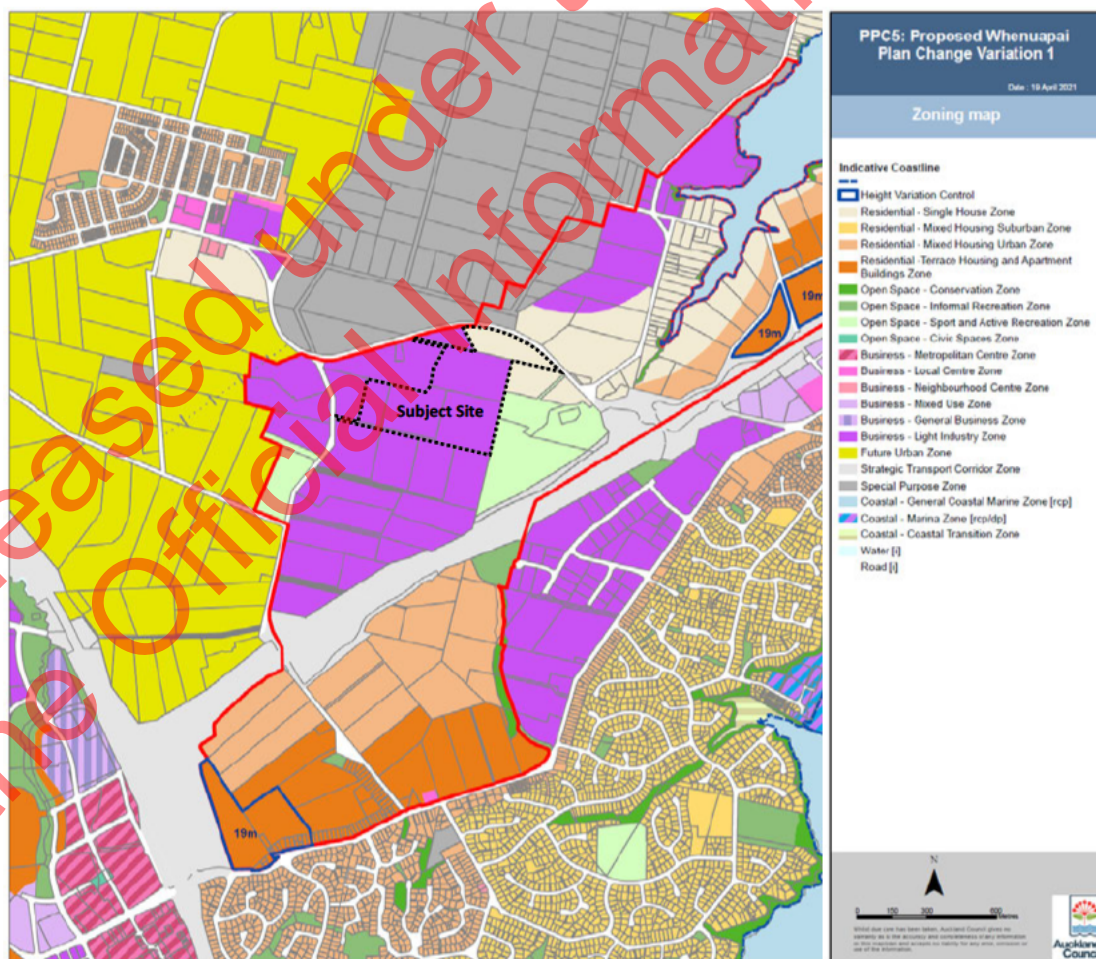
strategy. However, it wasn't until Auckland Council's Proposed Unitary Plan was released in 2013 that the intent to urbanise Whenuapai was cemented via the FUZ zoning.

Since 2013, several steps have been taken to live zone the land for development, starting with the adoption of the Whenuapai Structure Plan in 2016. The following year, Whenuapai was identified as 'development ready' in Council's Future Urban Land Supply Strategy (FULSS), with Whenuapai Plan Change ("PC5") publicly notified in September 2017. PC5 sought to rezone 360 hectares of mostly FUZ land in Whenuapai to a mix of business and residential zones, with the subject land to be zoned "Business – Light Industry."

Progress on PC5 stalled in 2019 because of excess noise generated by the airbase, which conflicted with the planned rezoning of land on its borders. In April 2021, Auckland Council publicly notified PC5 Draft Variation 1, which incorporated updated engine testing noise contours associated with the RNZAF Airbase, and which also addressed several other minor matters. Council is expected to provide an update on timing for the public notification of the formal variations to PC5 soon.

The latest indicative plan, PPC5 Proposed Variation 1, shows most of the subject site being zoned "Business – Light Industry", with a small area of "Residential – Single House Zone" in the site's northeast. This latest plan is illustrated below.

Figure 3: Site Zoning Under PPC5 Variation 1





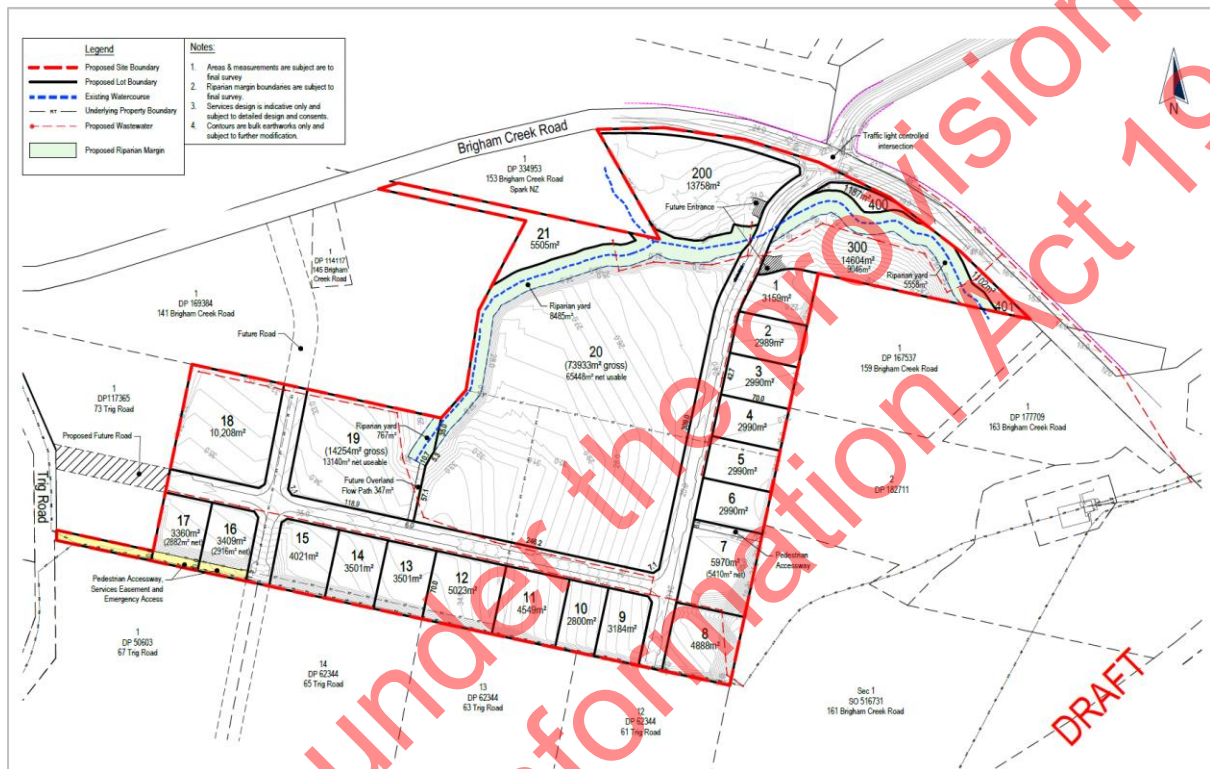
## 4. About the Proposed Development

This section describes the proposed development.

### 4.1. Indicative Subdivision Plan

Figure 4 shows the latest subdivision plan for the site.

Figure 4: Illustrative Zoning & Subdivision Plan



The indicative plan consists primarily of industrial lots (lots 1 to 21), with two residential super-lots on the site's north-eastern boundary (lots 200 and 300). Reconciling this with the latest planning vision for the site, as articulated in PPC5 Proposed Variation 1 (see above), confirms that the proposed development largely – if not completely – gives effect to the Council's latest anticipated uses of the subject site. Indeed, we understand that Neil Group has consulted extensively with Auckland Council on this proposed plan since late 2019, and that the two parties agree that the proposal is an appropriate use of the subject site.

### 4.2. Industrial Sections

In total, an estimated 15.7 hectares of net useable industrial land is enabled by the proposal, which is distributed across 21 lots of varying sizes. Lot 20 accounts for more than 6.5 hectares of the total industrial land area, with the remaining lots ranging in size from 2,800 square metres to just over 13,140 square metres. This range of section sizes is illustrated in Table 1 below, which also shows the estimated floorspace enabled by the indicative subdivision plan.

Table 1: Industrial Site Areas and Estimated GFA

Lot	Land Area (m <sup>2</sup> )	Indicative FAR	Est. GFA (m <sup>2</sup> )
1	3,159	60%	1,895
2	2,989	60%	1,793
3	2,990	60%	1,794
4	2,990	60%	1,794
5	2,990	60%	1,794
6	2,990	60%	1,794
7	5,970	60%	3,582
8	4,888	60%	2,933
9	3,184	60%	1,910
10	2,800	60%	1,680
11	4,549	60%	2,729
12	5,023	60%	3,014
13	3,501	60%	2,101
14	3,501	60%	2,101
15	4,021	60%	2,413
16	3,409	60%	2,045
17	3,360	60%	2,016
18	10,208	60%	6,125
19	13,140	60%	7,884
20	65,448	50%	32,724
21	5,505	20%	1,101
<b>Total</b>	<b>156,615</b>	<b>54%</b>	<b>85,222</b>

Table 1 shows that all industrial lots are expected to achieve a FAR of 60%, except:

- lot 21, which has access constraints and an irregular plot shape, resulting in an expected FAR of only 20%; and
- lot 20, which is expected to achieve a FAR of about 50%. It has been the subject of confidential negotiations with a large owner/developer for some time, and the expected floorspace yield reflects the proposed uses of the site by that organisation.

Overall, the 21 industrial lots created by the proposed subdivision are expected to support more than 85,000m<sup>2</sup> of business floorspace over time.

### 4.3. Residential Yields

The two residential super-lots on the site's northern boundary span about 2.8 hectares, 68% of which is considered developable. Based on an anticipated average lot size of 600 square metres, this land could yield about 32 residential sections, as indicated in Table 2 below.

Table 2: Indicative Residential Yield

Item	Value
Gross Land Area	2.8 ha
Development Area	1.9 ha
Average Lot Size	600 m <sup>2</sup>
<b>Total Dwellings</b>	<b>32</b>

## 5. Current State of Industrial Land Market

This section assesses the current state of the industrial land market as context for the proposal.

### 5.1. Latest Council Assessment of Supply/Demand

The latest available information on the likely supply of, and demand for, industrial land is contained in an assessment by Auckland Council, which was published under the National Policy Statement on Urban Development Capacity (NPSUDC). That assessment, which is called the *Housing and Business Development Capacity Assessment for Auckland*, was completed in late 2017. Although it is due to be updated soon, it remains the latest publicly available information, so we rely on it here.

The business capacity assessment sections of the report split the region into six areas based on local boards, then assesses the likely supply/demand balance across each for the various business zones identified in the AUP, including the light and heavy industrial zones. According to this assessment, each of the six areas that comprise the region have sufficient combined light/heavy industrial land to meet projected demand over the short-, medium-, and long-terms.

### 5.2. Critique of Council Supply Estimates

The estimates of industrial floorspace referred to above are the result of a complex modelling exercise, which incorporates numerous inputs and assumptions. In simple terms, though, they were derived by (i) first calculating the maximum plan enabled capacity available in each industrially zoned area, and (ii) then applying a scalar to reflect the proportion of theoretical capacity that has previously been provided by the market. For example, if the market has historically delivered about 10% of plan enabled capacity in a certain area, then a similar rate is expected to be delivered in future.

#### *Capacity Relies Heavily on Redevelopment*

The Council's estimates of likely industrial floorspace supply rely heavily on the assumed redevelopment of sites with so-called "vacant potential." These are plots that already contain buildings and which are already used for business purposes, but which the computer modelling deems could be more intensively redeveloped to provide more floorspace over time.

While we acknowledge that site redevelopment is increasingly common in residential areas, it is very rare for industrial properties. This is because most industrial sites deemed to have vacant potential are already meeting an existing tenant's needs, while simultaneously delivering an acceptable yield/return to the landlord. Accordingly, there is no reason to undertake a lengthy, risky, and expensive redevelopment, particularly since many industrial landlords are not property developers and have no aspirations to become one.

#### *Modelling Assumptions are Out-of-Date*

While we acknowledge the significant work undertaken to derive these supply and demand estimates, they do rely on dozens of inputs/assumptions, many of which may no longer be valid (three and a half years since they were derived). For example, industrial land prices have

skyrocketed recently, so land that was previously considered part of market supply may now be far too expensive for many prospective uses.

We also query whether the historic take up rates used to translate today's plan enabled capacity into likely future supply remain relevant. The issue is that the best land in each area is generally developed first, with more difficult/marginal plots typically left to develop later. Accordingly, historic take up rates will reflect the development of more suitable land (on average) than remains today, with future take up rates likely to be lower than in the past. This, too, causes short-medium term supply to be overstated.

#### *Feasible Capacity Ignores Various Market Constraints*

Another issue that fundamentally undermines the Council's analysis of industrial land adequacy is that it implicitly assumes that all sources of industrial capacity in the Northwest are available today. This can be seen in **Error! Reference source not found.**, where the short-medium term supply figures match the long-term ones. This is an ambitious and highly unlikely assumption that invariably overstates short-medium term capacity. In practice, significant tracts of industrial land will be unavailable for development, especially over the short term, because of:

- **Developer intentions** - some landowners have no clear intention to develop in the short- to medium-term, nor to sell their land to others who may wish to develop it.
- **Land banking and drip-feeding** – other landowners intend to develop in future, but are currently withholding supply to capitalise on inevitable land price inflation, while some are drip-feeding supply to maintain prices and hence maximise returns. We understand that that issue is particularly acute/relevant in Westgate and other Northwest industrial areas.
- **Site constraints** – the Council's estimates of likely supply appear to consider only infrastructure as a potential site constraint and therefore overlook other factors that affect developability, such as contamination or awkward site shapes/topography.
- **Operational capacity** – some landowners face operational capacity constraints, which limit the number of new industrial lots that they can supply per annum.
- **Financing** – similarly, some landowners face capital/financing constraints that also limit their ability to supply.

Collectively, these various constraints will significantly limit actual market supply, particularly over the short to medium term.

For example, the Council's supply estimates include almost 58,000m<sup>2</sup> of additional GFA at the Hobsonville corridor light industrial area, which is one kilometre south-east of the subject site. As a “ground-truthing” exercise, we conducted an extensive audit of land and buildings currently available at this node. This included visually inspecting each parcel in person and then performing

extensive searches of real estate websites to determine land and/or buildings currently available for sale or lease.

Although this area is currently a hive of development activity and is thus one of the primary sources of industrial capacity in the Northwest today, the quantity of new buildings and land for lease/sale there was only a fraction of the Council's estimates of its (supposedly immediately available) capacity. When that same exercise is performed on other Northwest industrial nodes, most of which are not currently in a "boom period" and hence provide little – if any – additional capacity, the Council's estimates appear even less realistic. Put bluntly, with respect, the Council's estimates of short-medium term capacity are likely to significantly overstate the true amount.

#### *Not All Source of Supply Are the Same*

Finally, we note that the Council's assessment of industrial supply implicitly treats all sources of capacity as the same, which can mask subtle yet important differences. For example, some industrial land users may need very large sites, or to be located near specific customers and/or suppliers. Others require a high stud and/or a large yard capable of handling regular truck movements. However, the Council's modelling exercise naturally can't address these fine-grained considerations. Instead, it simply provides an aggregated assessment of supply and demand, where all plots of land are treated as perfectly substitutable. In doing so, it masks the specific site and location requirements of many industrial land users and therefore overstates the adequacy of the current land inventory.

In summary, despite the significant effort expended by the Council and its advisors to estimate likely industrial supply/demand, there are several compelling reasons to believe that there is unlikely to be sufficient capacity available today to meet demand.

### **5.3. Review of Council Demand Estimates**

We now consider the other side of the ledger – the demand for industrial floorspace. Like supply, the Council's approach to projecting industrial land demand was also fairly conventional. It comprised the following steps:

- Project regional economic activity well into the future,
- Determine the proportion of future economic activity that is likely to be industrial, and
- Convert future industrial activity into requirements for industrial-zoned land.

Despite being a logical and common approach to projecting demand, however, recent trends suggest that the demand for industrial property is outpacing the Council's estimates, particularly since these forecasts are now almost four years old. Below we consider the issue from two perspectives – occupier demand for industrial space, and investor demand.

#### *Occupier Demand*

A major driver in the uptick in industrial floorspace demand is the rapid growth of online shopping and the associated need for modern, high-stud, large footprint warehousing space. For example, according to Bayleys' 2021 *Auckland Industrial Market Update*, online shopping during the first



quarter of 2021 was up 27% on the first quarter of 2020, and up 50% on the first quarter of 2019. As a result, online sales accounted for 11% of all retail shopping in New Zealand last year, which is almost double its share from only a few years earlier.

This increased online shopping directly translates to an increased need for warehouse and distribution space, which is nearly always located in light industrial zones. Coupled with increased stockpiling of goods to meet increased demand associated with the Covid-19 pandemic<sup>1</sup>, there has been significant growth in demand for warehouse space. This is noted by Colliers, who describe a particularly sharp increase in industrial warehouse average net face rents since 2020.

A further consequence of the rise in online shopping is increased demand on logistics partners to distribute goods, with Bayleys noting that logistics partners are expanding in central Auckland locations to fulfil this demand.

In addition, Colliers cite the rapid emergence of demand from the datacentre sector as creating additional impetus for the recent growth in industrial land demand. At the same time, Auckland's construction sector continues to grow apace, with most construction businesses also located in light industrial zoned areas.

Auckland's position within the golden triangle also plays an important role. Containing more than half of the nation's population and generating the majority of its GDP, the Golden Triangle is home to the country's two biggest sea ports and its largest airport<sup>2</sup>. It is widely recognised as the engine room of the national economy.

A recent report by JLL provides specific commentary on the industrial sector in the Northwest, where the subject site is located.<sup>3</sup> It notes that:

“With proven sector resilience over 2020, vacancy remains structurally low across Auckland's industrial precincts. In the Northwest precinct, such low vacancy is driven by additional factors specific to the precinct including the quality of new build space available and the numerous key anchor tenants in the area. Continued residential development particularly in Hobsonville will also have flow on effects in stimulating tenant demand for space. Given these factors, combined with underlying sector characteristics, we forecast demand to remain high.”

In summary, a wide range of recent research suggests that the demand for industrial property will continue to be strong, particularly in the Northwest where the subject site is located.

#### *Investor Demand*

Not only is occupier demand for industrial areas running hot, but so too is investor demand. There are several factors at play. First, New Zealand has relatively high property yields compared to other parts of the Asia Pacific region. And, within the “commercial” property sector, industrial property generally has the highest overall returns. The current low interest rate environment has also

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<sup>1</sup> <https://www.stuff.co.nz/business/124968669/industrial-property-the-property-sectors-new-black>

<sup>2</sup> The Golden Triangle Logistics, Bayleys, 2019

<sup>3</sup> Jones Lang LaSalle Market Snapshots New Zealand Industrial Q2

sparked a chase for yield across the property market, which is largely missing from other defensive asset classes.<sup>4</sup> As a result, investor demand is strong.

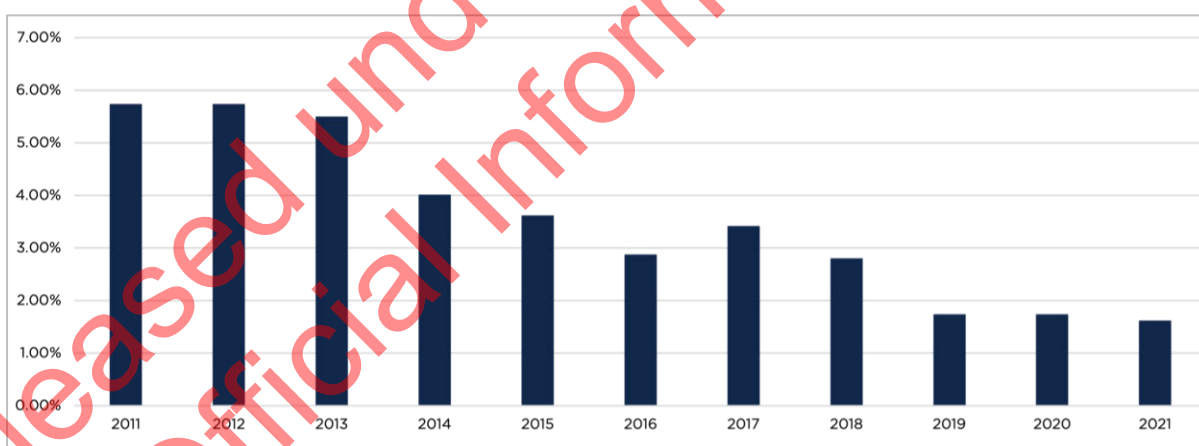
A recent article entitled *“Industrial property: the property’s sector’s new black?”*<sup>5</sup> points to several other factors underpinning strong investor demand. First, industrial property has proven largely resilient in the face of economic ups and downs. Second, tenants tend to be stable, with leases frequently lasting seven years or more. Third, investing in industrial property is becoming more accessible, with the lending environment increasingly comparable to residential investment, and with syndicates now also emerging to enable investment at lower entry points.

Finally, there has recently been a recent flight from residential property investment, following proposed legislative changes that would remove tax relief against interest costs on new residential property investment. Coupled with extensions to the bright-line test, residential property investment has become less attractive. This was noted by Bayleys, who describe an influx of new buyers in the industrial market chasing yield in response to the new regulations<sup>6</sup>. According to their research, this has put further pressure on the market and, coupled with the limited number of assets coming to market, has caused industrial yields to firm.

#### Market Metrics

Strong investor and occupier demand is evident in various market metrics, including vacancy rates. This is illustrated in the following chart from Bayleys, which shows that Auckland’s industrial vacancy rate is at a ten-year low.

Figure 5: Auckland Industrial Vacancy Rates<sup>7</sup>



The same report has demand in the leasing market classified as ‘strong’ in ten of the 11 Auckland precincts (and ‘steady’ in the other). As for investment market demand, it is considered ‘strong’ across all precincts. Booming industrial land prices provide further indication of strong market demand. Average land values reached \$900 per square metre in the city’s northwest in the first

<sup>4</sup> Bayleys Auckland Industrial Market Update 2021

<sup>5</sup> <https://www.stuff.co.nz/business/124968669/industrial-property-the-property-sectors-new-black>

<sup>6</sup> Bayleys Auckland Industrial Market Update 2021

<sup>7</sup> Image source: Bayleys Auckland Industrial Market Update 2021

quarter of 2021, according to Jones Lang LaSalle, and are expected to continue rising. This represents a 36% increase over the previous year.

#### **5.4. Summary and Conclusion**

Although the Council's 2017 assessment of industrial floorspace suggests that there is more than enough supply to meet demand, there are several compelling reasons to believe that its estimates of supply are implausibly high. At the same time, there is a body of market evidence to suggest that the demand for industrial property is higher than ever before, as confirmed by various market indicators, including vacancy rates and land prices. Accordingly, we conclude that there is a pressing need to supply more industrial land as soon as possible to help plug the gap.

## 6. Impacts on Industrial Land Market

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This section considers the proposal's likely impacts on the industrial land market.

### 6.1. Meets Short-Term Need for Additional Supply

With more than 15 hectares of developable industrial land being brought to the market by an experienced developer with a strong track record, the proposal represents a significant and much-needed boost in industrial land supply. Indeed, as discussed in the previous section, the industrial property sector is running hot with strong demand from both occupiers and investors. This has caused vacancy rates to hit 10-year lows and industrial land prices in the Northwest to increase more than 35% over the last 12 months.

The proposal acknowledges and directly responds to this need for additional industrial zoned land by providing 21 new lots of varying shapes and sizes in an area that has already been identified as suitable for light industrial purposes. Thus, not only does the proposal boost industrial land supply, but it also directly gives effect to the long-held planning vision for the site.

### 6.2. Improved Supply Responsiveness

In addition to directly boosting industrial land supply, the proposal may also help the market to be more responsive to growth in demand over time.

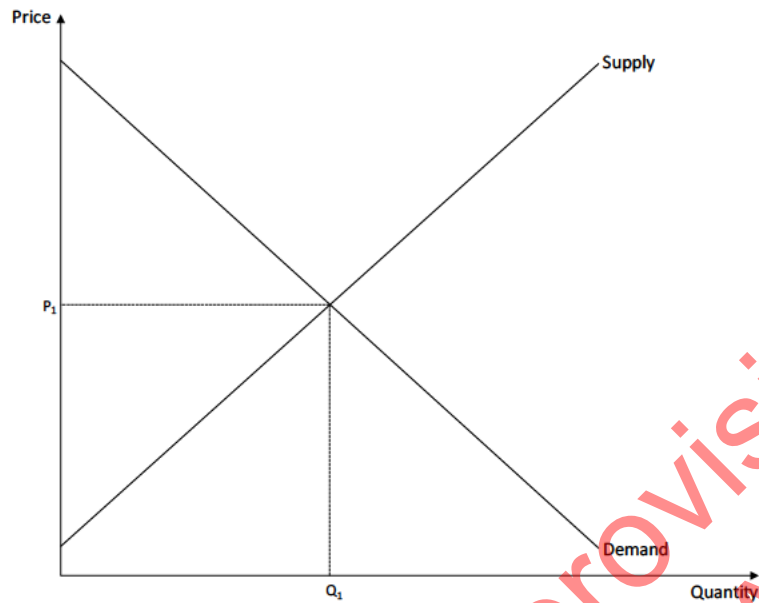
#### *Introduction to Supply-Demand Analysis*

To illustrate the impacts of a more responsive industrial land supply we used a common technique called supply-demand analysis. It incorporates two curves, namely:

- A **demand curve**, which represents the maximum price that consumers are willing to pay for each quantity of a good or service. It slopes down because the lower the price, the more that consumers are willing to buy (all other things being equal); and
- A **supply curve**, which represents the minimum price that sellers/producers are willing to accept for each quantity of a good or service. It slopes up because the higher the price, the more that suppliers are willing to sell (all other things being equal).

Figure 6 shows a typical supply-demand graph, where the market is in equilibrium (or balance) at price  $P_1$  and quantity  $Q_1$ . This price-quantity combination is the market equilibrium because it is the only one that is acceptable to both parties. Thus, it represents a price and quantity that both the buyer is willing to pay, and the seller is willing to receive. No other combinations of price and quantity satisfy this market equilibrium condition.

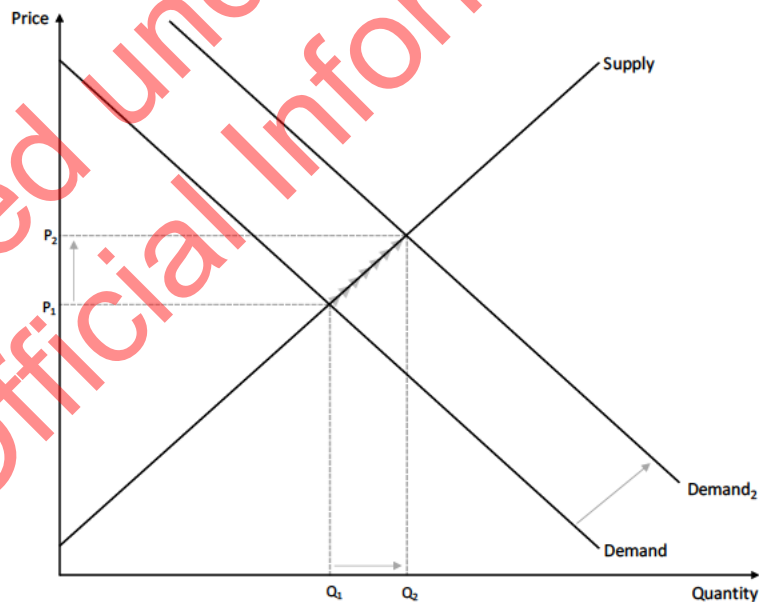
Figure 6: Basic Supply-Demand Graph for a Market in Equilibrium



#### *Incorporating the Effects of Time*

The supply-demand graph shown above represents a snapshot in time, where the positions of the supply and demand curves are fixed. However, over time, both curves can move. For example, the demand for industrial land curve can move out when the size of the economy increases. Figure 7 incorporates the effects of time by showing what happens to the market price and quantity when demand increases over time due to growth in general economic activity.<sup>8</sup>

Figure 7: Impacts of Growth in Industrial Activity on Market Demand Over Time



<sup>8</sup> We acknowledge that the supply curve may also move out over time, particularly as new land is rezoned for industrial purposes. However, allowing both curves to move out adds significant complexity to our graphical analysis without altering the key insights of a more responsive supply. Accordingly, to keep the analysis as accessible as possible, we assume that the supply curve remains fixed over time. Suffice to note, however, that this simplification does not alter the conclusions of this section, nor does it negate the economic benefits of a more responsive supply.

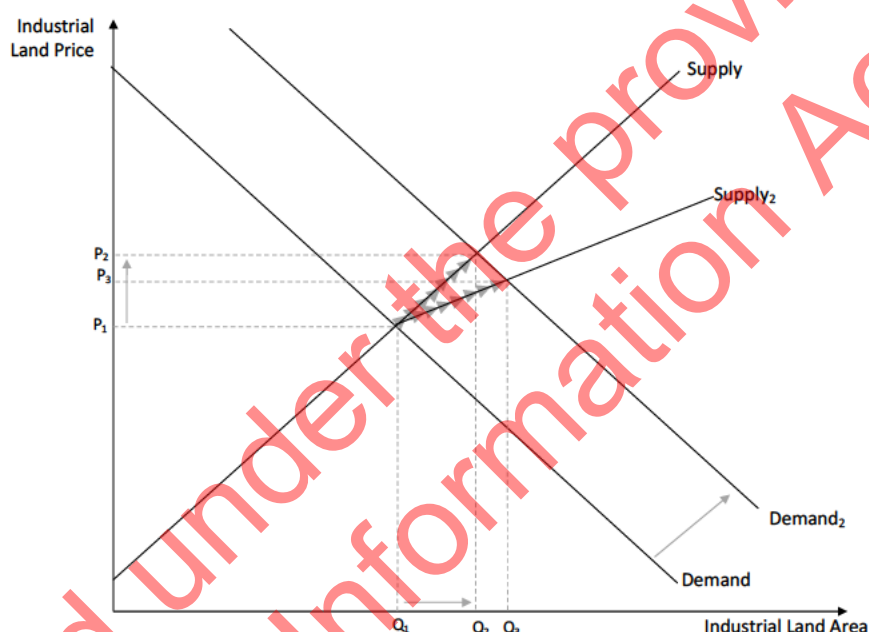


Figure 7 shows that growth in industrial activity causes the demand curve to shift outward. As this occurs, the new equilibrium price and quantity are found by moving along the supply curve to the point where it intersects the new demand curve. This produces a new equilibrium price of  $P_2$  and corresponding market quantity of  $Q_2$ . The series of arrows that connects the initial equilibrium ( $Q_1$  &  $P_1$ ) with the new one ( $Q_2$  &  $P_2$ ) is sometimes called the 'price path'.

### *Impacts of a Supply Boost*

Having set the scene, we now show how a supply boost effects the market, particularly the price path. In the next graph, prices reflect the median prices per square metre of industrial land, and the market quantity reflects the total new land area bought/sold each year. With those definitions in mind, Figure 8 shows the impacts of a supply boost on the local industrial land market.

Figure 8: Impacts of Supply Boost on Future Market Prices and Quantities



In Figure 8, the market is initially in equilibrium at price  $P_1$  and quantity  $Q_1$ . However, as the region's economy grows, the demand curve shifts out from Demand to Demand<sub>2</sub>. Under the status quo, this causes the average price to increase from  $P_1$  to  $P_2$ , and the equilibrium market quantity to increase from  $Q_1$  to  $Q_2$ . However, if a more responsive land supply is enabled, the supply curve flattens beyond the current market quantity of  $Q_1$  to create the new supply curve Supply<sub>2</sub>.

With that more responsive supply in place, future industrial growth (and the corresponding shift out of the demand curve) causes the market price to increase at a slower rate, and more new industrial land to be provided in response to the increase in demand. In other words, the supply boost flattens the price path. As a result, the future average market price is lower than it would have been otherwise ( $P_3$  vs  $P_2$ ), and the total industrial land area in the district is higher ( $Q_3$  vs  $Q_2$ ). Thus, with more responsive supply, more industrial land is developed at a lower price than the status quo.

### *Resulting Economic Benefits*

By flattening the price path and hence reducing the rate at which land prices grow, the proposal will help to improve industrial land affordability. This is particularly important for two reasons. First, industrial land uses are typically land hungry, so even a small decrease in land prices (relative to the status quo) can significantly aid affordability.

Second, industrial land uses often have strong linkages with the rest of the economy through the provision of various goods and services. Hence, by keeping industrial land prices as affordable as possible, the proposal – and others like it – can help control the costs (and thus prices) of the various goods and services provided by industrial land users to other parts of the regional economy. This, in turn, helps improve the overall competitiveness of the Auckland region.

### **6.3. Addresses Large-Lot Shortage**

While most of the new industrial lots created by the proposal are less than 6,000m<sup>2</sup>, the indicative subdivision plan also includes three lots of one hectare or more, including one very large site of about 6.5 hectares.<sup>9</sup> These three sites account for more than half the total industrial land created.

Neil Group informed us that these three large sites directly address a widely-known shortage in large industrial lots, particularly in the Northwest where the subject site is located. To demonstrate that shortage, Neil provided us with the results of a comprehensive audit that they conducted on industrial land in the former Waitakere City and North Shore City areas, which collectively form the subregional land market in which the site falls.

Having collated information on each industrial site in Waitakere and North Shore, Neil filtered it for parcels larger than one hectare. Then, they assessed the suitability of each site for development, using both Core Logic data, aerial imagery, and their extensive knowledge of each area.

The analysis identified 51 industrial parcels in the former Waitakere City area that were larger than one hectare, which spanned a total of just under 165 hectares. Of these, 27 lots were estimated to have at least one hectare of land available for development, with a median parcel size of 3.0 hectares. Only one site, on Hobsonville Road, was identified to have an available area of over 5 hectares, though we understand that this has now been committed to subdivision.

The North Shore was also investigated, with three vacant sites larger than one hectare identified. Of these, one was deemed unsuitable for development, and another is still in use as a going concern. This just left one industrial-zoned parcel on the North Shore larger than one hectare.

The proposed development has been designed specifically to meet this gap in the market by not only providing 18 lots of up to 6,000m<sup>2</sup>, but also through the provision of three larger sites of at least one hectare.

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<sup>9</sup> 18 of the 21 industrial sites (86%) are between 2,800 and 6,000m<sup>2</sup>.

## 7. Impacts on Residential Land Market

This section assesses the proposal's likely impacts on the local housing market. First, however, it briefly summarises trends in Auckland land and dwelling prices to help set the scene.

### 7.1. Regional Dwelling Prices and Rental Trends

Auckland's housing market remains in a state of crisis, with prices rising and affordability deteriorating rapidly, particularly for first-home buyers. This is illustrated in the chart below, which plots the trend in dwelling prices since 1994. It is based on the SPAR index (published by the Ministry of Housing and Urban Development), which adjusts selling prices to account for inflation and differences in dwelling size/quality to enable underlying trends to be readily identified.<sup>10</sup>

Figure 9: Auckland Inflation-Adjusted Dwelling Prices – 1994 to 2021 (SPAR Index)

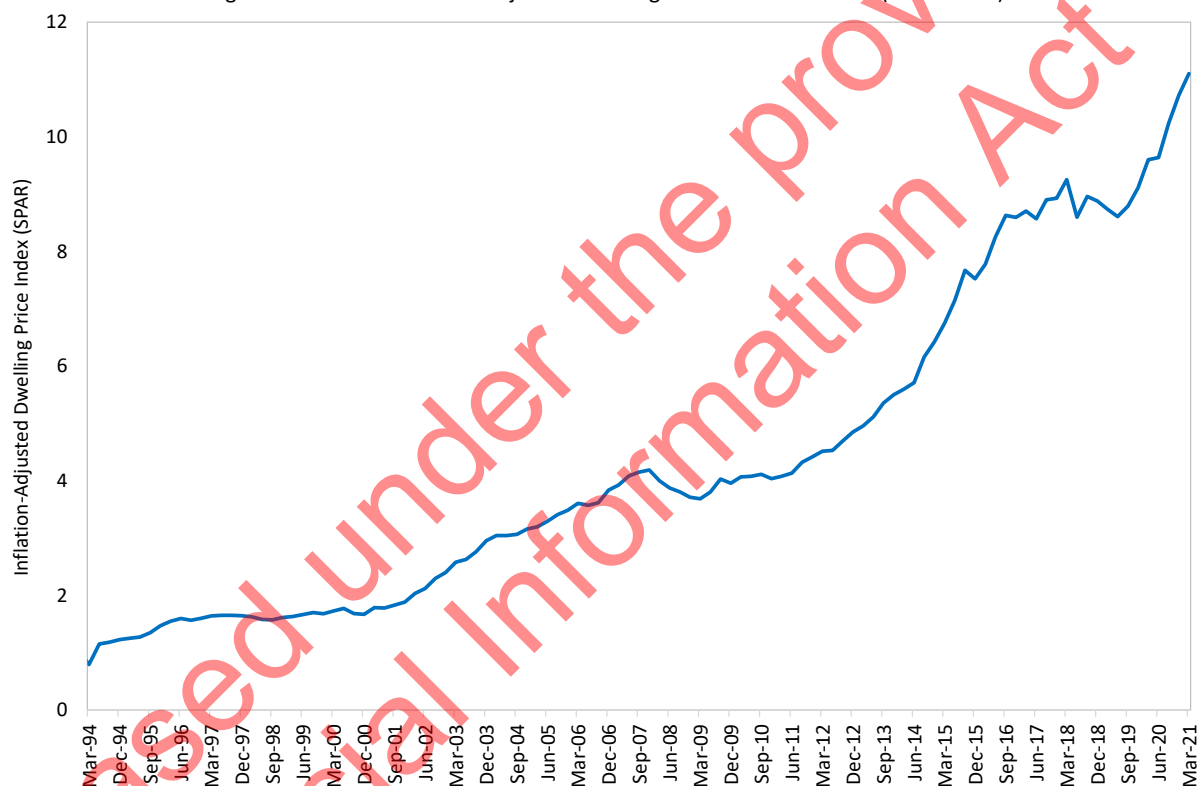


Figure 9 illustrates the sustained progression in Auckland's dwelling prices, which have risen by an average of 10% per annum over the last 27 years. Accelerated growth is evident in the past two years, with prices increasing by 13% per annum. As shown in the next chart, which plots the corresponding land price index, dwelling prices have risen largely on the back of ongoing increases in land prices. In fact, land prices have risen by 15% per annum since 2019.

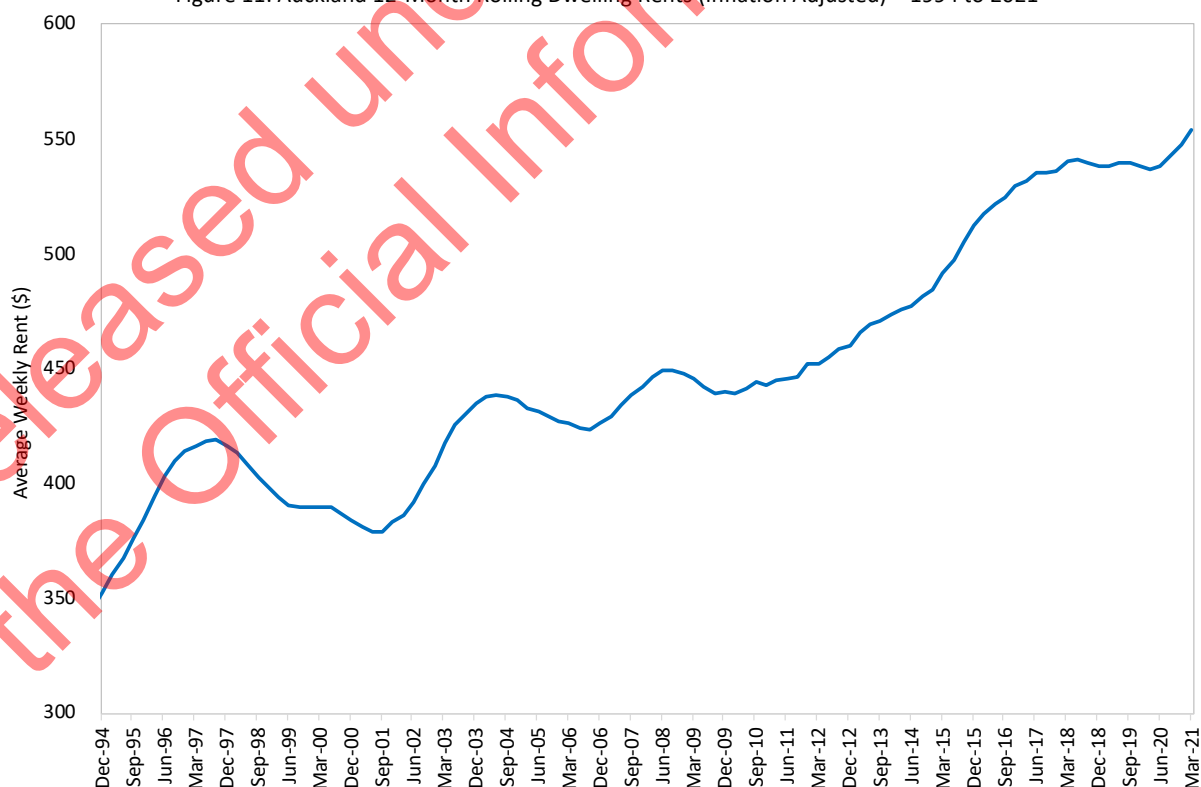
<sup>10</sup> Accessible here <https://huddashboards.shinyapps.io/urban-development>

Figure 10: Auckland Inflation-Adjusted Land Prices – 1994 to 2021 (SPAR Index)



Figure 11 below charts the 12-month rolling average rent in Auckland, adjusted for inflation. It shows that weekly rental price rises have outstripped inflation by 2.4% per annum since 2011.

Figure 11: Auckland 12-Month Rolling Dwelling Rents (Inflation Adjusted) – 1994 to 2021



The latest affordability report by Core Logic<sup>11</sup> shows that the median house price in Auckland is eight times the median household income. By comparison, the benchmark for affordability is a ratio of only three. In addition, the report shows that it takes more than ten years to save the deposit for a new home in Auckland. Thus, not only are house prices themselves increasingly unaffordable, but even the task of saving the deposit for a new home is an onerous task well beyond the reach of many households.

Figure 12: Core Logic Housing Affordability Report December 2020

	Value to income ratio		Share of income for repayments		Years to save deposit		Rent to income ratio	
	Latest (Q4 2020)	Average (2004–20)	Latest (Q4 2020)	Average (2004–20)	Latest (Q4 2020)	Average (2004–20)	Latest (Q4 2020)	Average (2004–20)
Auckland	8.0	6.8	38%	43%	10.7	9.1	20%	21%
Hamilton	6.7	5.0	32%	32%	8.9	6.7	22%	20%
Tauranga	9.0	7.6	43%	49%	12.1	10.2	27%	26%
Wellington	6.4	5.1	31%	33%	8.5	6.8	18%	18%
Christchurch	5.2	5.1	25%	32%	6.9	6.8	19%	20%
Dunedin	6.8	5.1	32%	32%	9.0	6.8	23%	22%
New Zealand	6.8	5.6	33%	36%	9.0	7.5	21%	20%

With that context in mind, we now consider the likely impacts of the proposal on the local housing market.

## 7.2. Proposal Impacts

The proposal's impacts on the residential land market mirror its impacts on the industrial land market, only to a lesser extent given the much smaller amount of residential land created. Thus, in short, the proposal will:

- Provide a direct boost in supply to meet a widely known shortfall of available residential land, as confirmed by the staggering growth in residential land prices (see Figure 10); and
- Help improve the responsiveness of supply to growth in demand, thereby helping (to some small extent) to help control the rate at which residential land and dwelling prices increase over time.

<sup>11</sup> Accessible here <https://www.corelogic.co.nz/housing-affordability-report>



## 8. Broader Economic Effects

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This section considers the broader economic effects of the proposal.

### 8.1. One-Off Economic Stimulus

The processes associated with obtaining all necessary consents, finalising the subdivision plan, preparing the land for development, installing necessary infrastructure, and the constructing the various buildings enabled by the proposal will generate significant one-off economic impacts.

We quantified the likely one-off economic impacts of this activity using a technique called multiplier analysis, which is based on detailed matrices called input-output tables. These describe the various supply chains that comprise each economy, and therefore enable the wider economic impacts of a change in one sector (or sectors) to be traced through to estimate the overall impacts. These impacts include:

- **Direct effects** – which capture onsite activities directly enabled by the proposal; plus
- **Indirect effects** – which arise when businesses working directly on the project source goods and services from their suppliers, who in turn may need to source good/services from their own suppliers, and so on; and
- **Induced effects** – which occur when a share of the additional wages and salaries generated by the project (directly or indirectly) are spent in the local/regional economy and therefore give rise to additional rounds of economic impacts.

These economic effects are usually measured in terms of:

- **Contributions to value-added (or GDP).** GDP measures the difference between a firm's outputs and the value of its inputs (excluding wages and profits). It captures the value that a business adds to its inputs to produce its own outputs.
- **The number of people employed** – this is measured in terms of employment counts, which include both part-time and full-time workers, because Statistics New Zealand does not provide data on full-time equivalent employees (FTEs).
- **Total wages and salaries** paid to workers, which are often labelled 'household incomes.'

Baring these definitions in mind, the following tables shows the estimated economic impacts of the various activities enabled by the proposal.

Table 3: One-Off Regional Economic Impacts of the Proposal

<b>Planning/design/consent</b>	<b>Direct</b>	<b>Indirect</b>	<b>Induced</b>	<b>Total</b>
Regional GDP (\$ millions)	\$1.0	\$0.5	\$0.4	\$1.9
Employment (FTE-years)	9	5	4	18
Salaries/Wages (\$ millions)	\$0.6	\$0.2	\$0.2	\$1.0
<b>Onsite Infrastructure</b>	<b>Direct</b>	<b>Indirect</b>	<b>Induced</b>	<b>Total</b>
Regional GDP (\$ millions)	\$4.1	\$3.3	\$2.0	\$9.4
Employment (FTE-years)	27	29	17	73
Salaries/Wages (\$ millions)	\$1.9	\$1.6	\$0.7	\$4.2
<b>Land Development</b>	<b>Direct</b>	<b>Indirect</b>	<b>Induced</b>	<b>Total</b>
Regional GDP (\$ millions)	\$6	\$7	\$5	\$18
Employment (FTE-years)	52	63	39	154
Salaries/Wages (\$ millions)	\$4	\$3	\$2	\$9
<b>Building Construction</b>	<b>Direct</b>	<b>Indirect</b>	<b>Induced</b>	<b>Total</b>
Regional GDP (\$ millions)	\$28	\$78	\$33	\$138
Employment (FTE-years)	247	771	283	1,301
Salaries/Wages (\$ millions)	\$19	\$38	\$12	\$68
<b>Development Totals</b>	<b>Direct</b>	<b>Indirect</b>	<b>Induced</b>	<b>Total</b>
Regional GDP (\$ millions)	\$39	\$88	\$40	\$167
Employment (FTE-years)	335	868	343	1,546
Salaries/Wages (\$ millions)	\$25	\$43	\$15	\$83

Table 3 shows that the proposal will have significant economic impacts, particularly at the building construction phase. To fully inform decision makers, we restate these below in terms of the number of people directly and indirectly employed at each stage of the project.

- In 2021/2022, 9 direct FTE jobs will be created in the planning/design/consent stages, with a further 5 FTE jobs created indirectly in sectors that support planning/design/consent.
- In 2022/2023, 79 direct FTE jobs will be created in the infrastructure and land development stages, with a further 92 FTE jobs created indirectly in sectors that support infrastructure and land development.
- In 2024, 247 direct FTE jobs will be created in building construction, with a further 771 FTE jobs created indirectly in sectors that support construction.

## 8.2. Ongoing Employment Potential

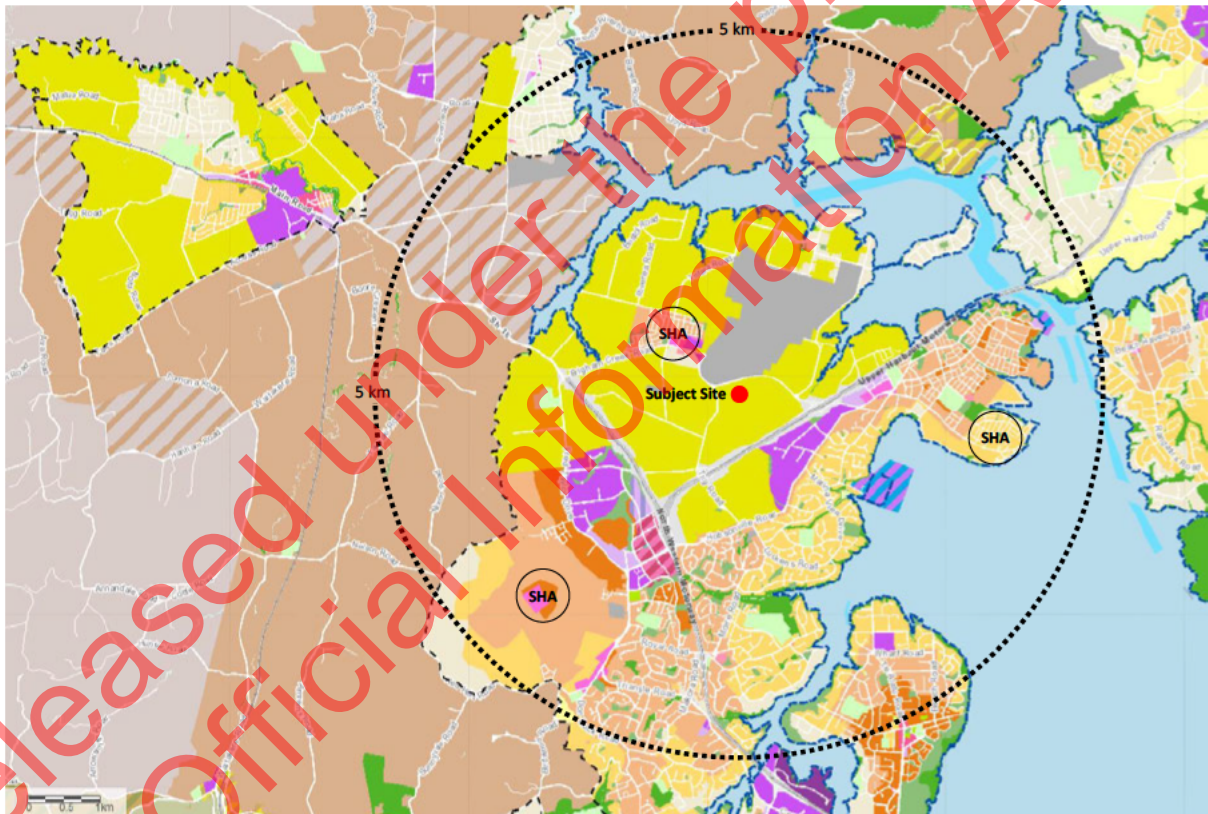
In addition to the significant one-off economic impacts estimated above, the proposal will also enable businesses to establish onsite, which themselves will have ongoing economic impacts. Of particular interest here is the potential for ongoing employment sustained onsite by future businesses.

To estimate this, we reviewed recent work for Council by Market Economics, which estimated the average industrial workspace ratio (WSR) for each of the local board groups. It suggested that a typical industrial area employs about 1 person per 80 square metres of gross floorspace. Applying this ratio to the proposal's estimated industrial floorspace of 85,200 square metres indicates that the proposal could support permanent future employment for about 1,065 people.

### 8.3. Spatial Match with Population Growth

Not only will future businesses on the subject site sustain permanent employment for more than 1,000 people, but the subject site also provides an important spatial match between household growth and employment opportunities. This, in turn, may help to reduce average commute times and distances, which will have important economic and environmental benefits. Figure 13 provides some context by drawing a 5-kilometre radius around the subject site. As we can see, significant areas of existing urban areas, and swathes of FUZ land, are less than 5 kilometres away. So, too, are three special housing areas (SHAs).

Figure 13: Proximity of the Subject Site to Existing and Future Urban Areas



According to the development strategy in the Auckland Plan 2050, these various FUZ areas, and the recently zoned areas in Redhills, will accommodate an additional 82,000 people over the next 30 years, with more than 20,000 additional employees residing there. Clearly, then, access to a wide range of employment opportunities nearby is an important part of the Northwest “growth puzzle.” Indeed, according to the plan:



*“Increasing business growth and employment opportunities around Albany, Westgate and Manukau will help address several of Auckland’s current transport and employment challenges... As these areas grow, there will be more options for people to work or study closer to home...”*

#### 8.4. Synergies with Other Land Uses

Although the immediate receiving environment for the subject site is mostly rural, it is also directly adjacent to the Whenuapai Cable Landing Station (WCLS), which is one of the key termination points for the Southern Cross internet cable. This proximity is illustrated in the map below.

Figure 14: Proximity of Subject Site to Whenuapai Cable Landing Station (WCLS)



We understand that this immediate proximity to the WCLS means that prospective future uses of the subject site will experience ultra-low latency. This, in turn, is critically important for businesses that rely on extremely fast and reliable internet access, such as data centres.

#### 8.5. Highest & Best Use of Land

The subject land is currently used for low-value rural purposes. The proposal addresses this and enables the land to be put to its highest and best use. As a result, it maximises economic efficiency in the underlying land market while also supporting the overarching purpose of the RMA (to enable the sustainable use and development of natural and physical resources).

In addition, critically, the proposal finally resolves the prolonged process delays that have hitherto prevented it from being put to its intended urban uses.