**INSIGHT** | ECONOMICS

Final Report: 5 December 2024

# Economic Assessment of Proposed Industrial Plan Change in Te Rapa North

Prepared for: **Fonterra Limited**

**Authorship**

This document was written by Danielle Chaumeil, Fraser Colegrave, and Nicholas Keith.

**Contact Details**

For further information about this document, please contact us at the details below:

Email: fraser@ieco.co.nz
Web: www.insighteconomics.co.nz

**Disclaimer**

Although every effort has been made to ensure the accuracy and integrity of the information and opinions presented herein, the report's authors and Insight Economics Limited accept no liability for any actions, or inactions, arising from its contents.

**Copyright**

# Contents

# 1. Executive Summary

**Context**

This Economic Report has been prepared on behalf of Fonterra Limited for its Private Plan Change ('PC17') request at Te Rapa, Hamilton. The purpose of PC17 is to rezone approximately 91ha of land (the 'Plan Change Area') surrounding the Te Rapa Dairy Manufacturing Site (the 'Manufacturing Site'). PC17 does not seek to change the land use of the Manufacturing Site or planning provisions relating to the Manufacturing Site. This report was commissioned to help inform and support PC17 by assessing its likely economic effects. It assumes that PC17 will provide about 58 hectares of developable land, upon which up to 245,000m$^2$ of industrial floorspace could be built over time.

**Key Findings**

The key findings of our assessment are that:

- There is a strong and sustained demand for industrial land in Hamilton City, as reflected in industrial building consents and industrial employment data, which both spiked up recently.
- Hamilton City's industrial growth has historically been concentrated in Te Rapa, which accounted for nearly 70% of new city industrial floorspace consented between 2017 and 2022.
- Industrial property prices have soared over the last 10 years, with the average land value increasing by 11% per annum, and the average capital value increasing by more than 9%. Significant supply boosts are therefore required to keep pace with demand and slow the rate at which industrial property prices appreciate in the future.
- The nature of industrial activity is also changing, with the strongest growth recently occurring in warehousing and logistics. These land uses often have quite specific requirements, typically seeking relatively high studs and modern fit outs.
- The Business Development Capacity Assessment 2023 ('BCA') for the Future Proof Partners[1] reveals significant pending industrial land shortfalls across most parts of Hamilton City, except Ruakura.
- In Te Rapa, shortfalls of more than 80 hectares are forecast over both the medium term (10 years) and long term (30 years) despite the currently deferred Te Rapa North Industrial Zone being included in long term supply.
- It is therefore imperative that this land is unlocked (by way of a rezoning) as soon as possible to help keep pace with demand. PC17 acknowledges and directly responds to this by providing about 58 hectares of developable land in a master-planned environment already earmarked for growth.
- PC17 will bring forward 91ha (gross land area) and a forecast 58ha of net developable area that is planned within the long-term supply in the Future Proof Strategy (Future Development

[1] https://futureproof.org.nz/assets/FutureProof/Future-Proof-Business-HBA-2023_WR.pdf

Strategy Update 2024-2054) into the medium-term horizon. This will help to address part of the medium-term short fall that is identified in the BCA.

- Beyond direct boosts in industrial land supply, the economic rationale for PC17 includes that it is an excellent fit with industrial site and location criteria, as confirmed by the multicriteria assessment included in the BCA, and that PC17 offers potential synergies with other land uses.

- We used a common graphical technique called supply-demand analysis to illustrate likely impacts on the industrial land market. In short, PC17 will increase the supply of industrial land. This will reduce the average land price making industrial land relatively more accessible and affordable to prospective future owners and occupiers.

- PC17 will also have wider economic effects. They include the one-off impacts of future development activity, which we estimate could sustain hundreds of jobs for at least a decade, generate $185 million in wages/salaries, and boost Gross Domestic Product ('GDP') by $330 million.

- Further, once operational, future activities supported onsite could sustain full time work for 1,450 people, generate $105 million in annual wages/salaries, and provide $220 million of GDP annually.

- The main offsetting economic cost is the loss of rural production. However, this has averaged only $750,000 per annum over the last seven years, and has provided full time employment for fewer than two people.

- The proposal also will not cause any undue financial burden on HCC because the infrastructure required to service it can be recovered directly (from those that cause the need for and/or benefit from it) using development contributions or other available funding tools.

- Accordingly, PC17 represents a superior economic outcome for the Plan Change Area, and we strongly support it on that basis.

# 2. Introduction

## 2.1 Context and Purpose of Report

This Economic Report has been prepared on behalf of Fonterra to inform and support its Private Plan Change ('PC17') request at Te Rapa, Hamilton. The purpose of PC17 is to rezone approximately 91 ha of land (the 'Plan Change Area') surrounding the Te Rapa Dairy Manufacturing Site (the 'Manufacturing Site'). PC17 does not seek to change the land use of the Manufacturing Site or planning provisions relating to it.

The objectives of PC17 are to:

1. Live-zone all Fonterra-owned land to Te Rapa North Industrial Zone.
2. Protect the Manufacturing Site from incompatible surrounding land use and reverse sensitivity risk.
3. Future proof rail access on the North Island Main Trunk Line ('NIMT').

This report was commissioned to help inform and support PC17 by assessing its likely economic effects.

## 2.2 Approach to Assessment

Because PC17 gives effect to the long-held planning vision for the Plan Change Area and is also anticipated by its current zoning, this report focusses on the likely economic effects of realising the land's anticipated industrial capacity sooner rather than later.

Further, while this report adopts the entire Hamilton City territorial authority boundary as its study area, it focusses on the city's northern reaches as the primary "locality and market."

## 2.3 Structure of Report

The remainder of this report is structured as follows:

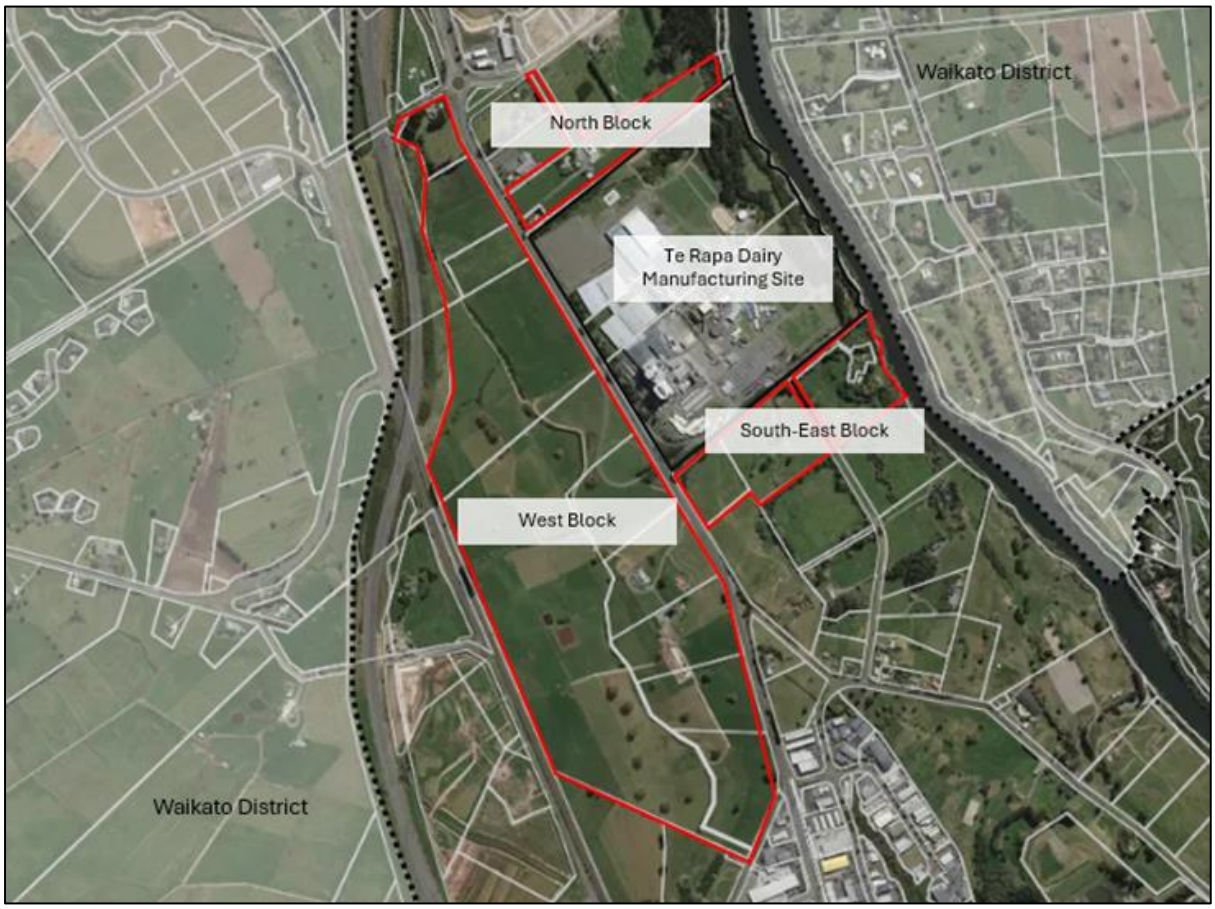
- **Section 3** identifies and describes the Plan Change Area and its proposed rezoning;
- **Section 4** describes the market context for PC17;
- **Section 5** summarises the latest land supply/demand information underpinning PC17;
- **Section 6** describes the economic rationale for PC17;
- **Section 7** considers the likely economic effects of PC17 on the industrial land market.
- **Section 8** briefly considers likely wider economic costs and benefits of PC17; and
- **Section 9** provides a summary and conclusion.

# 3. About the Plan Change Area & PC17

## 3.1 Plan Change Area Location and Description

The Plan Change Area spans approximately 91 hectares of land surrounding Fonterra's Manufacturing Site in Te Rapa North, approximately 8km north of Central Hamilton, as per the red outlines in the map below.

Figure 1: Plan Change Area Boundaries (Red Outlines)




The Plan Change Area comprises three distinct parts (the North, West and South-East Blocks), all of which are encompassed by the Waikato River to the east, the State Highway 1C (Waikato Expressway) and the NIMT to the west, Hutchinson Road and Bern Road to the north and Ruffell Road, Old Ruffell Road and property boundaries to the south.

State Highway 1C is located nearby to the northwest which provides regional road connectivity. The NIMT forms part of the western boundary of the Plan Change Area with the nearest stopping point being the Mainfreight Depot south of the junction of Onion and Ruffell Road. In addition, all three parts of the Plan Change Area have frontage to Te Rapa Road which runs north to south through the centre of the Plan Change Area.

The Plan Change Area is currently utilised for rural and residential uses.

## 3.2 Receiving Environment

The surrounding area predominantly comprises rural and industrial activities with the outer residential suburbs and industrial areas of Hamilton towards the south and southeast. The Plan Change Area wraps around the Manufacturing Site, a milk processing site, which is recognised within the Waikato Regional Policy Statement ('WRPS') as 'Regionally Significant Industry'. The Manufacturing Site is a critical asset for Fonterra.

To the north is the Te Awa Lakes development, which will provide 90ha of industrial, commercial and residential land.

Beyond State Highway 1C is the township, Horotiu, which includes a mixture of residential, industrial and community activities. Other nearby locations include the Te Kowhai township, 5km to the west, and the Ngāruawāhia township, approximately 8km to the north.

## 3.3 Planning Context

Under the Hamilton City Operative District Plan ('ODP'), the Plan Change Area is mostly zoned Te Rapa North Industrial Zone, which is overlaid with the 'Deferred Industrial Zone,' Area, with small amounts of land zoned for open space purposes along the riverside.

The Plan Change Area, and other land nearby, forms part of the city's longer term industrial land supply. Until relatively recently, Hamilton City Council ('HCC') was advancing Plan Change 10 ('PC10') to rezone the deferred parts of the Te Rapa North Industrial Zone, but this has been put on indefinite hold / cancelled by HCC.

## 3.4 About PC17

PC17 proposes to remove the ODP's planning map area deferring the Plan Change Area's zone and amend the provisions of the Te Rapa North Industrial Zone to enable its intended future industrial use. The key objectives are to:

- Live-zone all Fonterra-owned land to Te Rapa North Industrial Zone.
- Protect the Manufacturing Site from incompatible surrounding land use and reverse sensitivity risk.
- Future proof rail access on the NIMT.

PC17 does not seek to change the land use of the Manufacturing Site, or planning provisions relating to it.

## 3.5 Indicative Yields

In our experience, about 35% of the Plan Change Area is typically used for roads, reserves, stormwater management and similar supporting uses, when developing a greenfield area for industrial purposes. Applying that rule-of-thumb, PC17 will yield nearly 58 hectares of developable industrial land. Depending on future development intensities, this could accommodate approximately 245,000 square metres of new industrial building gross floor area ('GFA') at most. We adopt that value here for assessment purposes but also consider the likely effects of lower intensities too.

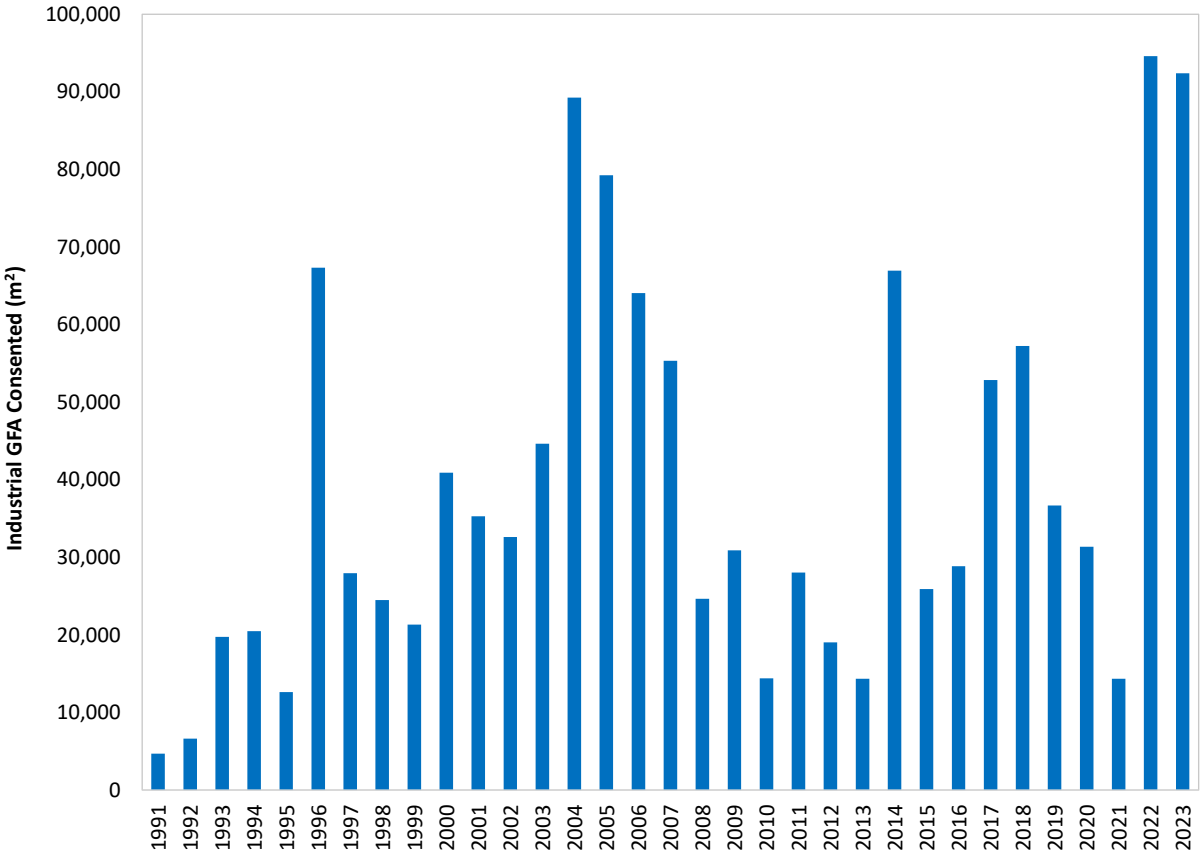
# 4. Market Context

This section summarises Hamilton City's industrial property market to provide context for PC17.

## 4.1 Building Consents

Figure 2 plots the quantity of new industrial floorspace consented in Hamilton City each year since 1991. Overall, consents have tended to follow macroeconomic cycles. However, consents spiked in 2022 to exceed 94,000m$^2$, with a further 92,400m$^2$ in 2023. These recent consent volumes signal significant, sustained demand for new industrial properties, particularly warehousing and logistics space, which accounted for 72% of new industrial GFA consented in 2022, and 94% in 2023.

Figure 2: Industrial Floorspace Consented in Hamilton City 1991 to 2023 (GFA m$^2$)



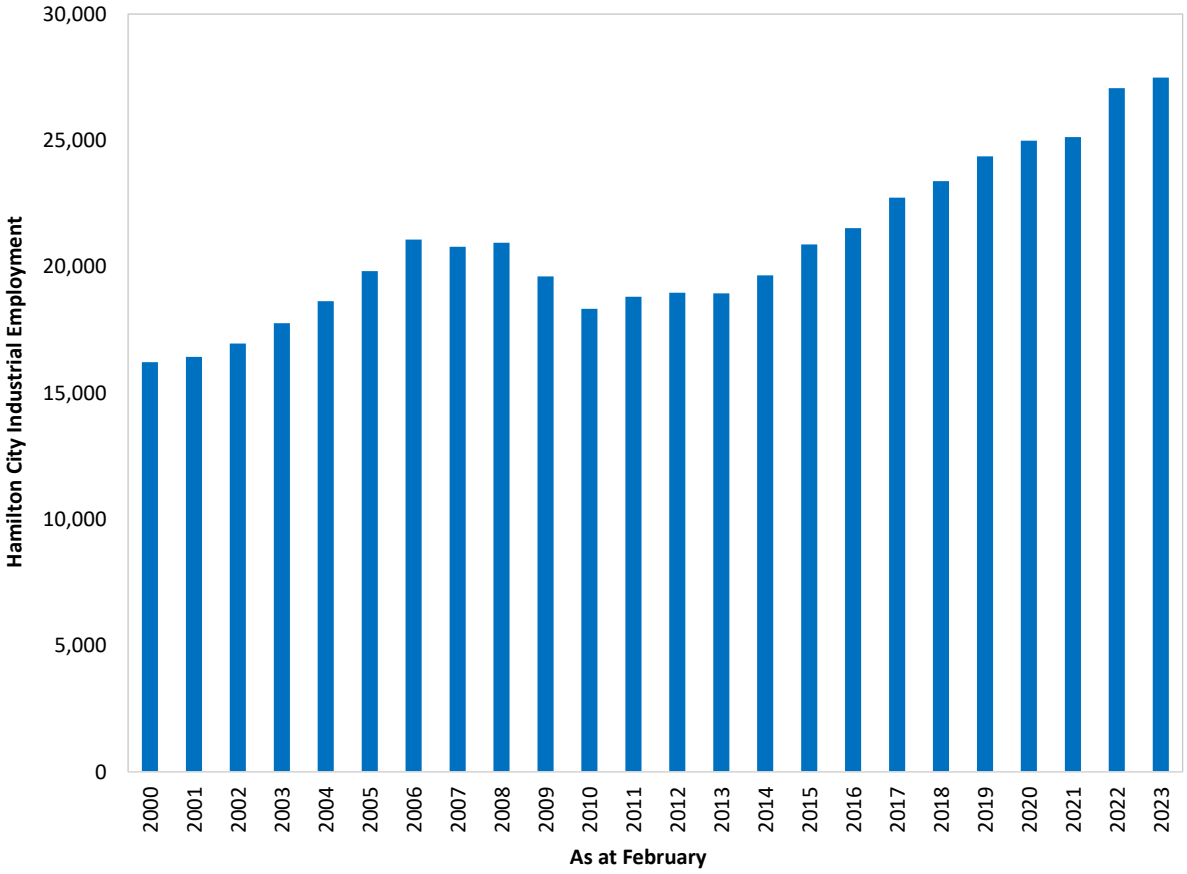

While floorspace growth has occurred across the city's industrial zoned areas, most has occurred within Te Rapa North SA2[2] – in which the Plan Change Area falls – averaging just under 70% of new industrial GFA consented between 2017 and 2022. However, Te Rapa North's share reduced to 31% of new industrial GFA in 2023, following the rezoning of the new industrial growth cell, Ruakura (located to the south-east of the city).

[2] SA2 stands for Statistical Area 2, which is a common spatial building block defined by Statistics New Zealand and used in many datasets. It replaces the former Census Area Units ('CAUs').

## 4.2 Industrial Employment

Naturally, employment in Hamilton City's industrial sectors has also risen over time, with a notable increase recently. In fact, the number of industrial employees grew 7.6% in the year ending February 2022, with a further 1.6% rise in the 12 months thereafter. Figure 3 plots the trend over time.

Figure 3: Industrial Employment in Hamilton City (as at February of each Year from 2000 to 2023)




## 4.3 Industrial Property Values

We used Property Guru's Core Logic tool to also analyse trends over time in the number of industrial zoned properties in Hamilton City, and their values.[3] Table 1 presents the details.

[3] Specifically, we analysed trends in properties zoned as either Industrial Zone, Industrial Amenity Protection Area, Logistics Zone, Ruakura Industrial Zone, or Te Rapa North Industrial Zone in the ODP.

Table 1: Hamilton City Industrial Zoned Property Snapshot in 2013 & 2023

| **Totals** | **2013** | **2023** | **Change** | **CAGR** |
|---|---|---|---|---|
| Zoned Properties | 2,100 | 2,510 | 410 | 1.8% |
| Building GFA (000s $m^2$) | 1,735 | 2,220 | 485 | 2.5% |
| Land Value $m | $1,035 | $3,520 | 2,485 | 13.0% |
| Improved Value $m | $1,170 | $2,870 | 1,700 | 9.4% |
| Capital Value $m | $2,205 | $6,395 | 4,190 | 11.2% |
| | | | | |
| **Averages per Property** | **2013** | **2023** | **Change** | **CAGR** |
| Building GFA $m^2$ | 825 | 885 | 60 | 0.7% |
| Land Value | $495,000 | $1,405,000 | $910,000 | 11.0% |
| Improved Value | $555,000 | $1,145,000 | $590,000 | 7.5% |
| Capital Value | $1,050,000 | $2,545,000 | $1,495,000 | 9.3% |

Table 1 shows that the number of industrial zoned properties in Hamilton City grew by 410 between 2013 and 2023 (from 2,100 to 2,510), which represents a compound annual growth rate ('CAGR') of 1.8%. Over the same period:

- Total GFA increased by 485,000$m^2$, which equals a CAGR of 2.5%.
- Total land value increased by $2.48 billion, which equals a CAGR of 13%.
- Total improved value increased by $1.7 billion, which equals a CAGR of 9.4%.
- Total capital value increased by $4.19 billion, which equals a CAGR of 11.2%.

The bottom half of the table presents the same information on an average-per-property basis. It shows that the average size of industrial buildings has increased slightly from 825$m^2$ to 885$m^2$ but that the average land value has nearly trebled while the average capital value is now 2.5 times higher than 10 years ago. Consequently, industrial properties in Hamilton City are far more expensive to purchase (or rent) than they were 10 years ago.

## 4.4 Changes in Industrial Land Uses

Property Guru was used again to analyse the trends in Hamilton City land uses within industrial zoned areas over time. Table 2 summarises our findings.

Table 2: Hamilton City GFA by Land Use within Industrial Zones in 2013 & 2023 ($m^2$)

| Industrial Uses | 2013 | 2023 | Change | CAGR |
|---|---|---|---|---|
| Building materials other than timber | 31,500 | 34,200 | 2,700 | 0.8% |
| Chemicals, plastics, rubber, and paper | 79,900 | 81,200 | 1,300 | 0.2% |
| Depots and yards | 75,700 | 98,500 | 22,800 | 2.7% |
| Engineering, appliances, and machinery | 358,200 | 409,800 | 51,600 | 1.4% |
| Food, drink, and tobacco | 105,900 | 143,900 | 38,000 | 3.1% |
| Multi-use within industrial, incl storage | 404,500 | 539,700 | 135,200 | 2.9% |
| Other industries, including storage | 328,600 | 528,200 | 199,600 | 4.9% |
| Textiles, leather, and fur | 43,100 | 42,500 | -600 | -0.1% |
| Timber products and furniture | 68,500 | 66,300 | -2,200 | -0.3% |
| Vacant buildings | 12,900 | 4,900 | -8,000 | -9.2% |
| **Industrial Uses Sub-Total** | **1,508,800** | **1,949,200** | **440,400** | **2.6%** |
| | | | | |
| All Other Uses | 226,400 | 273,300 | 46,900 | 1.9% |
| | | | | |
| **Totals** | **1,735,200** | **2,222,500** | **487,300** | **2.5%** |

Table 2 shows that most of the city's industrial sectors span more GFA now than in 2013, except for textiles, leather, and fur, and timber products and furniture manufacturing, which both shrunk slightly. In addition, the quantity of vacant industrial floorspace decreased during that period from 12,900$m^2$ in 2013 to only 4,900$m^2$ in 2023. The fastest growing sectors were "Other industries" and "Multi-use" both of which include storage activities. This is consistent with the building consent data above, where new storage buildings have accounted for most new GFA consented in recent times.

Finally, we note that the amount of GFA used for non-industrial purposes (i.e. "All Other Uses" in Table 2) rose in absolute terms (from 226,400$m^2$ to 273,300$m^2$) but fell proportionally from 13% of total GFA in 2013 to 12.3% in 2023.

## 4.5 Implications for PC17

Hamilton City industrial sectors are in high demand, with record consents granted for new floorspace over the past two years. This rapid growth is also reflected in industrial employment, which has experienced a rapid increase over the past two years. Industrial land prices also continue to increase rapidly, with the average property's land value increasing by 11% per annum over the past decade. The mix of activities occurring in industrial zones is also changing, with warehousing, storage, and logistics growing far quicker than other uses. To keep pace with these changes and to ensure that industrial land prices do not spiral out of control, significant boosts in supply are needed.

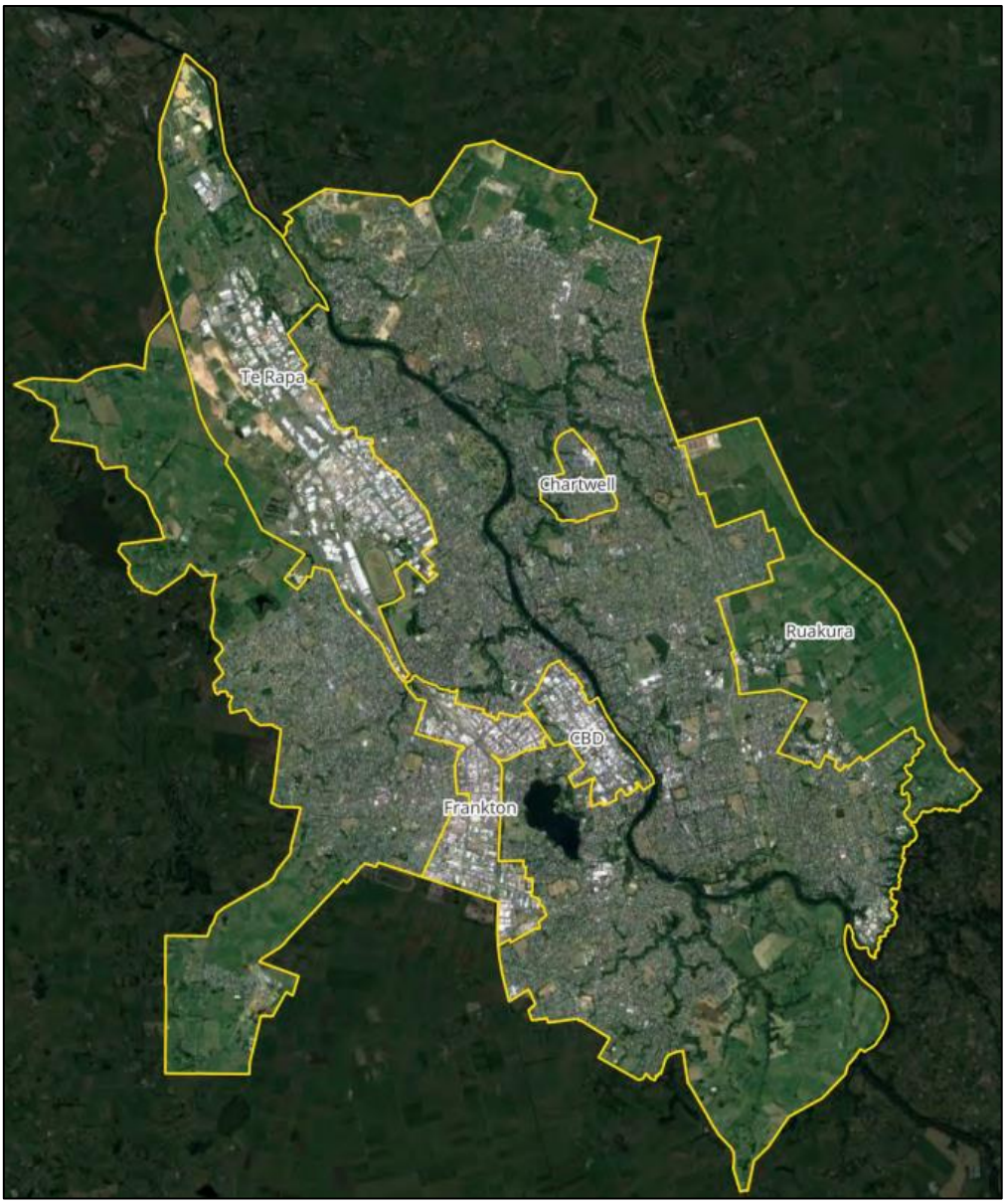
# 5. Projected Demand & Supply

## 5.1 Introduction

This section briefly considers the likely future supply and demand for industrial land in Hamilton City, particularly its northern reaches, to further set the scene for PC17. For consistency with other HCC plans, strategies and reports, we adopt the findings of the latest Business Development Capacity Assessment 2023 ('BCA') for Future Proof Partners ('Future Proof') to measure industrial land demand and supply.[4]

The spatial area (or node) referred to as "Te Rapa" is defined by the BCA as per Figure 4 below (alongside other nodes).

Figure 4. Spatial extent of areas considered by the BCA




[4] https://futureproof.org.nz/assets/FutureProof/Future-Proof-Business-HBA-2023_WR.pdf

## 5.2 Industrial Land Demand

Table 3 presents the latest estimates of industrial land demand for Hamilton City by node and by the National Policy Statement on Urban Development 2020 ('NPS-UD') timeframes,[5] including competitiveness margins of 20% over the short and medium terms, and 15% over the longer term.

Table 3: Hamilton City Projected Industrial Land Demand (ha) – incl. competitiveness margins

| Name | Short Term | Medium Term | Long Term |
|---|---|---|---|
| Te Rapa | 38.5 | 123.3 | 236.5 |
| Chartwell | 0.2 | 0.6 | 1.7 |
| Frankton | 8.5 | 31.1 | 89.9 |
| CBD | 2.8 | 9.7 | 28 |
| Ruakura | 1.6 | 5.1 | 15.4 |
| Other | 9.8 | 30.5 | 86 |
| **Total** | **61.0** | **200.0** | **457.0** |

Over the short-term (i.e. three years), 61 hectares of industrial land demand is expected, with 200 hectares forecasted over the medium term (10 years), and 457 over the long-term (30 years). More than 60% of that demand is expected to be supplied by the rezoning of Te Rapa over the short and medium terms and just over 50% in the longer term. Clearly, strong and sustained demand is expected for additional industrial land in the same locality and market as PC17. i.e. Te Rapa.

## 5.3 Industrial Land Supply

Table 4 presents the corresponding supply figures by node and by NPS-UD timeframe.

Table 4: Hamilton City Projected Vacant Industrial Land Supply (ha)

| Name | Short Term | Medium Term | Long Term |
|---|---|---|---|
| Te Rapa | 39.6 | 39.6 | 149.8 |
| Chartwell | 0.1 | 0.1 | 0.1 |
| Frankton | 4.6 | 4.6 | 4.6 |
| CBD | 0.8 | 0.8 | 0.8 |
| Ruakura | 66.1 | 154.9 | 173.0 |
| Other | 14.4 | 14.4 | 14.4 |
| **Total** | **126.0** | **214.0** | **343.0** |

Citywide, 126 hectares of vacant land is expected to be available over the short term, 214 hectares over the medium term, and 343 hectares over the long term. For Te Rapa itself, the figures are 39.6 hectares over both the short and medium terms, rising to nearly 150 hectares over the long term. This higher long-term figure represents the full realisation of Te Rapa North's industrial capacity[6], which can only be achieved by the development of the Plan Change Area and the balance of the Te Rapa North Industrial Zone land (that would retain the Deferred Industrial Zone Area overlay).

[5] Being estimates of the short term, medium term and long term development capacity to meet expected demand for business land.

[6] BCA, page 77.

## 5.4 Supply-Demand Balances

Table 5 presents the corresponding supply/demand balances, which have been calculated as supply minus demand. Red numbers denote supply shortfalls, while black numbers denote surpluses.

Table 5: Hamilton City Projected Supply-Demand Balances (Supply-Demand) ha

| Node | Short Term | Medium Term | Long Term |
|---|---|---|---|
| Te Rapa | 1.1 | -83.7 | -86.7 |
| Chartwell | -0.1 | -0.5 | -1.6 |
| Frankton | -3.9 | -26.5 | -85.3 |
| CBD | -2.0 | -8.9 | -27.2 |
| Ruakura | 64.5 | 149.8 | 157.6 |
| Other | 4.6 | -16.1 | -71.6 |
| **Total** | **65.0** | **14.0** | **-114.0** |

As illustrated in Table 5 above, the Te Rapa area is expected to have sufficient capacity only in the short-term (i.e. the next three years), with shortfalls of nearly 84 hectares over the medium term, and 87 hectares over the long term. Given that the Te Rapa supply figures in Table 5 already include the Plan Change Area and the rest of the Te Rapa North Industrial Zone over the long term, it follows that the city is facing severe, prolonged supply deficits. Indeed, the only part of the city not forecast to face a deficit is Ruakura. That aside, the city will face major shortfalls at every node, over both the medium and longer terms.

## 5.5 Implications for PC17

According to the BCA, there is a clear and pressing need to start the process of rezoning the Deferred Industrial land within Te Rapa as soon as possible to meet medium term demand. Given the long lead times typically associated with large-scale greenfield developments, PC17 should be enabled as soon as possible including to address part of the shortfall in capacity over the medium term.

PC17 will bring forward 91ha gross land / 58ha of net developable land from long term supply to medium term. The BCA supports the bringing forward of this land because it will address part of the existing shortfall (but not all of it).

# 6. Economic Rationale for Rezoning

## 6.1 Introduction

The previous section identified a pressing need for industrial-zoned land, particularly in Te Rapa. We now discuss the suitability of PC17 to help meet this need.

## 6.2 Sequencing Anticipated by Proposed Change 1 to the WRPS

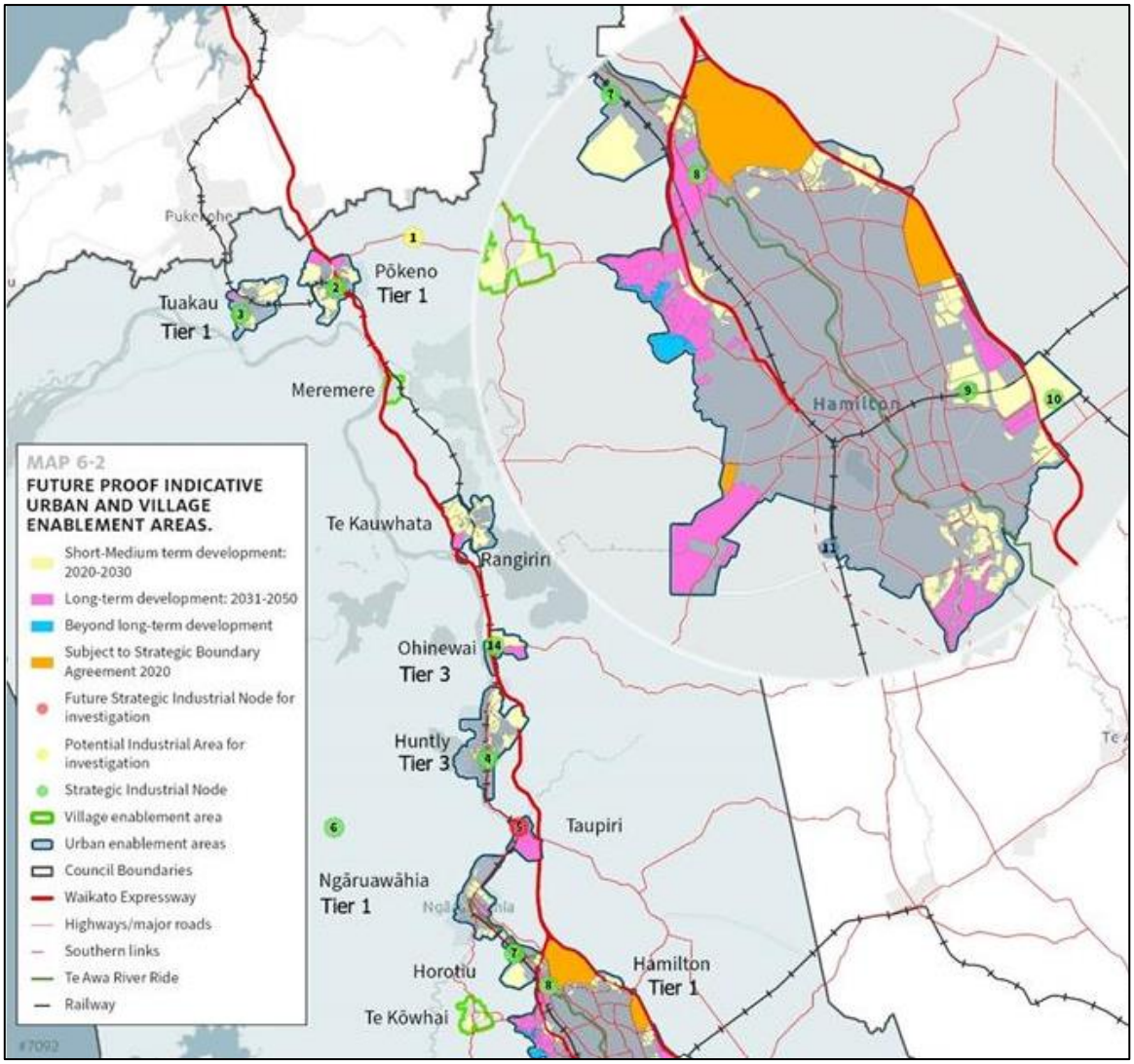
Proposed Change 1 ('PC1') to the WRPS requires new industrial development to predominantly occur in accordance with the indicative timings in Table 35 (Appendix 6) of the WRPS, as reproduced below. Table 35 adopts the Future Proof Strategy (Future Development Strategy Update 2024-2054) ('Future Proof Strategy') industrial land allocation based on anticipated demand.[7] Map 43 of the WRPS then sets out the sequencing for when development of these areas is to occur.

Table 6: WRPS (PC1) Table 35 – Future Proof Strategy industrial land allocation

| **Strategic Industrial Nodes (based on gross developable area)** | Industrial Land allocation and staging (ha) | | |
|---|---|---|---|
| | **2020 to 2030** | **2031 to 2050** | **Total to 2050** |
| Pōkeno | 5 | 23 | 53 |
| Tuakau | 26 | 77 | 103 |
| Huntly/Rotowaro/Ohinewai | 77 | - | 77 |
| Horotiu/Te Rapa North/Rotokauri | 189 | 50 | 239 |
| Ruakura/Ruakura East | 172 | 245 | 417 |
| Hamilton Airport/Southern Links | 94 | 46 | 140 |
| Hautapu | 67 | 160 | 227 |
| **TOTALS** | **630** | **626** | **1,256** |

[7] Future Proof Strategy (Future Development Strategy Update 2024-2054), based on expected demand Table 7.2.4 of Futureproof HBA 2023.

Figure 5: Map 43 of the WRPS (PC1)




PC17 is consistent with the indicative timeframes set out in Table 6 because it supplies 91ha of land for development between 2020-2030, when 180ha is anticipated as being required to meet demand (noting that most of the future development of the Plan Change Area is anticipated to be delivered during the 2020-2030 horizon, with the balance to occur thereafter).

PC17 would, however, bring forward the sequencing of the development (i.e. supply) to the medium term compared to what is shown in Map 43, which classifies Te Rapa as long term. This then requires territorial authorities to assess PC17 using the responsive planning criteria contained in Appendix 13 of the WRPS.

As the development is anticipated in the long-term, only Criteria A needs to be considered. The criteria set out in Appendix 13 considered relevant to PC17 and this economics assessment, are:

a. *That the development would add significantly to meeting a demonstrated need or shortfall for…business floor space, as identified in a Housing and Business Development Capacity Assessment or in council monitoring.*

*b. That the development contributes to a well-functioning urban environment. Proposals are considered to contribute to a well-functioning urban environment if they:*[8]

*i. …have or enable a variety of sites that are suitable for different business sectors in terms of location and site size;*

*ii. support, and limit as much as possible adverse impacts on, the competitive operation of land and development markets.*

*c. That the development is consistent with the Future Proof Strategy guiding principles, and growth management directives* [being B8 Growing a Prosperous Economy, in this instance]

*e. In cases where development is being brought forward, whether it can be demonstrated that there is commitment to and capacity available for delivering the development within the advanced timeframe.*

*i. That the development does not compromise the efficiency, affordability or benefits of existing and/or proposed infrastructure in the sub-region.*

*k. That the development demonstrates efficient use of local authority and central government financial resources, including prudent local authority debt management…*

These factors are considered in the following assessment and under Sections 7 and 8 below. It is understood that the assessment of effects for PC17 that is being prepared by Harrison Grierson, will address the above factors in full.

## 6.3 Addresses Near-Term Supply Shortfalls

With around 58 hectares of developable land, PC17 represents a significant and much-needed boost in industrial land supply for the city and the wider subregion. Given the significant shortfalls projected for Te Rapa over the medium and longer terms even when the Te Rapa North Industrial Zone is included in the latter, it follows that PC17 is needed much sooner than later. As such, PC17 is wholly consistent with Criteria A of WRPS(PC1) Appendix 13.

As is natural with greenfield developments, significant infrastructure will be required to enable urban development. However, we understand that there are no *prima facie* obstacles to infrastructure delivery. Consequently, we conclude that PC17 will help to address medium term supply shortfalls, particularly in the city's northern areas.

## 6.4 Boosts Freehold Land Availability

As shown in Table 4 above, the Hamilton City's projected future industrial land supply effectively spans only two nodes – Te Rapa and Ruakura. In fact, Ruakura accounts for more than 50% of the city's short-term supply, and more than 70% of its medium-term supply. Notwithstanding inevitable concerns about the impacts of this supply concentration on the degree of market choice and competition, this

[8] WRPS(PC1) UFD-M49.1

also means that the city's current land supply is largely leasehold, being the approach implemented at Ruakura.

We have participated in many arbitrations between ground lessees and lessors over the rent payable. Based on that experience, we expect that many organisations will not lease land and construct a new industrial building on it due to future ground rent risk. Indeed, ground rents are usually fixed for a period of five to seven years, at which point they are reviewed and will invariably increase markedly. Those future ground rent increases, in turn are financial risks that some parties may seek to avoid.

Bringing the Plan Change Area forward for development contributes positively to competitive land-markets, consistent with Criteria B.ii of WRPS(PC1).

## 6.5 Good Fit with Location Criteria

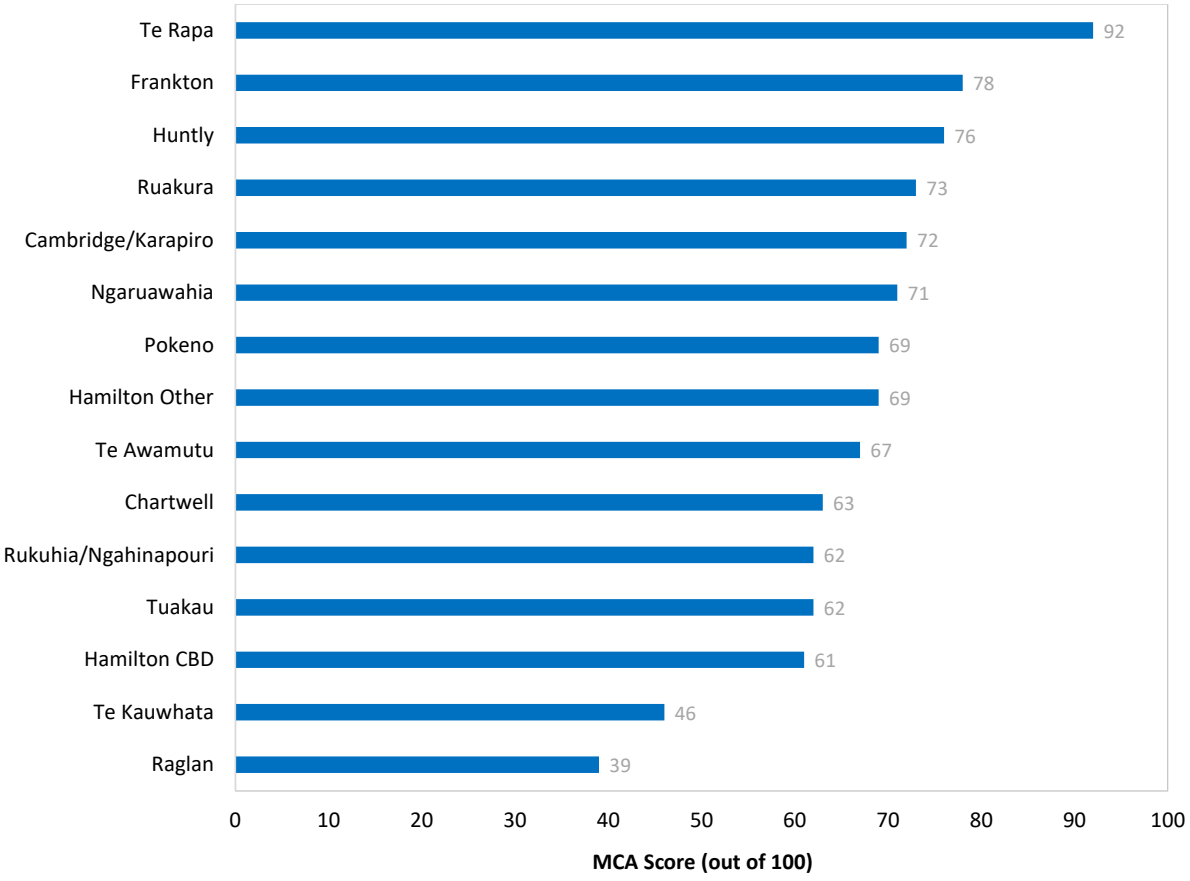
The Plan Change Area is an excellent fit with industrial site and location criteria, which often include:

- Ability to buffer adverse effects/avoid reverse sensitivity;
- Access to major road/transport routes;
- Access to rail;
- Close to other industrial land;
- Complementary business services;
- Exposure/profile/visibility;
- Flat topography;
- Good range of site shapes and sizes;
- Proximity to ports (including inland ports); and
- Proximity to workforce.

Unsurprisingly, the BCA multicriteria assessment ('MCA') of the different industrial areas' suitability for growth, identifies Te Rapa as the best place in the Future Proof subregion. The criteria used in the MCA closely mirror those above, with the scores for each criterion then weighted to derive an overall score out of 100. Figure 6 below shows the resulting MCA scores for the sub-region's various industrial nodes. We acknowledge this ranking of industrial nodes and emphasise its implications for PC17.

Given the above, we consider PC17 consistent with Criteria B.i of Appendix 13 of WRPS(PC1).

Figure 6: MCA Scores for Industrial Nodes in Future Proof Subregion




## 6.6 Potential Synergies with Other Land Uses

Finally, we note that the Plan Change Area provides a unique opportunity for businesses to co-locate near, and harness potential synergies with, the Manufacturing Site. These synergies are known as "agglomeration benefits" in economics jargon, and they are the primary reason that businesses often choose to locate near one another.

## 6.7 Summary and Conclusion

PC17 enables a significant amount of industrial zoned land to be brought to the market in a timely fashion, thus providing a much-needed medium-term supply boost that will help to address part of the shortfall that is identified in the latest BCA. It also does so in a location eminently suitable for industrial use, while giving effect to HCC's long-held planning vision for the Plan Change Area.

# 7. Industrial Land Market Impacts

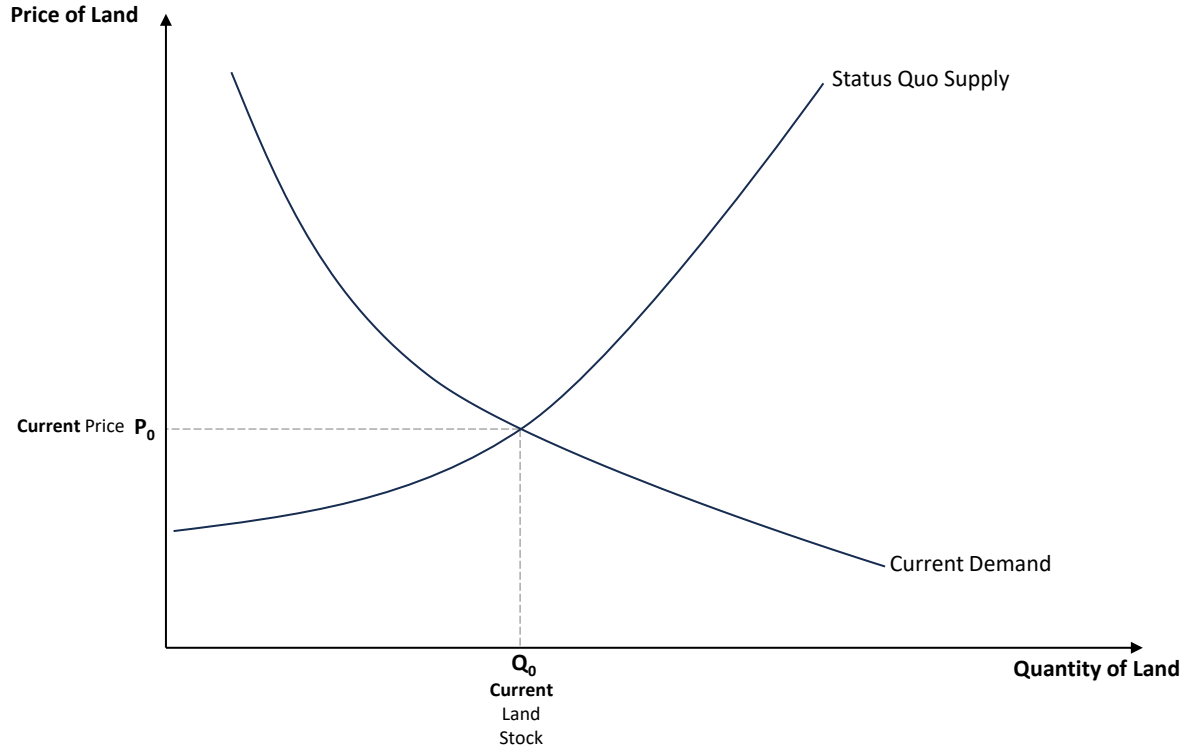
## 7.1 Introduction

This section uses a common economic technique, known as supply-demand analysis, to illustrate the impacts of PC17 on the industrial land market. It provides the rationale for PC17 in accordance with Criteria B.A of Appendix 13 of the WRPS(PC1).

## 7.2 Current Situation

PC17 would unlock industrial land supply in the medium-term, which may help the market to be more responsive to growth in demand over time. As a result, the price of industrial land may not increase as sharply over time as it would have otherwise. This effect is illustrated in the series of supply-demand charts below, starting with Figure 7, which represents the current state of Hamilton City's industrial land market.

Figure 7: Supply-Demand Graph of Hamilton City's **Current** Industrial Land Market



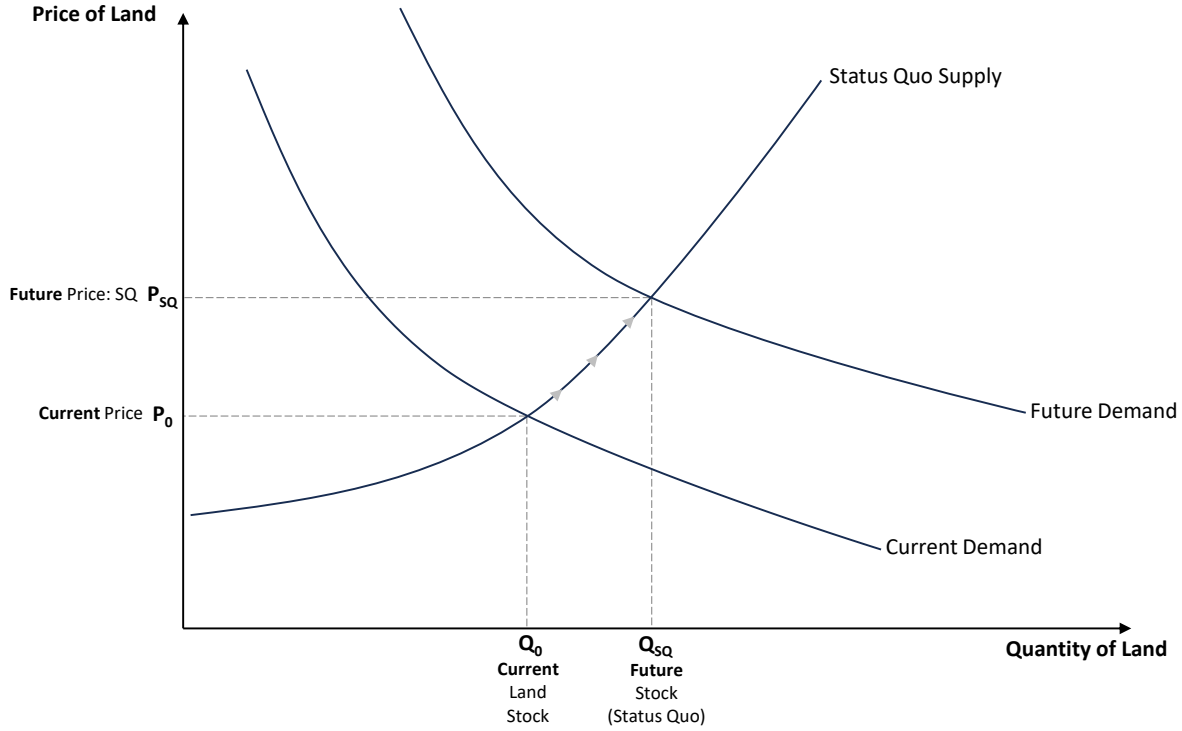

In Figure 7, the city's industrial land market is represented by its corresponding supply and demand curves, which intersect to yield the current/equilibrium industrial land stock of $Q_0$ hectares, and the prevailing (average) market price of $P_0$ per hectare.[9]

[9] The supply curve slopes up because, all other things being equal, a higher price entices more land to be supplied, and vice versa. Conversely, the demand curve slopes down because a lower price makes land affordable to a larger number of prospective buyers, and vice versa. The intersection of these curves defines the market equilibrium because it is a price that both (i) buyers are willing to pay for that quantity of land, and (ii) sellers are willing to accept for it.

## 7.3 Future Situation under Status Quo

Over time, as Hamilton City's economy grows, so too will the demand for industrial land. This causes the market demand curve to shift out, which increases the size of the land stock over time (from $Q_0$ to $Q_{SQ}$). In addition, it raises the average price of industrial land (from $P_0$ to $P_{SQ}$). See Figure 8 below.

Figure 8: Supply-Demand Graph of Hamilton City's **Future** Industrial Land Market **without** PC17




## 7.4 Future Situation with PC17

PC17, will make the city's future industrial land supply more responsive to growth in demand over time, which causes the market supply curve to flatten, as per Figure 9 below.

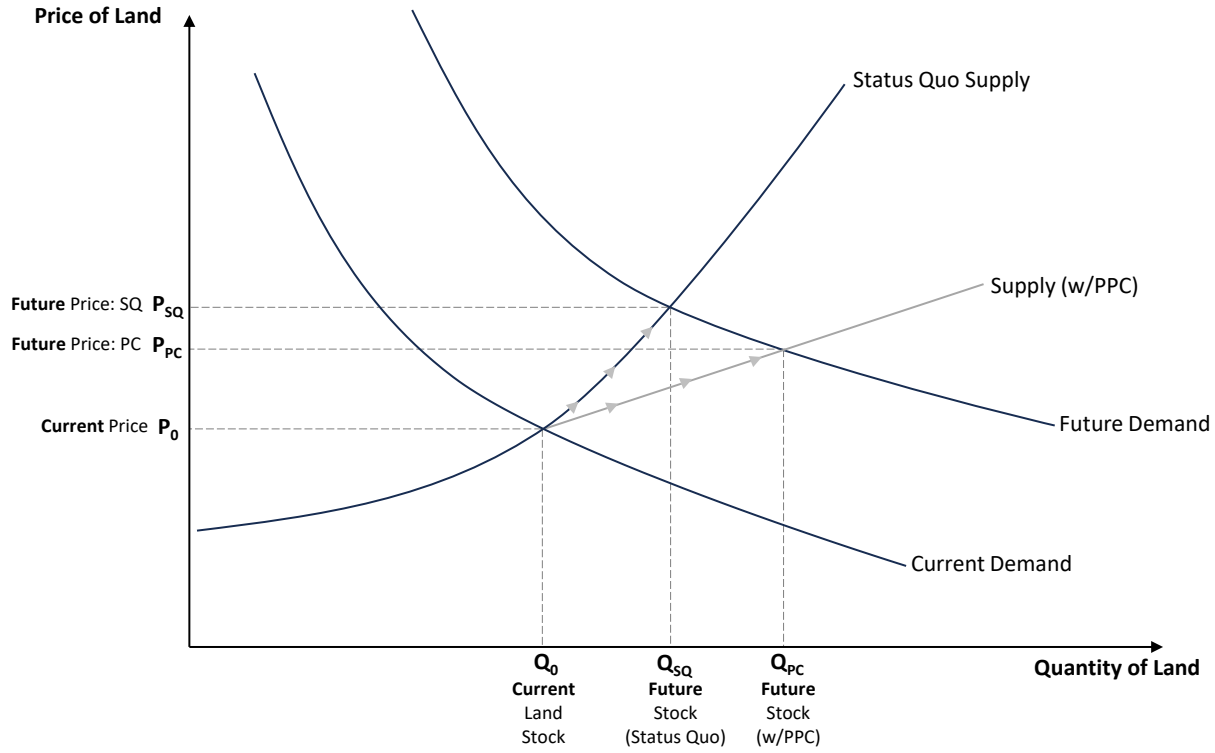
As a result, relative to the future situation under the status quo PC17 should:

- Increase the size of the future industrial land stock (from $Q_{SQ}$ to $Q_{PC}$); and
- Reduce the average price of industrial land (from $P_{SQ}$ to $P_{PC}$).

In other words, PC17 will enable more people the opportunity to purchase industrial land, and to do so at lower prices than they likely could have otherwise.[10]

[10] PC17 will also have broader impacts due to changes in the trajectory of land prices. Specifically, because future land prices will be lower with PC17 than they likely would otherwise, existing landowners will be worse off, while new ones (and renters) will be better off. In economic terms, however, this is just a 'wealth transfer' from one group to another, which cancels out and has no net effects overall.

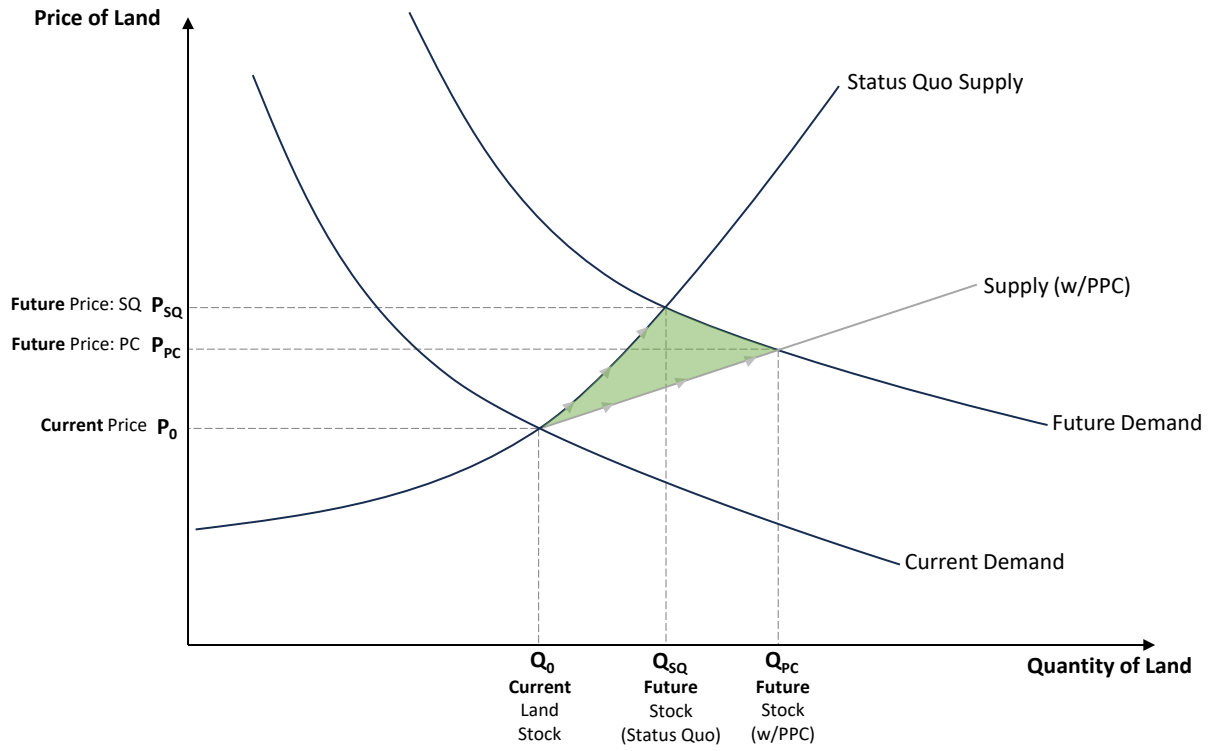
Figure 9: Supply-Demand Graph of Hamilton City's **Future** Industrial Land Market **with** PC17




## 7.5 Resulting Efficiency Gains

Finally, PC17 will create efficiency gains, which are denoted by the shaded green triangle in Figure 10 below. These represent increases in consumer and producer surplus, which are the benefits that land buyers and sellers (respectively) gain from trading with one another.

Figure 10: Industrial Land Market **Efficiency Gains** from PC17 (Green Shaded Area)



# 8. Wider Costs & Benefits

This section describes the likely wider economic impacts of the PC17. It provides the rationale for PC17 in accordance with Criteria C of Appendix 13 of the WRPS(PC1), with consideration to B8 and its related Directives. One-off development impacts are less relevant to the long-term outcomes sought by the WRPS and Future Proof Strategy, but they are not contrary.

## 8.1 One-Off Development Impacts

The processes associated with developing the Plan Change Area, including obtaining all necessary consents, finalising the subdivision plan, preparing the land for development, installing all necessary infrastructure, and constructing the various buildings enabled by the rezoning will have significant one-off economic impacts on GDP, jobs, and wages. We quantified these using a technique called multiplier analysis, which traces the impacts of additional economic activity in one sector – such as construction – through its underlying supply chains to estimate the overall impacts, including flow-on effects.

Specifically, the analysis captures both:

- **Direct effects** which arise from onsite development activities directly enabled by the PC17, such as land preparation and building construction; plus

- **Indirect effects** which arise from businesses supplying goods and services to onsite activities, who in turn may need to source good/services from their own suppliers, and so on.

The economic effects are usually measured in terms of:

- **Contributions to value-added (or GDP):** GDP measures the difference between a business' outputs and the value of its inputs (excluding wages and salaries). It captures the value that a business adds to its inputs to produce its own outputs.

- **The number of FTEs employed:** This is measured in terms of full-time equivalents, which combines part-time and full-time workers to provide a single employment metric.

- **Total wages and salaries:** Amount paid to workers and reported as 'household incomes.'

For example, when a construction company wins a new project, it usually subcontracts various other companies (i.e. subcontractors) to complete the job, such as glaziers, tilers, and plumbers. Those subcontractors, in turn, will need to source a range of materials and services from their suppliers, who in turn may need to source additional materials and services from their own suppliers, and so on. Multiplier analysis enables the impacts of these supply chain interactions to be captured to estimate the overall impact of the new building project, including its direct and flow-on (supply chain) effects.

We estimated these effects for PC17 by first adopting the average floor area ratio ('FAR') for industrial activities in the city in 2023, which was just over 0.42. Then, we applied that FAR to the assumed amount of developable land (of 58 hectares), which produced an estimated future floorspace of

approximately 245,000m$^2$. Next, we applied an indicative build cost of $1,500 per square metre to derive a ballpark future development cost of $368 million.[11] Finally, we made an allowance for other activities (such as planning, design, consent, and land preparation) based on recent experience with similar projects elsewhere. Those figures were fed into our economic impact model to derive the estimated one-off impacts of PC17, as summarised in Table 7 below.

Table 7: One-Off Economic Impacts of Development Activity

| **Planning/design/consent** | **Direct** | **Indirect** | **Total** |
|---|---|---|---|
| FTEs – 2 years | 9 | 4 | 13 |
| GDP $m | $2.6 | $1.4 | $4.0 |
| Wages/Salaries $m | $1.5 | $0.7 | $2.2 |
| | | | |
| **Land development** | **Direct** | **Indirect** | **Total** |
| FTEs – 2 years | 70 | 90 | 160 |
| GDP $m | $21 | $25 | $46 |
| Wages/Salaries $m | $11 | $12 | $24 |
| | | | |
| **Construction** | **Direct** | **Indirect** | **Total** |
| FTEs – 10 years | 45 | 175 | 220 |
| GDP $m | $55 | $225 | $280 |
| Wages/Salaries $m | $40 | $115 | $155 |
| | | | |
| **Project totals (rounded)** | **Direct** | **Indirect** | **Total** |
| FTE-years | 610 | 1,940 | 2,550 |
| GDP $m | $80 | $250 | $330 |
| Wages/Salaries $m | $55 | $130 | $185 |

In summary, we estimate that future:

- **Planning/design/consenting** work will create full-time employment for about 13 people for two years, generating $2.2m in wages/salaries;

- **Land development** (including infrastructure provision) will generate full-time work for approximately 160 people for two years (split across multiple stages), with $24m in wages/salaries paid; and

- **Building construction** will provide full-time work for around 220 people for 10 years (again, split across multiple stages), with $155m paid in wages and salaries.

## 8.2 Future Onsite Activity

In addition to the significant one-off economic impacts estimated above, PC17 will also enable businesses to establish onsite, thereby sustaining jobs and wages for many workers permanently.

To estimate this, we reviewed the BCA, which indicated that the number of employees per hectare varies by industrial land use. For example, factories average nearly 350 square metres of developable land (not floorspace) per worker, while warehouses are nearly 420 square metres. To be conservative,

[11] Based on recent building consent data for Hamilton City Industrial buildings

we adopted an average of 400 square metres of developable land per worker. On that basis, the 58 hectares of developable land enabled by PC17 is estimated to sustain ongoing employment for approximately 1,450 people.

To estimate the corresponding wages/salaries and annual GDP generated, we reviewed Statistics New Zealand's latest national accounts, which summarise the economy's overall structure and reveal the wages, GDP, and output generated per worker by industry. Table 8 below summarises the key information for the four key industrial sectors of relevance here.

Table 8: Average Annual Industrial Output, GDP, and Wages per Employee in 2022 (National Averages)

| **Industrial Sectors** | **Output $** | **GDP $** | **Wages $** |
|---|---|---|---|
| Manufacturing | 501,000 | 139,000 | 72,000 |
| Construction | 422,000 | 130,000 | 70,000 |
| Wholesale Trade | 305,000 | 164,000 | 75,000 |
| Transport, Postal and Warehousing | 298,000 | 178,000 | 78,000 |
| **Industrial Average** | **381,500** | **152,750** | **73,750** |

Overlaying these metrics with the 1,450 potential future onsite employees, we calculated the annual economic impacts generated/enabled by PC17 in Table 9 below.

Table 9: Estimated Annual Industrial Output, GDP, and Wages (1,450 employees)

| **Industrial Sectors** | **Output $m** | **GDP $m** | **Wages $m** |
|---|---|---|---|
| Construction | $727 | $200 | $105 |
| Manufacturing | $610 | $185 | $105 |
| Transport, Postal and Warehousing | $440 | $235 | $105 |
| Wholesale Trade | $435 | $260 | $110 |
| **Industrial Average** | **$553** | **$220** | **$106** |

Taking the average across the four industrial sectors assessed, we estimate that future onsite activity enabled by PC17 could generate:

- Full time employment for around 1,450 people;
- Annual output of $553 million;
- Annual GDP of $220 million; and
- More than $105 million in annual salaries/wages.

## 8.3 Higher & Better Site Uses

The Plan Change Area is currently used for low-value rural purposes. PC17 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 Resource Management Act 1991 (to enable the sustainable use and development of natural and physical resources).

## 8.4 Foregone Rural Production

Finally, we note that PC17 will reduce the extent of future rural production on the Plan Change Area. While this is a valid economic cost, the numbers are small. In fact, we understand that the average farm revenue over the past seven years was approximately $750,000 per annum, which supported

fewer than two full time workers. This is very small in comparison to the employment, GDP, and wages enabled by future onsite activity under PC17 so is not considered any further here.

## 8.5 Potential Costs to the Council

Finally, we considered whether PC17 might impose unwarranted costs on HCC and the Waikato Regional Council ('WRC') as contemplated by Criterion K of Appendix 13. To that end, we note that:

- PC17 is in a location already identified for growth over the longer term. Only the development's proposed timing is mooted for change. Accordingly, PC17 would not cause the unforeseen extension of major infrastructure networks to reach a new and unplanned location.

- Councils have a range of funding tools available to help fund the cost of any infrastructure required to service new developments like PC17. They include:

    - Financial Contributions ('FC') under the Resource Management Act 1991;

    - Development Contributions ('DC') under the Local Government Act 2002 ('LGA');

    - General or targeted rates under the Local Government (Rating) Act 2002; and

    - Infrastructure Funding and Financing ('IFF') levies under the Infrastructure Funding and Financing Act 2020 (IFFA).

- HCC has been administering a DC policy under the LGA for nearly 20 years, and we have been regularly advising them on the design and implementation of it since 2006.

- HCC's DC policy includes catchments to recover growth-related infrastructure costs arising in each part of the city from the specific developments serviced by them.

- That catchment-based approach can easily be extended – if/as required – to ensure that the costs of servicing the proposal are correctly recovered only from those that cause the need for (or benefit from) them.

- Any ongoing/annual costs associated with that infrastructure can also be recovered from those that cause the need for, or benefit from, it via targeted rates or similar.

Accordingly, PC17 will not have any adverse financial impacts on HCC, nor WRC.

# 9. Summary and Conclusion

There is a pressing need for industrial zoned land in Hamilton to meet high demand, particularly in the northern reaches of Te Rapa and Te Rapa North. PC17 directly acknowledges and responds to this need, by seeking to rezone land that is identified across economic and planning documents as being an integral part of new industrial land supply. In addition, future industrial uses enabled by PC17 will unlock significant and enduring economic benefits without incurring any material economic costs.

Considering the criteria set out by the WRPS (PC1) for out-of-sequence development, PC17 appears consistent from an economic perspective because it will add significantly to addressing the forecasted shortfall of industrial land in the strategic node in the medium-term, enable the development of land well-suited to industrial uses, supports competitive land markets, contributes to a prosperous economy, and will not unduly financially burden HCC.

Accordingly, we support PC17 on economic grounds.