

BEFORE A HEARING COMMISSIONER

IN THE MATTER of the Resource Management Act 1991 (RMA)

AND

IN THE MATTER of hearing submissions and further submissions in respect
of Matamata-Piako District Council - Plan Change 58 -
Avenue Business Park

**STATEMENT OF KEVIN COUNSELL ON BEHALF OF WARWICK AND
MARION STEFFERT**

ECONOMICS

14 FEBRUARY 2024

Introduction

- 1 My full name is Kevin Geoffrey Counsell.
- 2 I am an economist and Director at NERA, a global economic consulting firm. I am based in Wellington. I have been employed as a professional economist for over twenty-three years.
- 3 I have a Master of Commerce degree with Distinction in economics, a Bachelor of Commerce degree with First Class Honours in economics, and a Bachelor of Science degree in mathematics, all from Victoria University of Wellington. I am a member of the Law and Economics Association of New Zealand, in which I currently hold the position of Wellington Vice President, and a member of the Resource Management Law Association of New Zealand.
- 4 Broadly my consulting work involves the application of economic analysis to legal and business issues, including urban development, resource management and environmental issues. I have appeared as an economic expert before the Environment Court and independent hearings panels. I have also authored or co-authored papers relating to economic analysis of urban development, resource management and environmental issues, including in the *New Zealand Journal of Environmental Law*, *Planning Quarterly*, *Resource Management Journal*, *Resource Management Theory & Practice*, and *Policy Quarterly*.
- 5 Of relevance to the issues arising in the present proceeding, my experience includes economic analysis for planning and consenting of residential, commercial, and industrial developments. I have assessed supply and demand and the sufficiency of capacity for urban developments. I have also analysed the economic benefits and costs of urban developments, and more generally undertaken cost-benefit analysis in a variety of settings, including for environmental policy and plan changes.
- 6 In relation to this hearing, I am authorised to give evidence on behalf of Warwick and Marion Steffert (**Steffert**).

Code of Conduct

- 7 I have read the Environment Court's 'Code of Conduct for Expert Witnesses' as contained in the Environment Court's Consolidated Practice Note 2023 and agree to comply with it. I have complied with it

when preparing this written statement of evidence and I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed. Other than when I state I am relying on the advice of another person, I confirm that my evidence is within my area of expertise.

Executive Summary

- 8 The proposed Plan Change 58 (**PC58**) for land near the western edge of Morrinsville would provide for approximately 10.1 hectares (**ha**) of developable land to the industrial land supply for Morrinsville once expected non-developable areas such as roads, stormwater and wastewater infrastructure are excluded.
- 9 Below is a summary of the position reached in this evidence on the significant economic matters:
 - (a) A Business Demand and Capacity Assessment (**BDCA**) has been prepared for Morrinsville, which shows that there is sufficient industrial land supply in Morrinsville to meet demand in the short-term (three-year) and medium-term (ten-year) scenarios. However, the BDCA is based on employment projections which are now relatively dated, and the BDCA does not capture some recent changes in the extent of vacant Industrial-zoned land in Morrinsville;
 - (b) In undertaking my own analysis of supply and demand to address these issues, there is a shortfall of Industrial-zoned land in Morrinsville in the medium-term in all the scenarios I assess, and in some scenarios, there is a shortfall in the short-term. For example, in a scenario with an employee density ratio of 800m² per employee, the medium-term shortfall is -13.0ha without applying the competitiveness margins set out in the National Policy Statement on Urban Development (**NPS-UD**) and -18.0ha with NPS-UD margins added. More conservative results using an employee density ratio of 500m² per employee are for a shortfall of -3.7ha/-6.8ha without/with NPS-UD margins, respectively. In an alternative scenario where I exclude from the supply-side land that reflects actual demand that has already been realised (having been sold by developers to private owners), the medium-term shortfall is -19.5ha using the 800m² employee density ratio and without NPS-UD margins added (or -24.5ha with margins added);

- (c) On this evidence, there is a strong economic case for additional Industrial-zoned land to be made available in Morrinsville through PC58, to meet a shortfall in the medium-term and potentially even in the short-term. PC58 therefore also meets the requirements of clause 3.6(4)(a) of the National Policy Statement for Highly Productive Land (**NPS-HPL**), in that it is required to provide “sufficient development capacity” to meet expected demand for Industrial-zoned land in the medium-term and potentially even in the short-term;
- (d) The NPS-HPL also specifies that, if development capacity is required, “[t]erritorial authorities must take measures to ensure that the spatial extent of any urban zone covering highly productive land is the minimum necessary to provide the required development capacity while achieving a well-functioning urban environment”.¹ A soils assessment by AgFirst finds that part of the PC58 site is no longer considered highly productive land, and the area of highly productive land in PC58 is 7.9ha. In all but the two most conservative of the scenarios I analyse, at least 7.9ha of Industrial-zoned land will be required to provide sufficient development capacity in Morrinsville in the medium-term. That is, in these scenarios the full spatial extent of the highly productive land in the PC58 site will be necessary to provide the required development capacity;
- (e) An alternative approach to the aforementioned analysis of supply and demand is to instead use the demand estimates from the BDCA (while retaining the supply-side analysis that captures recent changes in the extent of vacant Industrial-zoned land in Morrinsville). This analysis yields a -7.1ha shortfall in the medium-term, using an employee density of 800m² per employee and excluding NPS-UD competitiveness margins;
- (f) I have also assessed the benefits and costs of PC58, and I find that the proposed plan change will expand the supply of Industrial-zoned land and release the supply constraint, benefiting purchasers of this land through lower prices and more choice, and bringing new businesses and employees to Morrinsville. It will also result in more

¹ Clause 3.6(5) of the NPS-HPL.

businesses being located in close proximity to each other, generating productivity benefits; and

- (g) My analysis of the benefits and costs is relevant to clause 3.6(4)(c) of the NPS-HPL which requires consideration of whether the benefits of rezoning outweigh the costs associated with the loss of highly productive land for land-based primary production. I find that the economic benefits of PC58 will outweigh the economic costs of the loss of 7.9ha of highly productive land.

Background

10 In 2021, I was engaged by the Stefferts to provide economic analysis for PC58. I have prepared four reports in respect of PC58:

- (a) A report dated 12 October 2021 with a preliminary analysis of industrial land supply and demand in Morrinsville. This report was provided to planning staff at the Matamata-Piako District Council (**MPDC**);
- (b) A report dated 6 October 2022 with an analysis of industrial land supply and demand in Morrinsville, and the benefits and costs of PC58. This report was filed with MPDC as part of the PC58 application;
- (c) A report dated 23 November 2023 with an updated analysis of industrial land supply and demand in Morrinsville, and the benefits and costs of PC58. This report was filed with MPDC as part of an Addendum to the PC58 application; and
- (d) An addendum dated 2 February 2024 with an analysis of industrial land supply and demand in Morrinsville using an alternative set of demand projections to those used in my 23 November 2023 report. This most recent addendum, which I prepared following discussions with MPDC's economic peer reviewer (Mr Fraser Colegrave), also provided additional contextual information on factors influencing industrial land demand in Morrinsville.

Scope of Evidence

11 This evidence has been prepared on behalf of the applicants, the Stefferts, who have requested a private plan change to the Matamata-Piako District Plan to rezone approximately 13.4 hectares of rural land

from Rural Zone to General Industrial Zone on the western side of Morrinsville, between Avenue Road North and SH26 (of which there will be approximately 10.1 hectares of developable land).

- 12 My evidence addresses economic matters and responds to submissions made on the PC58 application and relevant parts of the Section 42A Hearing Report (**s42A Report**).
- 13 My evidence covers:
- (a) The applicability to PC58 of a recent BDCA prepared by Market Economics;
 - (b) My assessment of the demand for, and supply of, Industrial-zoned land in Morrinsville;
 - (c) My assessment of the economic benefits and costs of PC58; and
 - (d) My response to submissions and relevant parts of the s42A Report.
- 14 In the course of preparing this evidence I have considered:
- (a) The PC58 application lodged with Council on 22 December 2022, the further information response provided on 1 May 2023, and the addendum provided on 30 November 2023;
 - (b) The 14 submissions received and 1 further submission; and
 - (c) The s42A Report dated 7 February 2024.
- 15 My evidence is to be read in conjunction with the PC58 application and further information referred to above, and the evidence presented by the other experts on behalf of the Stefferts. I have also reviewed a draft of the evidence being provided by Mr Chris Steffert.
- 16 My evidence is also to be read in conjunction with my previous economic reports filed with MPDC in respect of PC58. In particular, as my latest reports in this matter have been filed relatively recently (23 November 2023 and 2 February 2024), my evidence provides a summary of the analysis in those reports. Full details of the analysis and calculations I have undertaken are set out in those reports.

The applicability of the BDCA to PC58

- 17 MPDC recently commissioned Market Economics to update a previous BDCA that had been undertaken for the Matamata-Piako District. The

updated (2023) BDCA includes an analysis of the supply and demand of industrial land in the Morrinsville township and the Industrial-zoned area located south of the Morrinsville township.² I refer to the latter area as the **Morrinsville-Walton Rd Industrial Area**, and I refer to **Morrinsville** as the Morrinsville-Walton Rd Industrial Area taken together with the Morrinsville township.

- 18 The key finding in the BDCA is that there is sufficient Industrial-zoned land supply in Morrinsville to meet demand in the short-term (three-year) and medium-term (ten-year) scenarios. It is only when considering a longer-term period (from 2023 to 2054) that the BDCA finds insufficient Industrial-zoned land supply.
- 19 In general, a BDCA such as the one prepared by Market Economics for the Matamata-Piako District can often provide a starting point for assessing supply and demand in relation to a private plan change. However, I note the following in applying this particular BDCA to PC58:
- (a) On the demand side, the BDCA is based on Waikato Integrated Scenario Explorer (**WISE**)³ employment projections which are now relatively dated, having been released in March 2021, and which I show later in my evidence to be an underestimate relative to more recent projections; and
 - (b) On the supply side, the BDCA does not capture some recent changes in the extent of vacant Industrial-zoned land in the Morrinsville township.
- 20 I therefore consider it preferable to undertake my own assessment of supply and demand in respect of PC58, rather than rely entirely on the BDCA (albeit that the BDCA does serve as an input to some components of my analysis). I elaborate on the above two points and set out my own supply-demand assessment in the following sections of my evidence. As an alternative, I also set out later in my evidence some results that retain the demand-side analysis of the BDCA, while utilising the supply-side results from my own assessment.

² Market Economics (2023), "Business Development Capacity and Demand Assessment 2023: Update – Matamata-Piako District", Final report, prepared for MPDC.

³ WISE is an online simulation tool developed through the Waikato Regional Council's Creating Futures research project, see <http://www.creatingfutures.org.nz>.

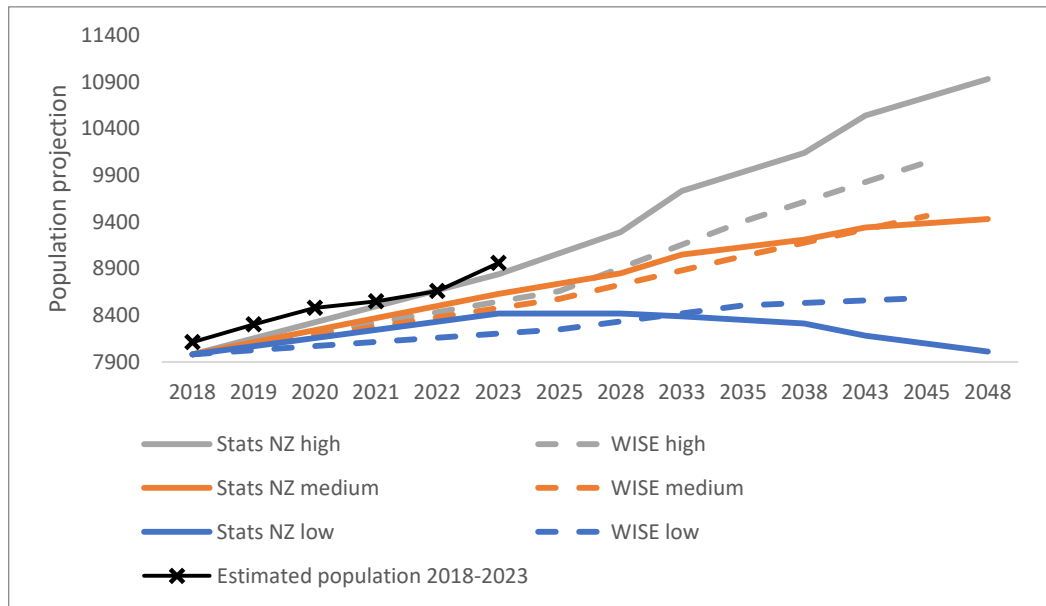
Demand for Industrial-zoned land in Morrinsville

Comparison of WISE and Statistics New Zealand data

- 21 The Industrial-zoned land demand projections in the Market Economics BDCA are based on WISE employment projections which are now relatively dated, having been released in March 2021.
- 22 The implications of that time lag can be seen by comparing the WISE projections with a more recent set of projections, prepared by Statistics New Zealand (**Stats NZ**), with the most up-to-date Stats NZ projections released in December 2022. While Stats NZ does not prepare projections of employment, it does prepare population projections, and it is those population projections that serve as a basis for comparing against WISE population projections.
- 23 In Figure 1 below I have compared the Morrinsville township population projections in the low, medium and high scenarios from the Stats NZ projections (from December 2022) with the WISE low, medium and high scenario projections (from March 2021). The Stats NZ projections run from 2018 through to 2048 (at five-year intervals), and I have shown the WISE projections over the same 2018-2048 time period.⁴ This graph shows that the Stats NZ population projections for the high scenario (the solid grey line) are materially above the WISE high scenario projections (the dotted grey line) over the entire 2018 to 2048 time period shown. The Stats NZ projections are also above the WISE projections in the low scenarios through to around 2033, and above the WISE projections in the medium scenarios through to around 2043.

⁴ I note that the WISE projections are for ten-year intervals from 2025 onwards, so do not match the precise dates in which the Stats NZ projections are made.

Figure 1: Comparison of Stats NZ and WISE population projections for Morrinsville township, 2018-2048



Source: NERA analysis of Stats NZ and WISE population projections

- 24 Figure 1 above also compares the Stats NZ and WISE population projections with Stats NZ's population *estimates*. The population estimate is an estimate of the (historical) population of an area, as of 30 June of each year. In Figure 1 above, I have shown Stats NZ's population estimates for the Morrinsville township from 2018 to 2023 with the solid black line. It can be seen that the estimated population is tracking at or above the Stats NZ high scenario population projections.
- 25 Lastly, as a further sense test of the Stats NZ and WISE population projections, I have compared the rate of historical population growth in the Morrinsville township in the last ten years (from 2013 to 2023), with that implied by the Stats NZ and WISE population projections over a forthcoming ten-year period (I use 2023-2033 from the Stats NZ data and 2025-2035 from the WISE data). The results of this analysis are shown in Table 1 below. This shows that the projected rate of future population growth in the Stats NZ and WISE projections is low by historical standards. Even the highest growth rate in the population projections, of 1.0% per annum in the Stats NZ high scenario, is low relative to the recent growth in the Morrinsville township's historical population of 2.0% per annum (the grey shaded row).

Table 1: Morrinsville township average annual population growth by ten-year period

Population scenario	Average annual population growth over ten-year period
Stats NZ population estimates 2013-2023	2.0%
Stats NZ low scenario 2023-2033	-0.04%
Stats NZ medium scenario 2023-2033	0.5%
Stats NZ high scenario 2023-2033	1.0%
WISE low scenario 2025-2035	0.3%
WISE medium scenario 2025-2035	0.5%
WISE high scenario 2025-2035	0.8%

Source: NERA analysis of Stats NZ and WISE population projections, and Stats NZ population estimates. Growth rates are compound annual growth rates.

- 26 Drawing on the above analysis, I consider that there is a strong basis for using the Stats NZ high scenario projections in my analysis of demand for Industrial-zoned land, for the following reasons:
- (a) The Stats NZ population projections have been prepared more recently than the WISE population projections;
 - (b) The estimated population in the Morrinsville township is tracking at or above the Stats NZ high scenario population projections; and
 - (c) The Stats NZ high scenario projections have a growth rate that is low by historical standards.
- 27 Using the Stats NZ high scenario would also be consistent with MPDC's request of Market Economics in the BDCA to use the high scenario in the WISE data, to reflect a prudent approach to addressing issues such as the high price of industrial land.⁵

Estimate of demand for Industrial-zoned land in Morrinsville

- 28 Based on the analysis in the previous section, I use the Stats NZ high scenario population projections as a means of proxying the demand for Industrial-zoned land in Morrinsville. My analysis of demand covers

⁵ Market Economics (2023), "Business Development Capacity and Demand Assessment 2023: Update – Matamata-Piako District", Final report, prepared for MPDC, at p.27.

Industrial-zoned land in both the Morrinsville township and the Morrinsville-Walton Rd Industrial Area.

- 29 In my 23 November 2023 report, I noted that my analysis of demand only covered the Morrinsville township (see paragraph [20]). However, since preparing that report, Market Economics has clarified that the BDCA's industrial employment projections cover both the Morrinsville township and the Morrinsville-Walton Rd Industrial Area. Since these industrial employment projections serve as an input to my analysis (as discussed below), it has become clear that my analysis of Industrial-zoned demand does in fact cover both the township and the Morrinsville-Walton Rd Industrial Area. This is consistent with the spatial area analysed in the BDCA, which also analyses demand across both the Morrinsville township and the Morrinsville-Walton Rd Industrial Area.
- 30 In addition, I note that the geographic area in my supply-side calculations (set out in the next section) also covers both the Morrinsville township and the Morrinsville-Walton Rd Industrial Area, albeit that there is no remaining undeveloped Industrial-zoned land in the latter area.
- 31 In summary, my approach to estimating the future demand for Industrial-zoned land in Morrinsville is:⁶
- (a) I start with the Stats NZ high scenario population projections for Morrinsville township. Since Stats NZ does not prepare employee projections, I use the relationship between population and employee projections in the WISE data (of 0.35 industrial employees to population) to determine the implied employee projections from the Stats NZ data (I return to this 0.35 ratio below);
 - (b) I then convert the number of industrial employees in each year to a measure of industrial land demand using a measure of employee density i.e., the ratio of land area to employee. For this I use the two employee density scenarios used in the Market Economics BDCA, of 500m² of industrial land per employee and 800m² of industrial land per employee, and also a scenario of 700m², which is a scenario identified in the Economic Peer Review from Insight Economics attached as an appendix to the s42A Report.⁷ Having

⁶ For the full details of this calculation, see section 4.2 of my 23 November 2023 report.

⁷ Insight Economics (2024), "Economic Peer Review of Revised Application for PC58 in Morrinsville", prepared for MPDC, 6 February.

made this conversion from employees to land area, the result provides an estimate of future demand for Industrial-zoned land in Morrinsville; and

- (c) I then calculate the net change in the Industrial-zoned land demand estimates across three different time periods. I do this over a short-term timeframe of three years (from 2023 to 2026), and a medium-term timeframe of ten years (from 2023 to 2033), consistent with the definitions of short-term and medium-term in the NPS-UD. While the NPS-UD defines the long-term as 30 years, I use a long-term timeframe of 25 years (from 2023 to 2048) because the Stats NZ population projections only go as far as 2048.

- 32 Table 2 below shows the resulting net change in Industrial-zoned land demand over these time periods, both excluding and including the competitiveness margins set out in the NPS-UD. These margins are 20% for the short-term and medium-term, and 15% for the long-term. The demand results in Table 2 are utilised later in my evidence when I assess the overall sufficiency of Industrial-zoned land in Morrinsville.

Table 2: Net change in estimated Industrial-zoned land demand in Morrinsville, 2023-2048

Employee density ratio	Short-term 2023-2026	Medium-term 2023-2033	Long-term 2023-2048
Change in Industrial-zoned land demand: no NPS-UD margin			
500m ² per employee	4.7ha	15.6ha	36.6ha
700m ² per employee	6.6ha	21.8ha	51.2ha
800m ² per employee	7.6ha	24.9ha	58.5ha
Change in Industrial-zoned land demand: with NPS-UD margin			
500m ² per employee	5.7ha	18.7ha	42.1ha
700m ² per employee	7.9ha	26.2ha	58.9ha
800m ² per employee	9.1ha	29.9ha	67.3ha

Source: NERA analysis, including of Stats NZ and WISE data

- 33 As noted above, the results in Table 2 utilise a ratio based on the relationship between population and employee projections in the WISE data, of 0.35 industrial employees to population. The reason that I use this ratio is that I have Stats NZ projections of the population in the Morrinsville township, but no Stats NZ employment projections (since Stats NZ does not prepare these). I therefore need some way to convert the Stats NZ population projections to employment projections.
- 34 To do so, I use WISE data on the ratio of the population in Morrinsville township to industrial employment in Morrinsville (i.e., both the Morrinsville township and the Morrinsville-Walton Rd Industrial Area). The employment data is that analysed in the BDCA, which is based on the WISE data. The resulting ratio (of 0.35) is simply an arithmetic relationship used to convert from population to industrial employment; it is not intended to be an estimate of the actual ratio of industrial employment to population in a particular region.
- 35 Applying this ratio means that I have taken the Stats NZ Morrinsville township population projections, and from this derived implied Stats NZ industrial employment projections across both the Morrinsville township and the Morrinsville-Walton Rd Industrial Area. The employment projections that I derive are consistent with, being of a similar order of magnitude to, those in the BDCA, which supports the 0.35 ratio approach that I have utilised.
- 36 For example, for 2023, the BDCA estimates industrial employment in the Morrinsville township and the Morrinsville-Walton Rd Industrial Area of approximately 2,958 employees.⁸ Using the Stats NZ population projections and my conversion approach explained above, I derive industrial employment for the same spatial area of 3,094. The derived Stats NZ employment projections are slightly higher than the WISE employment projections, consistent with the more recent Stats NZ population projections also being higher than the WISE population projections. However, since both projections are of a similar order of magnitude, the 0.35 ratio approach I use is deriving reasonable employment estimates.

⁸ While this number is not presented in the BDCA, I have derived it from Table 4-3 of the BDCA. That table shows industrial land demand for Morrinsville of 147.9ha in 2023 at an employment ratio of 500m²/employee, from which it can be determined that there are 2,958 industrial employees.

Supply of Industrial-zoned land in Morrinsville

Base case assessment of supply

- 37 The Market Economics BDCA calculates that there is 23.6ha of vacant Industrial-zoned land available across the Morrinsville township and Morrinsville-Walton Rd industrial area.
- 38 However, recent analysis by Monocle has shown that the Market Economics supply assessment is based on out-of-date assumptions. A memo from Monocle to MPDC, dated 23 November 2023, sets out an updated assessment of vacant Industrial-zoned land supply in Morrinsville – that memo is provided in Appendix A of my 23 November 2023 report. The Monocle assessment identifies 11.9ha of vacant Industrial-zoned land supply in Morrinsville.
- 39 The Monocle assessment is a more up-to-date supply assessment than what is presented in the BDCA, and seeks to rigorously verify vacant supply based on, for example, recent aerial photography. For these reasons, I consider it appropriate to adopt the 11.9ha supply figure in my base case analysis. I note that this 11.9ha supply figure has also been accepted by Insight Economics in the Economic Peer Review.⁹

Alternative scenario to account for undeveloped land that is already sold

- 40 Some of the aforementioned 11.9ha of vacant Industrial-zoned land in Morrinsville has yet to be developed but has been sold by the developer to purchasers likely seeking to use the land for industrial development. In this section, I set out an alternative supply scenario that seeks to account for this sold-but-undeveloped land.
- 41 Before setting out the results of this scenario, it is useful to take a step back and explain the basis for considering sold-but-undeveloped land in a supply-demand assessment. The NPS-UD and NPS-HPL both refer to the provision of sufficient development capacity to meet “expected demand” for housing or business land.¹⁰ Neither of these National Policy Statements specifies how “demand” is defined or is to be assessed. From an economics perspective, “demand” is typically defined as the

⁹ Insight Economics (2024), “Economic Peer Review of Revised Application for PC58 in Morrinsville”, prepared for MPDC, 6 February.

¹⁰ See Clauses 3.2 and 3.3 of the NPS-UD and Clause 3.6(4)(a) of the NPS-HPL.

willingness and ability to purchase a particular good or service.¹¹ In the case of demand for Industrial-zoned land, projections of employment can provide an *indication* or *proxy* of future demand i.e., will there be, looking forwards, potential buyers with a willingness and ability to purchase Industrial-zoned land?

- 42 However, an analysis of sold-but-undeveloped land provides evidence of where *actual* demand has already occurred. If existing undeveloped Industrial-zoned land has been sold into private ownership, then this is strong evidence of actual demand being realised. That is, a buyer has indicated that they have a willingness and ability to purchase Industrial-zoned land, because that purchase has already been executed. Since demand has already been realised, these sold-but-undeveloped properties would no longer be available to future purchasers of industrial land and are therefore not part of future demand. A tractable way of capturing this in the supply-demand analysis is to remove these sold-but-undeveloped properties from the area of vacant supply.
- 43 I recognise that a private owner of industrial land may not necessarily develop the land for their own purposes, but rather they may on-sell it to another future potential buyer. It is for this reason that I run this as an alternative to the base case supply scenario i.e., it is effectively a sensitivity test. Nonetheless, purchase by a private owner is likely to represent a strong intention to develop the land for their own purposes. Indeed, in respect of a number of sold-but-undeveloped lots in the Avenue Business Park (Stage 1) development, a memo from Steffert Property filed with MPDC as part of an Addendum to the PC58 application shows that all of the lots already sold will have at least commenced development, and in some cases completed it, by 2026.
- 44 Indeed, since sold-but-undeveloped land is likely to be developed in a relatively short period of time, including a scenario which analyses this land can assist in understanding where the sensitivities lie and in erring on the side of caution in the sufficiency assessment, including to avoid a risk of a false sense of precision being applied to demand estimates. Indeed, a cautious approach is important in light of inherent uncertainties and forecast error in estimating demand through, for example,

¹¹ See, for example, N. Gregory Mankiw (2016), *Principles of Microeconomics*, Eighth Edition, Cengage Learning, at p.67.

employment projections. Estimates of demand from employment projections may also not adequately account for demand for Industrial-zoned land on which there are no employees, such as storage, car parking or landscaping space.

- 45 Corroboratively, I note the evidence of Mr Chris Steffert states that one of the sold-but-undeveloped sites accounted for in my analysis is to be used for overflow storage for machinery and vehicles and is expected to be ready in the next 3-4 weeks. By including sold-but-undeveloped land in my analysis, this site would be captured as an area where actual demand for Industrial-zoned land has occurred, despite it not necessarily absorbing any employment.
- 46 For Industrial-zoned land in Morrinsville, of the 11.9ha of vacant supply identified in the previous section, this includes 6.5ha of sold-but-undeveloped land in the Avenue Business Park (Stage 1) development. By deducting this 6.5ha from the 11.9ha vacant supply, I calculate the resulting supply figure of 5.4ha in this alternative scenario to account for sold-but-undeveloped land.
- 47 The results of the two scenarios for the supply of Industrial-zoned land are shown in Table 3.

Table 3: Estimated Industrial-zoned land supply in Morrinsville

Scenario	Vacant supply
Base case	11.9ha
Alternative scenario removing sold-but-undeveloped land	5.4ha

Sufficiency of Industrial-zoned land in Morrinsville

- 48 Building on the analysis of demand and supply in the previous sections of my evidence, in Table 4 below I set out my results showing the overall sufficiency (supply minus demand) of Industrial-zoned land in Morrinsville.
- 49 Focusing on the short- and medium-term, my key takeaways from Table 4 are as follows:
- (a) Across all scenarios considered there is a shortfall of Industrial-zoned land in the medium-term (the next ten years);

- (b) With an 800m² employee density ratio, there is a shortfall of Industrial-zoned land of -13.0ha over the next ten years in the base case supply scenario (which assumes land that has been sold is available supply) and with no NPS-UD margins. This shortfall increases to -18.0ha when NPS-UD margins are added;
 - (c) Even on the most conservative scenario (500m² employee ratio with the base case supply scenario and no NPS-UD margins), there is a shortfall of Industrial-zoned land in the medium-term, of -3.7ha over the next ten years;
 - (d) In an alternative supply scenario where sold-but-undeveloped land is excluded from the supply estimates, there will be material shortfalls in the medium-term with no NPS-UD margins added (-10.2ha or -19.5ha using the 500m² and 800m² employee density ratios respectively). The shortfalls will be higher if NPS-UD margins are added: -13.3ha or -24.5ha in the medium-term using the 500m² and 800m² employee density ratios respectively; and
 - (e) Of the different scenario combinations, five show a shortfall in Industrial-zoned land in the short-term (the next three years).
- 50 On this evidence, there is a strong economic case for additional Industrial-zoned land to be made available in Morrinsville via PC58, to meet a shortfall in the medium-term and potentially even in the short-term.
- 51 PC58 also meets the requirements of clause 3.6(4)(a) of the NPS-HPL, in that it is required to provide “sufficient development capacity” to meet expected demand for Industrial-zoned land in the medium-term and potentially even the short-term.
- 52 Also of note is clause 3.6(5) of the NPS-HPL, which states that “the spatial extent of any urban zone covering highly productive land is the minimum necessary to provide the required development capacity while achieving a well-functioning urban environment.” A soils assessment undertaken by AgFirst and filed with MPDC as part of an Addendum to the PC58 application, finds that some of the PC58 site is no longer considered highly productive land due to modification of soils. The assessment notes that once factors such as earthworks, drains, farm tracks, and sheds are

deducted, this will reduce the area of highly productive land to 7.9ha.¹² In all but the two most conservative scenarios shown in Table 4, at least 7.9ha of Industrial-zoned land will be required to provide sufficient development capacity in Morrinsville in the medium-term. That is, in these scenarios the full spatial extent of the highly productive land in the PC58 site will be necessary to provide the required development capacity.

¹² Agfirst (2023), "Avenue Business Park (Private Plan Change 58)", prepared for Warwick and Marion Steffert, November.

Table 4: Results for Morrinsville Overall Balance of Industrial-zoned Land Demand and Supply

Metric	500m ² per employee			700m ² per employee			800m ² per employee		
	Short-term: 2023-2026	Medium-term: 2023- 2033	Long-term: 2023-2048	Short-term: 2023-2026	Medium-term: 2023- 2033	Long-term: 2023-2048	Short-term: 2023-2026	Medium-term: 2023- 2033	Long-term: 2023-2048
	Base case supply scenario								
Sufficiency (supply minus demand) without NPS-UD margins	7.2ha	-3.7ha	-24.7ha	5.3ha	-9.9ha	-39.3ha	4.3ha	-13.0ha	-46.6ha
Sufficiency (supply minus demand) with NPS-UD margins	6.2ha	-6.8ha	-30.2ha	4.0ha	-14.3ha	-47.0ha	2.8ha	-18.0ha	-55.4ha
	Alternative supply scenario (excluding sold-but-undeveloped land)								
Sufficiency (supply minus demand) without NPS-UD margins	0.7ha	-10.2ha	-31.2ha	-1.2ha	-16.4ha	-45.8ha	-2.2ha	-19.5ha	-53.1ha
Sufficiency (supply minus demand) with NPS-UD margins	-0.3ha	-13.3ha	-36.7ha	-2.5ha	-20.8ha	-53.5ha	-3.7ha	-24.5ha	-61.9ha

Source: NERA analysis

Alternative scenario using BDCA demand estimates

- 53 As set out earlier in my evidence, my view is that there is a strong basis for using the Stats NZ high scenario projections in my analysis of demand for Industrial-zoned land, rather than the WISE projections that are reflected in the BDCA.
- 54 However, even if the Industrial-zoned land demand estimates from the BDCA are used in the sufficiency assessment, I show in this section that there is still a strong case for PC58.
- 55 In Table 5 below, I set out the results of the sufficiency assessment using the demand figures in the BDCA, but while retaining the supply-side adjustments I set out earlier in my evidence. Focusing just on the more conservative base case supply scenario, Table 5 shows that there will be a shortfall of Industrial-zoned land in Morrinsville in the next ten years of - 7.1ha with the 800m² per employee ratio. I consider that the 800m² per employee ratio result is more appropriate to use for determining sufficiency, because (as discussed earlier) the WISE projections used in the BDCA are an underestimate relative to more recent Stats NZ projections, and due to other relevant context that I set out in the next section of my evidence.

Table 5: Results for Morrinsville Overall Balance of Industrial-zoned Land Demand and Supply, using BDCA Demand Results

Metric	500m ² per employee			700m ² per employee			800m ² per employee		
	Short-term: 2023-2026	Medium-term: 2023-2033	Long-term: 2023-2048	Short-term: 2023-2026	Medium-term: 2023-2033	Long-term: 2023-2048	Short-term: 2023-2026	Medium-term: 2023-2033	Long-term: 2023-2048
	Base case supply scenario								
Sufficiency (supply minus demand) without NPS-UD margins	7.9ha	0.1ha	-15.3ha	6.2ha	-4.8ha	-26.3ha	5.5ha	-7.1ha	-31.7ha
Sufficiency (supply minus demand) with NPS-UD margins	7.1ha	-2.3ha	-20.0ha	5.0ha	-8.1ha	-32.1ha	4.2ha	-10.8ha	-39.1ha
	Alternative supply scenario (excluding sold-but-undeveloped land)								
Sufficiency (supply minus demand) without NPS-UD margins	1.4ha	-6.4ha	-21.8ha	-0.3ha	-11.3ha	-32.8ha	-1.0ha	-13.6ha	-38.2ha
Sufficiency (supply minus demand) with NPS-UD margins	0.6ha	-8.8ha	-26.5ha	-1.5ha	-14.6ha	-38.6ha	-2.3ha	-17.3ha	-45.6ha

Source: NERA analysis

Relevant context in considering the sufficiency assessment

56 In considering the sufficiency assessment, there is also some relevant ‘on-the-ground’ information that provides context and is indicative of strong demand for Industrial-zoned land in Morrinsville:

- (a) The evidence of Mr Chris Steffert states that all 11 lots in the Avenue Business Park (Stage 1) development have been pre-sold off the plans by word-of-mouth, without any external marketing or engagement of real estate agents. Further, Mr Steffert’s evidence also states that three of eight lots in Stage 2 have been made available for sale and have also already been sold off the plans;
- (b) There is an identified need from an existing industrial operation to expand its site if PC58 is approved. Bowers Brothers Concrete Limited’s submission on PC58 states that it could expand its operations if PC58 is approved, but such an expansion would not be possible without PC58 or if new Industrial-zoned land were located elsewhere in Morrinsville.¹³ Mr Steffert’s evidence states that Bowers Brothers Concrete has expressed an interest in purchasing 2.3ha, which is approximately 23% of the 10.1ha of developable land that would be made available by PC58; and
- (c) Demand for Industrial-zoned land can be to some extent ‘lumpy,’ in that there is the potential for a single buyer to purchase a large land holding. Where this occurs, a large portion of vacant supply can quickly become unavailable to meet future demand (in contrast to more incremental demand take-up of smaller land holdings). Bowers Brothers Concrete is a good example of an industrial activity that requires a large land holding. With the additional 2.3ha that they have expressed an interest in purchasing, their total site would be 9.9ha.¹⁴ With existing supply, a new industrial activity of a similar scale to this would not be capable of being accommodated on Industrial-zoned land in Morrinsville. Mr Steffert’s evidence states that he has received enquiries from potential purchasers for up to 6ha sites which he is currently unable to accommodate.

¹³ See paragraph [69] of my 23 November 2023 report and Bowers Brothers Concrete Limited (2023), “Submission on Private Plan Change 58”, July.

¹⁴ The submission of Bowers Brothers Concrete states that their current site covers 7.6ha: Bowers Brothers Concrete Limited (2023), “Submission on Private Plan Change 58”, July.

Benefits and costs of PC58

- 57 In this section, I summarise my qualitative assessment of the benefits and costs of PC58.¹⁵
- 58 There are two ways to assess the benefits and costs in this particular case. One is to consider the benefits and costs of an expansion in Industrial-zoned land in Morrinsville *in general*. That is, the benefits and costs, relative to an alternative scenario where there is no such expansion in industrial land. The second approach is to consider the benefits and costs of PC58 *in particular*. That is, the benefits/costs of PC58, relative to a hypothetical alternative industrial expansion in another Morrinsville location, and presumably also at a later time (given the time lag that would be required to implement a plan change).
- 59 In the summary below, I assess both the benefits and costs of an increase in the supply of Industrial-zoned land in general, and the extent to which these benefits and costs apply to the particular case of PC58.
- 60 In summary, the benefits and costs are as follows:
- (a) In general, an expansion in Industrial-zoned land in Morrinsville will release the binding supply constraint shown earlier in my evidence (that is, the future demand for Industrial-zoned land in Morrinsville is likely to be greater than the supply in the medium-term in all scenarios assessed). This will benefit purchasers of Industrial-zoned land in Morrinsville through lower prices and more choice and bring new businesses and employees to Morrinsville. For PC58 in particular, this benefit will be realised earlier relative to an alternative block of land which is yet to go through the process of being identified and re-zoned as Industrial;
 - (b) A general expansion in Industrial-zoned land in Morrinsville will provide for new industrial businesses to enter the area, allowing for a greater clustering of such businesses. When businesses locate in close proximity to each other, it can generate benefits from increased productivity. This will allow both new and existing businesses to increase their sales and provide workers with access to more productive and better paid jobs. For PC58 in particular,

¹⁵ Further details on the benefits and costs are provided in section 7 of my 23 November 2023 report.

these benefits are likely to be greater due to the locational advantages relative to other possible sites in Morrinsville, with the PC58 site adjacent to existing Industrial-zoned land and within the Morrinsville township;

- (c) For both a general expansion in Industrial-zoned land and PC58 in particular, there will be some infrastructure costs. However, these costs are incurred by developers, and it is reasonable to assume that the benefits that developers receive will exceed these costs, so there is no net cost associated with infrastructure;
- (d) For PC58 in particular, there will be a benefit if PC58 can better utilise existing infrastructure relative to an alternative industrial site, allowing lower costs to be passed through to lower prices for new purchasers seeking to buy Industrial-zoned land; and
- (e) For PC58 in particular, there will be a cost associated with the loss of the productive capacity of the land for land-based primary production. This cost has been assessed in more detail in the versatile soils assessment prepared in respect of PC58,¹⁶ and a key finding is that the productive capacity of the land in a rural use is restricted. On this basis, the cost of the lost productive capacity of the land is unlikely to be material. Furthermore, based on my assessment of benefits and costs, the economic benefits of PC58 will significantly outweigh the economic costs of any lost productive capacity of the land.

Response to matters raised in submissions

- 61 I have reviewed the submissions made to MPDC in respect of PC58, and there are two issues within my area of expertise that I comment on.
- 62 First, the Waikato Regional Council does not support a scenario where sold-but-undeveloped land is excluded from the supply-side of the sufficiency assessment. Waikato Regional Council states that “[a] change in ownership does not necessarily mean that the land is no longer available for future industrial uses.”¹⁷

¹⁶ Agfirst (2023), “Avenue Business Park (Private Plan Change 58)”, prepared for Warwick and Marion Steffert, November

¹⁷ Waikato Regional Council (2023), “Submission to Proposed Private Plan Change 58 (PC58) to the Matamata-Piako District Plan”, 17 July, at [9].

- 63 I have provided more detail earlier in my evidence on the basis for running an alternative scenario in which sold-but-undeveloped land is excluded from the supply-sided. It is not a change in ownership *per se* that is the basis for this scenario; rather it is the finding that actual demand has already been realised for this land. Indeed, consistent with the language in the NPS-UD and NPS-HPL, the supply-demand assessment is used to determine if there will be buyers that “demand” i.e., are willing and able to purchase, Industrial-zoned land in Morrinsville. If any such purchases have already occurred, then this is evidence that demand has already been realised.
- 64 Second, Peter Hexter submits that the economic assessment of PC58 “lacks substance” regarding the impact of PC58 on the value of neighbouring properties.¹⁸
- 65 To the extent that there is any impact of PC58 on property values, it is standard practice in an assessment of economic costs and benefits not to incorporate these, to avoid double counting.¹⁹ This is because any impact on property values will represent the capitalised value of changes in other benefits and costs, which have already been assessed (either separately in the economic assessment or by other experts). Accordingly, I do not consider it appropriate for my assessment of economic costs and benefits to include an assessment of the impact of PC58 on the value of neighbouring properties.

Response to matters raised in s42A Report

- 66 I have reviewed the s42A Report and the Economic Peer Review from Insight Economics attached as an appendix to the s42A Report (the **Insight Economics Report**).²⁰ I comment on four specific issues raised in the Insight Economics Report.
- 67 First, the Insight Economics Report states (p.4) that the authors are unclear of the rationale for why I excluded the Morrinsville-Walton Rd Industrial Area from the analysis in my 23 November 2023 report. As noted earlier in my evidence, I acknowledge that my 23 November 2023 report did state that the focus was only on the Morrinsville township.

¹⁸ Peter Hexter (2023), “Submission on Private Plan Change 58”, 14 July.

¹⁹ See the New Zealand Treasury (2015), “Guide to Social Cost Benefit Analysis”, July, at paragraph 25.

²⁰ Insight Economics (2024), “Economic Peer Review of Revised Application for PC58 in Morrinsville”, prepared for MPDC, 6 February.

However, I have since been provided with further information making it clear that my analysis does in fact cover both the township and the Morrinsville-Walton Rd Industrial Area. This is consistent with the spatial area analysed in the BDCA, which also analyses demand across the combined Morrinsville township and the Morrinsville-Walton Rd Industrial Area. The Insight Economics Report presents calculations for both the township on its own and the wider Morrinsville area but appears to focus more on the latter in its discussion of the results (e.g., in sections 4.2 and 4.3).

- 68 Second, the Insight Economics Report is critical of the 0.35 ratio I use to convert Morrinsville township population to employment in Morrinsville, stating that “there is no way that 35 out of every additional 100 people living in Morrinsville become industrial workers within local industrial zones” (p.4). As discussed earlier in my evidence, the 0.35 is simply an arithmetic calculation of the ratio between the WISE employment figures, taken from the BDCA, and the WISE population figures. It is not intended to be an estimate of the actual ratio of industrial employment to population in a particular region. I remain of the view that using the 0.35 ratio is an appropriate way to convert Stats NZ population projections to employment projections for Morrinsville.
- 69 Third, the Insight Economics Report considers the employee density ratio of 800m² per employee to be too high and notes the current district ratio is 700m² per employee (p.4). I have set out in my evidence results using both the 500m² and 800m² ratios from the BDCA, and the 700m² ratio that Insight Economics uses. Where I present my own analysis of supply and demand (which use Stats NZ projections to estimate demand), the results do not hinge on the employee density ratio, with all the scenarios I analyse showing a shortfall in Industrial-zoned capacity in the medium-term. Where I use the BDCA’s analysis of demand (but my own analysis of supply), I consider that the 800m² per employee ratio result is more appropriate to use for determining sufficiency, to err on the side of caution given that the WISE projections used in the BDCA are an underestimate relative to the more recent Stats NZ projections.
- 70 Fourth, the Insight Economics Report disagrees with my alternative supply scenario where I exclude sold-but-undeveloped land from the supply-side. Insight Economics states (at footnote 1) that “because demand is measured as increases in industrial employment over time, land should

still count as capacity/supply until it is developed and has absorbed some of the employment growth that comprises demand.”

- 71 I have provided more detail earlier in my evidence on the basis for running an alternative scenario in which sold-but-undeveloped land is excluded from the supply-sided. It is important to note that an estimate of demand based on increases in industrial employment only gives us an *estimate* or *proxy* for the demand for Industrial-zoned land. When there is information on the *actual* demand for Industrial-zoned land (as indicated by someone purchasing or “demanding” that land), in my view it is important to capture this in the analysis in some way. At the very least, this allows us to test the sensitivity of the sufficiency calculation to the realisation of actual demand, particularly given that there will inevitably be some margin of error in the (proxy) demand calculations.
- 72 In any event, as the Insight Economics Report notes (at p.3), my analysis does not rely on the results of this alternative scenario to demonstrate the need for PC58. That is, I still find material shortfalls in Industrial-zoned land in Morrinsville even in my base case scenario, where I include sold-but-undeveloped land on the supply-side.

Conclusion

- 73 My analysis of the supply and demand of Industrial-zoned land in Morrinsville finds that there is a shortfall of Industrial-zoned land in Morrinsville in the medium-term in all the scenarios I assess, and in some scenarios, there is a shortfall in the short-term. There is thus a strong economic case for additional Industrial-zoned land to be made available in Morrinsville through PC58, to meet a shortfall in the medium-term and potentially even in the short-term.
- 74 PC58 will generate economic benefits by expanding the supply of Industrial-zoned land and releasing the supply constraint, benefiting purchasers of this land through lower prices and more choice, and bringing new businesses and employees to Morrinsville. It will also result in more businesses being located in close proximity to each other, generating productivity benefits. Overall, I find that the economic benefits of PC58 will significantly outweigh the economic costs, including the costs of any lost productive capacity of the land.
- 75 PC58 also meets the requirements of clause 3.6(4) of the NPS-HPL, in that:

- (a) it is required to provide “sufficient development capacity” to meet expected demand for Industrial-zoned land in the medium-term and potentially even in the short-term (clause 3.6(4)(a)); and
- (b) The economic benefits of PC58 will outweigh the economic costs of the loss of highly productive land (of relevance to clause 3.6(4)(c)).

A handwritten signature in blue ink, appearing to read "John Cowell", with a stylized flourish at the end.

14 February 2024