The background features a complex geometric design composed of overlapping teal and dark teal shapes. A large, dark teal triangle points downwards from the top left, overlapping a horizontal teal bar. Another horizontal teal bar is positioned below it. To the right, a dark teal triangle points upwards, overlapping a horizontal teal bar. A diagonal teal bar runs from the bottom right towards the center, overlapping the horizontal bar above it. The overall composition is modern and abstract.

Ohinewai Rezoning Proposal -
Economic and Residential Matters:
Update

m.e
consulting



Prepared for

Waikato District Council

Document reference: Ohinewai Assessment 2020

Date of this version: 4 September 2020

Report author(s): Douglas Fairgray

Director approval: Douglas Fairgray

www.me.co.nz

Disclaimer: Although every effort has been made to ensure accuracy and reliability of the information contained in this report, neither Market Economics Limited nor any of its employees shall be held liable for the information, opinions and forecasts expressed in this report.



Contents

1	INTRODUCTION	1
1.1	OBJECTIVE	1
1.2	SITUATION.....	2
1.3	SCOPE OF THIS ASSESSMENT	5
2	OHINEWAI STRUCTURE PLAN PROPOSAL.....	7
3	RESIDENTIAL	10
3.1	ISSUES	10
3.2	DEMAND FOR HOUSING IN OHINEWAI	11
3.3	HOUSING AFFORDABILITY	15
3.4	HOUSING CAPACITY ASSESSMENT FOR THE NPS-UDC.....	17
3.5	IMPLICATIONS	19
4	OSP LABOUR FORCE	20
4.1	APL WORKFORCE ESTIMATES	20
4.2	POTENTIAL LABOUR FORCE FOR OSP.....	21
4.3	POTENTIAL LABOUR FORCE ATTRACTED	23
4.4	LABOUR FORCE INFLOWS.....	25
4.5	IMPLICATIONS	29
5	ECONOMIC ASSESSMENT	30
5.1	OSP DEVELOPMENT IN BUSINESS GROWTH CONTEXT.....	30
5.2	ECONOMY IMPACT.....	32
5.3	EVIDENCE ON ECONOMIC EFFECTS	34
6	CONCLUSIONS.....	39



1 Introduction

1.1 Objective

This Paper provides a review of matters relating to a proposed rezoning of land at Ohinewai for the Ohinewai Structure Plan (OSP). It is to inform and support the s42A report being prepared on the Proposal.

1.1.1 Qualifications and Experience

My name is James Douglas Marshall Fairgray. I have a PhD in geography from University of Auckland, and I am a principal of Market Economics Limited (ME), an independent research consultancy.

I have been engaged by Waikato District Council to provide analysis and advice relating to the proposed Ohinewai structure Plan.

I have over 40 years' of professional consulting and project experience, working for public sector and commercial clients. I specialise in policy and strategy analysis, urban and rural spatial economies, evaluation of outcomes and effects in relation to statutory objectives and purposes, assessment of demand and markets, economy assessment, economic analysis, land use and core economic processes. This research has been within my core disciplines of economic geography / spatial economics, and spatial planning. I have applied these specialties in more than 900 studies throughout New Zealand.

I have qualified as a commissioner, through the Making Good Decisions programme (2017 and 2020). I am an Associate Member of the New Zealand Planning Institute (since 2013).

I have wide research experience in policy evaluation and impact assessment from an economic perspective, from many economic assessments in the Resource Management Act 1991 (RMA) context. That includes evaluation of the benefits and costs of policy options, and economic processes and decision-making. During 2014, I was engaged to prepare the core material for the section 32 guide released by the Ministry for the Environment, and I was the presenter on economic matters for the nationwide series of workshops on the section 32 guidance. I have studied regional and district economies throughout New Zealand, and the roles of key sectors in the economy. I have completed many studies into business and residential land demand, in cities and districts throughout New Zealand. I have presented evidence on regional, urban and rural economies, business activity and location preferences, housing demand and dwelling and location preferences, and urban development matters generally, within the context of the RMA and regional and district plans.



I have completed a range of research into the Waikato District economy and community. In the last decade I have examined housing and land needs, retail and business activity, District growth in the wider context of the Hamilton to Auckland corridor, and the District in the context of the future Proof Partners' sub-regional economy. I recently completed research to support the S42A assessment of the District's Rural Subdivision policy.

Code of Conduct

Although this Paper is not a statement of evidence, I confirm that I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2014 and to the extent that I am giving expert evidence, I have complied with it in preparing this Paper. I confirm that the issues addressed are within my area of expertise and I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

1.2 Situation

Ambury Properties limited (APL) is seeking the re-zoning of 178 ha of Rural zoned land to enable Industrial, Business, and Residential uses, as well as open spaces and nature restoration reserves, within the Ohinewai Structure Plan (OSP). The key component is the proposed establishment of a large bed-products factory by The Comfort Group ("TCG"). The Proposal identifies very substantial development and significant change in Ohinewai. It raises a number of issues to be examined.

1.2.1 Applicant Information

The proposed re-zoning and development ('the Proposal') has been described in reports by Property Economics Ltd¹ (PEL), Quigley and Wake² (QW), and Bloxham Burnet and Olliver³ (February 2020), and subsequently in statements of evidence from Mr Heath, Mr Osborne, Mr Quigley, Dr Wheeler and Mr Olliver July 2020, and statements of rebuttal evidence by Mr Heath, Mr Osborne, and Dr Wheeler (August 2020).

This Paper draws from those statements, to the extent that they provide additional or updated information, otherwise it is based on the earlier Reports. I also consider matters raised in the statement of evidence of Mr Keenan for Waikato Regional Council (August 2020), as well as issues

¹ Property Economics Ltd. Ohinewai Structure Plan - Assessment of Economic Effects, November 2019.

² Quigley and Watts Ltd. Assessment of social effects of the Ohinewai Masterplan. 27 November 2019

³ Bloxham, Burnett & Olliver. Rezoning Submission to the Waikato Proposed District Plan Review – AEE Report and s32AA Evaluation, December 2019



considered in the expert conferencing and the economics Joint Witness Statement (JWS) of June 2020.

1.2.2 ME Initial Assessment March 2020


The initial assessment I undertook in March 2020 examined matters relating to the proposed residential enablement, the OSP workforce and potential re-location of some TCG workers, housing costs and affordability and other considerations as to housing provision in Ohinewai including the NPS-UDC Housing Capacity Assessment. The proposed re-zoning was put on the basis that the industrial development would be dependent on the residential enablement, and aspects relating to location, the factory space other than the TCG development, the proposed Discount Factory Outlet (DFO) centre, and the link between factory and residential development.

I concluded that the combination of employment opportunity and dwelling affordability is the key driver of the suggested growth, with the economic and social impact assessments on that basis that the factory development and the offer of affordable dwellings does succeed in attracting 1,100 households to live in Ohinewai (predominantly) or Te Kauwhata or Huntly who would not otherwise have opted to re-locate there. I further noted that demand for housing in any location, depends on a range of factors, including price *per se* and employment opportunity, but identified that households further consider price in relation to location, households' accessibility to goods and services, travel costs, dwelling quality, land, and prospects for re-sale.

I also noted that while the wider context is the advantages and disadvantages of the Ohinewai location for providing housing supply within the Huntly-Ohinewai locality, or the Waikato District overall, that had been considered only from the perspective of an indicated shortfall in feasible housing supply from the NPS-UDC work, rather than consideration of whether that location represents an appropriate place to accommodate then it would need to cater for around 20% of total District demand over the next decade.

The assessment also identified the importance of understanding the sequence and logic of the proposed OSP and the rezoning, as follows:

- i. The core of the proposed development is the TCG factory, that being the main reason why re-zoning is sought, on the basis that alternative site(s) are not available, and the Ohinewai location is suitable.
- ii. The proposed housing is ancillary to the TCG factory, on the basis that the workforce requires affordable housing. The applicant's position is that the TCG factory would proceed only if there is a workforce residing in affordable dwellings at Ohinewai. Otherwise, the development of the factory does not depend on the housing development. The location for housing is determined by the location choice for the TCG factory.

- 
- iii. The indicated development of another 137,000m² or more of factory space is not identified as being dependent on the TCG factory. Nor does the reporting indicate that the TCG factory's development would depend on this other factory space and associated business activity. On this basis, the additional factory development is ancillary to the TCG factory, and its location and workforce options are determined by the location choice for the TCG factory.

From my assessment I concluded that there was not sufficient information provided to justify substantial re-zoning of Rural land to enable a new town in a rural setting.

I identified five important matters to be assessed:

- i. The indicated pricing of the OSP dwellings, and such pricing in relation to the wages and salary levels of the Sleepyhead workforce, and in relation to dwelling prices in other locations.
- ii. Consideration of the Ohinewai location as an appropriate place to accommodate around 20% of projected total District housing demand over the next decade (at 1.3.2).
- iii. the rationale for such a large area of factory floorspace to establish in that location - beyond its proximity to the proposed TCG plant and given the range of factors influencing industry location including labour supply and market access - in comparison with other locations which have capacity for industrial development in Waikato District, and Hamilton City.
- iv. Where the large OSP labour force would be likely drawn from, especially if the suggested worker re-location from Auckland were to not eventuate, and/or if the pricing meant the proposed dwellings were not affordable to attract workers to re-locate to Ohinewai.
- v. The travel implications of the proposed new town had not been assessed, either the journey to work travel according to the estimated origins of the workforce, or the travel of households residing in the town.

Overall, my assessment concluded (1.3.5) that “the dependence of the residential development, the other factory space, and the discount retail development on the location choice for the Sleepyhead factory places considerable focus on the appropriateness of that development in the proposed location, in the context of the provisions of the Waikato District Plan, and the Waikato RPS.”

One concern was the lack of an overall Economy Impact assessment, to consider how a new town and a large industrial node in that location would likely impact on the future functioning of the local Huntly-Ohinewai-Te Kauwhata economy and the District economy (within the region), in the context of the established district plan and the Waikato RPS with clear guidelines as to the appropriate location for urban and industrial development.



1.2.3 Joint Witness Statement June 2020

This matter was subsequently specified in the expert conferencing as “Issue Seven: Is Ohinewai an appropriate location for a new town, or the most appropriate location for expansion of Huntly town, at the large scale proposed.”

In the JWS, it was “agreed that [there is a] need to address this question from an economic perspective and the scenarios will assist with this” and “agreed the focus should be on whether the proposal is the most appropriate location from an economics perspective taking into account the implications on Huntly and other towns⁴”.

The JWS also identified “Issue Eight: How does the proposal address its role in the wider integrated employment node identified at Ohinewai in the Blueprint and Waikato 2070.” The outcome of the conferencing recorded “differing perspectives on this⁴.” I identified there my concern including that the “wider node” provided for significantly more growth than anticipated.

1.2.4 WRC Evidence

Mr Keenan concluded (13.1) that while the methods are sound, “..the economic analysis of Dr Wheeler, Mr Heath and Mr Osborne ... does not provide a full picture of the possible economic effects of the development at Ohinewai.” He further stated his concern (13.4) that “there has been little evidence presented of other options, and am therefore not convinced that opportunity costs have been adequately evaluated.”

1.3 Scope of this Assessment

Taking account of the above matters, in this assessment I have addressed:

1. The structure of the Proposal
2. The appropriate geography for the assessment – I adopt the extent of the local economy, as per Heath.
3. Residential and demand for housing in Ohinewai
4. Workforce matters, relating to demand in relation to the estimated future workforce in the Ohinewai catchment – the extent of the local economy, as per Heath.
5. Workforce travel
6. Economic issues and estimated contribution to the economy (incl Wheeler)
7. The scale of the Proposal relative to the local economy

⁴ Joint Witness Statement of Experts in Relation to Economics Dated 12 June 2020, p6 (seven) and p6 (eight)



8. Drawing these matters together, I consider the Economy Impact of the OSP, in regard to how it would likely affect the functioning of the Huntly-Ohinewai economy, and wider WDC economy. That is in the s32 context, with consideration of alternative locations. That is not to examine specific sites for the proposed development, but rather the wider view, recognising that any effects and outcomes are strongly influenced by location, and within any District or regional growth strategy, that means location relative to alternatives. And in this context consideration of the NPS-UD.



2 Ohinewai Structure Plan Proposal

As described, Ambury Properties limited (APL) is seeking that some 178 ha of Rural zoned land be re-zoned to enable Industrial, Business, and Residential uses, together with open spaces and nature restoration reserves, within the Ohinewai Structure Plan (OSP).

The Proposal is for a substantial development of a new town of approximately 3,100 population and 1,100 dwellings in Waikato District. It also seeks zoning to enable a large bedware manufacturing plant by The Comfort Group (TCG), other industrial activity, a retail service centre and a retail neighbourhood centre⁵. The new development would be in a rural locality, approximately 9.1km by road north of the town of Huntly⁶ (population 8,150⁷).

2.1.1 Land Use

Key elements of the Proposal are re-zoning of Rural zoned land of:

1. 52.2ha for residential use
2. Approximately 71 ha for industrial use, including 37ha to accommodate the proposed TCG factory. Initially, there was to be 25.7ha for other industrial activity, however that is now indicated at around 34 ha without the proposed DFO centre.
3. 54.8 ha for open spaces and reserves.

2.1.2 Built Development

The rezoning is sought to enable substantial built development on the land, identified as:

1. Up to 1,100 dwellings on the Residential zoned land
2. 100,000m² of factory space on the Sleepyhead site
3. 137,000m² of factory space on the other industrial zoned land
4. commercial space as a service centre of 1,500 m², a neighbourhood centre of 2,500m², and a 'corner shop' of 400m².

The development is proposed to be staged, with the TCG factory developed in 5 stages over approximately 6 years, with initial development of 22,000m², followed by increments of 20,000m² at 18-month intervals. The other 137,000m² of industrial capacity is proposed to be developed

⁵ The original intention to establish a Discount Factory Outlet centre is no longer part of the proposed development.

⁶ Calculated using Google Earth navigation, which shows 8.2km from Huntly CBD to Ohinewai turnoff, and allowing another 0.9km to the indicated entrance to the village along Tahuna Rd.

⁷ SNZ 2019



over 8 years. The residential component is proposed to be developed over 10 years, with full development by 2029⁸.

2.1.3 Development Expenditure

The proposed development would involve substantial expenditure. Figures in the PEL Report (Table 11) indicate land development and civil costs of \$478m and building construction costs of around \$647m, for an overall expenditure of \$1,125m over the decade (excluding the estimated DFO construction cost).

It is not clear how the land development and civil costs would be apportioned across the business development and between business and residential. Indicatively, assuming no costs would be apportioned to the open space areas, but carried instead by the industry, retail and housing, then the investment may be apportioned according to share % of land area (excluding open space) or share % of construction costs. Indicatively, that might mean:

1. \$468 - \$569m for residential development
2. \$553 - \$653m for factory development, including \$244 – \$315m for the proposed Sleepyhead factory, and \$309 - \$355m for other factory space / industrial activity
3. \$3 - \$7m for the service centre and neighbourhood centre.

The PEL Report does not identify the value of the 178ha site.

The figures indicate that expenditure on housing is considerably greater than that indicated for the TCG factory itself, by between \$246m and \$325m. That is, the proposed expenditure on housing would be 1.49 to 2.34 times that spent on the TCG factory.

2.1.4 Business Activity on the OSP Land

A development of up to 100,000m² of factory space is indicated for the TCG factory. There is no indication of which industries or entities might occupy the other 137,000m² or more of factory space.

2.1.5 Affordable Housing

The various reports and evidence prepared for the applicant state that affordable housing is a key aspect of the Proposal, with TCG intending to provide a substantial number of the 1,100 dwellings in “affordable” price brackets. There is no indication of whether the other industrial and business

⁸ PEL Report 2019, p43; Dr Wheeler evidence, Attachment A.



activities (around 1,400 workers) would seek to provide affordable housing for their workforces, or whether they would instead opt to draw their workforces from Huntly and Hamilton.

This is an important issue, because of both cost – if the affordability provisions are carried only by TCG, then their share of the costs will be proportionally larger – and because affordability is identified as a key driver of the attractiveness of Ohinewai as a place to purchase a dwelling and live. While the reports indicated that affordable housing would be a key component of the overall development, there was little detail on how housing affordability might be achieved.



3 Residential

3.1 Issues

For the residential component of the proposed development, the key issues identified are the likely level of demand for housing in that locality, and how the indicated affordable housing would be provided for.

According to the PEL economic report and the Q&W social impact report, the rationale for developing residential capacity in that location is based on:

- a. the TCG factory will be close by; and
- b. it is intended to provide affordable housing, that is, housing at a price where the TCG workforce can afford to purchase a dwelling there.

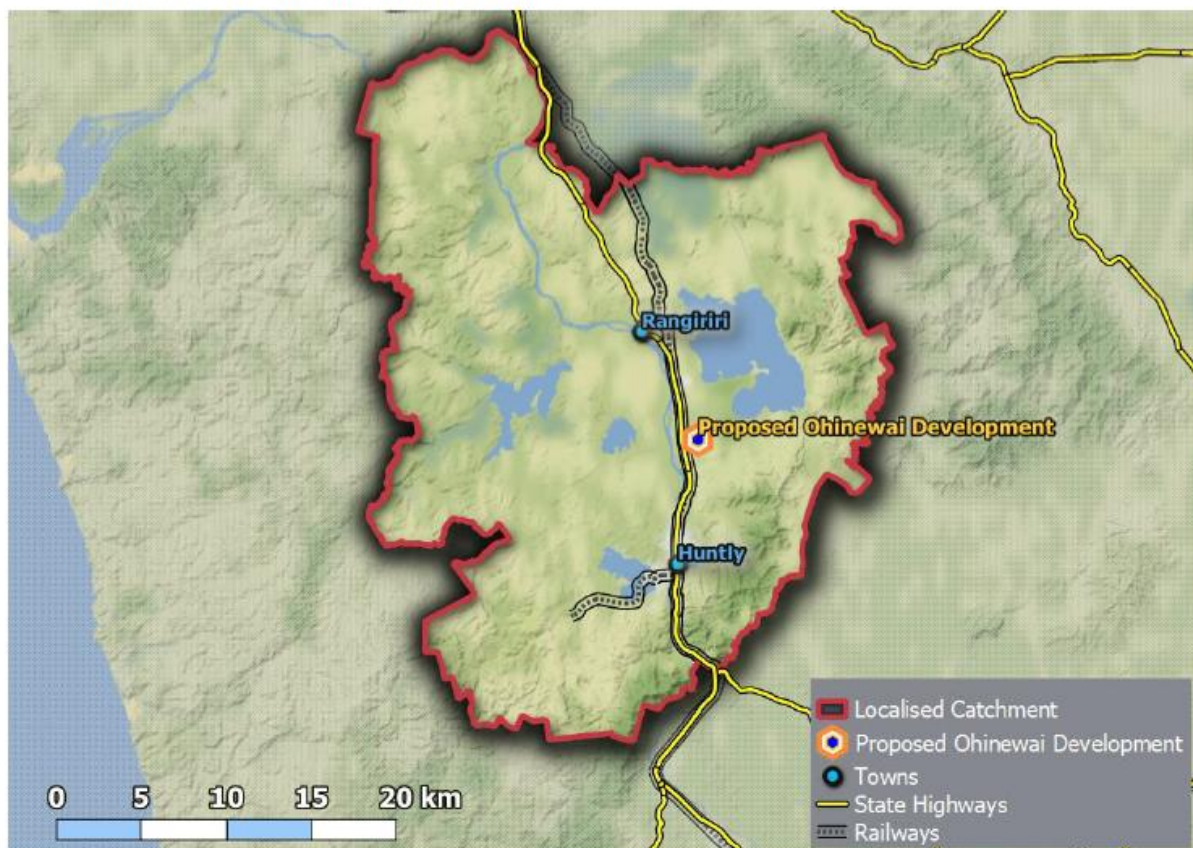
Additional dwelling capacity could serve the workforce employed in the other industrial development, and/or the retail and service outlets. The rationale for both those components of the OSP is based on the presence of the TCG factory itself, and so is dependent on the rationale for the TCG factory to establish there.

The directly related issue is whether the proposed dwellings would be affordable to the workforce of the TCG factory. Unless the dwellings are affordable to TCG workers, and can offer enough price or other advantage over other housing within commuting distance of Ohinewai, that raises the question of where demand for housing in Ohinewai location is likely to arise.

In the expert conferencing, the question was raised as to the relevant geography of the local economy. In his evidence, Mr Osborne has provided a map Figure 2 which shows the OSP 'Localised Catchment' (reproduced below) and which he describes in reference to the existing localised Ohinewai economy, as being the *"core economic market that localised activity would service on a more frequent basis."*⁹ That catchment covers the Pukekawa, Rangiriri, Huntly Rural, Huntly West, Huntly East, Te Kauwhata and Te Kauwhata West SA2 areas, as well as the western half (approximately) of Waerenga SA2 and approximately 10% of the Te Akau SA2. In my view, that indicated catchment is appropriate for assessment.

⁹ Mr Osborne's evidence at p13.

Figure 2: OSP Localised Catchment



Source: Property Economics

3.2 Demand for Housing in Ohinewai

One issue is the expected demand for housing in Ohinewai from the workforce anticipated in the proposed OSP, and the potential for demand from other sources.

Obviously, the requirements of the OSP workforce would be critical. It is likely that demand for housing in that location would arise very predominantly from that workforce seeking affordable dwellings in a location close to their place of employment. A number of factors point to that.

3.2.1 Current Patterns

Housing growth patterns across the last two decades do not suggest significant underlying demand for the Ohinewai locality (which lies within the Huntly Rural SA2 an area of 350.7 km²). In the last decade, there have been 47 consents for new dwellings issued for the whole SA2 (4.7 per year), or 0.9% of the Waikato District total over the period¹⁰. More widely, in the Ohinewai

¹⁰ Statistics NZ 2020



localised catchment as defined by Mr Osborne, there were 894 new dwellings consented over the last decade (89 per year, and 16.9% of the District total). That included 340 in Te Kauwhata, and 324 in Huntly East. The rural areas around Ohinewai (Huntly Rural, Waerenga, Rangiriri) saw 143 dwelling consents, some 2.7% of the District total and substantially fewer than in the previous decade.

3.2.2 OSP Workforce

That suggests that demand for housing in Ohinewai will derive predominantly from the business development there, especially in relation to work opportunity and housing affordability.

It is important to consider the proposed capacity for 1,100 dwellings in relation to the projected workforce, which is estimated now at 2,400¹¹.

Of these, an estimated 1,000 would be employed in the TCG factory. That includes an estimated 300 workers who would relocate from Auckland in order to remain employed with TCG. The balance of 1,400 workers would be around 1,340 in the other industrial development, and around 60 in retail and services.¹² There would be 800 dwellings potentially available for these workers, with these at market prices (that is, would not be offered as “affordable”).

Assuming that demand for those dwellings would be predominantly (say, 80%) from OSP workers that would mean around 650 occupied by the workforce, and another 150 or so by households opting to live in Ohinewai and work elsewhere.

3.2.3 Implied Re-location to Ohinewai

Those estimates suggest that the proposed 1,100 dwellings at Ohinewai would need to attract a considerable inflow of workers and their households to live and work in the locality.

The options for those finding employment in Ohinewai would be to re-locate there, re-locate to another location in the localised catchment, or remain living where they are, and commuting for work purposes.

Drawing together the PEL estimates of where the OSP workforce would reside, and where those workers would be recruited from, suggests the demand for housing in the OSP area (assuming one

¹¹ That is based on the figure of some 2,600 agreed at the Expert Conferencing, less the subsequent reduction by some 380 to allow for the removal of the DFO centre from the development, and some offsetting adjustment (+170) to allow for the larger area of factory space in the area no longer occupied by the DFO centre.

¹² Q&W Report previously identified a total expected workforce of 2072, with 300 workers who would relocate from Auckland to remain with TCG, another 700 in the Sleepyhead factory (total 1,000) another 650 persons on the other industrial development, 400 in the discount outlets (43,440m²), and 22 in the support services. Table 5, p21



household per worker, one household per dwelling and all 1,100 dwellings were built) would see up to 1,050 households re-locating to Ohinewai. Assuming 270 or so of the total 300 TCG workers re-locating from Auckland opted for Ohinewai, that would mean around 800 households re-locating from within the localised catchment, from elsewhere in Waikato District, or from elsewhere in Waikato Region.

Their location choices would be influenced by a range of factors. An important question is the extent to which this re-location would depend on the availability of affordable dwellings, and the local employment opportunity, or would be driven by other factors. The wider context is the relative attractiveness and suitability of Ohinewai as a place to live.

3.2.4 Other factors affecting demand for housing

Important factors in housing demand and dwelling purchase decisions include the dwelling price *per se* (in terms of what can be paid for), but also price in relation to location, households' accessibility to goods, accessibility to household services, dwelling quality, land, and prospects for dwelling re-sale. The future situation indicated for Ohinewai suggests that households would face a number of trade-offs when deciding whether or not to live in Ohinewai, with key matters as follows.

Access to goods and services. A quite limited provision of household goods and services is indicated within Ohinewai. Only a small retail-service node proposed (approximately 2,500m² of shops and services space) which on the sales estimates provided by Mr Heath would service less than one-fifth of Ohinewai households' demand. A limited range of goods and services would be available locally. Ohinewai households would likely access the majority of their goods and services (80%+) from Huntly or Hamilton. Retail sales figures indicate that Huntly households currently access over 30% of their shopping needs from outlets in Hamilton, suggesting limitations to the range of goods and services available in Huntly.

Household travel costs. Ohinewai is approximately 9.1km by road from Huntly town centre, and about 42km from Hamilton¹³. That will directly affect the costs of household travel, and the time taken to meet household needs. Nationally, about 25% of household travel costs are for work-related trips, while mean travel distances for those in urban locations are well below the implied travel to Huntly (round trip of about 18km) and Hamilton (round trip of about 84km). This would mean residents of Ohinewai would face likely higher than average travel costs for accessing shops, services such as health, education (especially secondary level education), recreation, and leisure.

¹³ Calculated using Google Earth navigation, which shows 41.1km from Hamilton CBD to Ohinewai turnoff, and allowing another 0.9km to the indicated entrance to the village along Tahuna Rd.



These additional annual travel costs would likely be weighed against the lower cost of an affordable dwelling. In total, travel accounts for about 12-13% of household expenditure. That indicates households living in Ohinewai would incur relatively high transport costs, with low journey to work costs offset by the higher costs of other household travel.

Access to work opportunities. Mr Heath identifies the main attractions of the Ohinewai locality as “adjacent to a significant employment hub and form part of Ohinewai Village” and notes the “TCG development has been specifically designed to deliver an integrated mix of land uses with an underlying employment base rather than a dormant township from which residents have to leave the area for work”¹⁴. However, the employment opportunities will be predominantly in manufacturing and other light industry, which in the District accounts for only 10-12% of total employment¹⁵. Even if all of the retail and service workers are recruited locally, the range of local employment opportunities will be quite limited. Moreover, the available information suggests that the TCG workforce will be predominantly lower to middle income earners, and the opportunities in other activities (factory work, retail work) also suggest the local workforce will be predominantly lower to middle income earners. That suggests limited opportunity in Ohinewai for households to have two persons employed full time, or one employed full- and one part-time, within the OSP area.

Ability to on-sell dwellings. A further influence on dwelling purchase decisions is the perceived ability to on-sell a dwelling in the future if the owner(s) wishes to re-locate. This can be a challenge in an economy where there are few industries, and the market is potentially limited to other workers arriving to take up employment in the same sectors. Generally, the larger an economy, the more scope there is to sell a dwelling. Similarly, the potential for market gain is greater in a larger, more diverse economy.

Accordingly, for these reasons especially there will be important trade-offs for households when they are deciding whether or not to live in Ohinewai, for employment there, and whether to purchase a dwelling in Ohinewai.

There is no suggestion that employment in the TCG factory or any other business in Ohinewai would be in any way limited to those purchasing a dwelling there.

This means that future workers in the Sleepyhead or other businesses would be free to choose where they reside, taking into account the full range of matters influencing their purchase decision. For example, the future might see half the TCG workforce opting to live in Ohinewai, the balance in Huntly or Hamilton, or other places within an affordable commuting distance. That is

¹⁴ Mr Heath at 6.16

¹⁵ For example, Mr Osborne’s evidence at Table 2, p14.



especially likely for households which currently reside in Huntly, Hamilton, Ngaruawahia or elsewhere who would take employment in Ohinewai, but opt to remain in their existing dwelling (owned or rented) to take advantage of the wider range of services and amenities available in those established places.

Directly related to this issue is the question of what demand there may be for households not connected through employment or otherwise to the proposed industrial and/or retail development to choose to live in Ohinewai. One of the factors influencing that decision will be the price of dwellings, and others will include the matters outlined above.

What does seem apparent is that the Ohinewai location would have a limited range of goods and services on offer, and households opting to live there who were not also employed there would face relatively high travel and transport costs, including travel to work. An obvious trade-off for such households is likely to be the cost of a dwelling there, relative to the higher than average travel costs, and the limited range of household goods and services available.

3.3 Housing Affordability

These considerations place considerable emphasis on the question of the provision of affordable housing at Ohinewai. The PEL Report stated:

Housing: a key consideration for the Comfort Group is the ability for employees to be located within an area that is affordable. A key driver of unaffordable housing is the demand directed through business location. A motivation for The Comfort Group is to redirect that demand to an area that typically has lower demand and therefore lower land and build values. This provides their employees with the opportunity to own their own homes. Additionally the development of 1,100 dwellings is likely to provide some additional options to the general market while providing greater levels of amenity afford[ed] by a Master planned development.¹⁶

It further stated that “Given the objective of the Comfort Group to provide affordable housing options for their immediate staff, it is assumed that 70% of the residential development will be absorbed.”¹⁷ This indicates that 770 dwellings would be developed as affordable dwellings.

The range of housing prices was not set out, however the Report notes that “*Property Economics understands the housing in Ohinewai is likely to be around the \$500,000 price point on average.*”¹⁸

¹⁶ PEL Report p44

¹⁷ PEL Report p51

¹⁸ ¹⁸ PEL Report p29



3.3.1 Housing Prices

In his July evidence, Mr Heath has indicated that around the likely mean dwelling price of \$500,000 would mean some dwellings would likely lie between the “low \$400,000s – mid \$500,000s depending on typology”¹⁹. I consider that such a range would be likely to be the case, and it is broadly consistent with the figures in his PEL Report which suggest dwellings in the broad price range of \$500,000 to \$550,000.. However, there is no indication of how many of the dwellings would be in the lower value bands.

The \$500,000 figure corresponds with the pricing for an affordable dwelling identified by the KiwiBuild initiative for dwellings outside of Auckland and Queenstown Lakes. The upper figure of \$550,000 is above the KiwiBuild range, and close to the median dwelling price in Hamilton (\$570,000).

The PEL Report and the Q&W Report both indicate that the \$500,000 pricing is substantially higher than current prices in areas of Huntly, and at the lower end of prices in Te Kauwhata., and this is confirmed in Mr Heath’s evidence.

That suggests Ohinewai could not rely on pricing alone to attract purchasers.

3.3.2 OSP Workforce Incomes

Affordability is driven by both dwelling price and household income. While there is no detailed information about the numbers of workers in each wage band, the PEL report (Table 12) indicates that average annual household incomes would be about \$45,000-46,000 after tax, which is about \$55,000-56,000 pre-tax.

Drawing on recent analyses of housing affordability (undertaken for Queenstown Lakes District, and in the context of the former KiwiBuild affordability²⁰), the income figures indicated in the PEL Report would place approximately 60% of the Sleepyhead workforce in household income Decile 3, with most of the rest in income Decile 4.

- a. For a household in Decile 3, the maximum affordable price is around \$350,000.
- b. For a household in Decile 4, the maximum affordable price is around \$430,000.

¹⁹ Mr Heath at 6.14

²⁰ That analysis considered the mean and upper end household incomes in each income decile. This uses a standard calculation for first home purchasers, based on a maximum share of household income (35% pre-tax) which can sustainably pay for housing, allowing for loan repayments over a 30 year period, at a mean interest rate of 7.5%, and a deposit of 20% of the purchase price. (which assumes the deposit is drawn from accumulated savings as distinct from the equity from a previous dwelling).



This suggests that for most of the workforce, a dwelling priced at \$500,000 would not be affordable. There would need to be significant numbers of dwellings in the lower \$400,000 range, as indicated by Mr Heath, for the proposed residential component of the OSP to contribute to affordable housing.

3.4 Housing Capacity Assessment for the NPS-UDC

The PEL Report and Mr Heath's evidence noted that the estimates of feasible capacity for the NPS-UDC work indicate a shortfall in feasible capacity at the district level and at the local level, and concludes *"this leaves an overall shortage of 587 dwellings in Huntly ...the Ohinewai development will assist in meeting the estimated long term feasible residential shortfall."*²¹

It is important to understand the context of the NPS-UDC assessment. The analysis for each location covered feasible capacity in the long term, and where infrastructure constraints were identified, the greenfield capacity was adjusted. In the Huntly locality, the total long term dwelling capacity was estimated at 980 to 1,210 dwellings overall, but at around 500 dwellings when infrastructure constraints were allowed for. This is shown in Figure 3-1, using the information from the NPS-UDC study.

It shows that in the 2017-2024 period there would be feasible dwelling capacity to accommodate growth. An obvious question then is whether the infrastructure constraints identified in the NPS-UDC work would be addressed in the medium or longer term. The PEL estimate is on the basis that the infrastructure constraints on Huntly's growth capacity would not be dealt with. While Huntly's projected growth rate is about half that expected for Waikato District as a whole (0.9%pa compared with 1.7%pa), the common procedure is for a council to provide infrastructure needed to accommodate expected growth.

Moreover, the NPS-UDC analysis provides a comparison of housing capacity and demand by locality, to inform council planning, including to identify potential constraints. The projections assume there is no transfer of demand among locations. To illustrate, Figure 2-1 shows the demand and capacity situation for the Huntly locality and Te Kauwhata combined.

Mr Heath in his Rebuttal evidence disagrees with Mr Keenan's view of the sufficiency of housing in the lower value bands for the District. He contends that the additional capacity numbers are *"unreliable to apply at this juncture"* (p5). In my view, the processes described to estimate additional capacity in the HBDCA are robust, and I do not agree that they are a 'rather arbitrary concept'. They reflect standard processes by which provision is made by councils for future needs.

²¹ PEL Report p28



As a Tier 1 council as part of the FPP structure, Waikato’s capacity has been subject to considerable examination, and that process is continuing to satisfy the new NPS-UD requirements. The short term outlook in the table copied from the ME report shows overall 97% sufficiency in the \$440-580,000 value band.

I also note that the feasibility assessments for the HBDC were deliberately conservative in terms of pricing assumed for new dwellings, and that placed them in the future value bands as at 3, 10 and 30 years into the future. The new dwellings in any district are not constructed only in those years, but instead are constructed in every year of the future planning period, at the price levels prevailing at the time, and subject to subsequent ageing and depreciation once built. That means the new dwellings in the higher value bands are over-stated, and the numbers in the lower value bands are correspondingly under-stated.

In any case, a substantial share of the existing estate is in those lower value bands, and ongoing depreciation of that existing estate in real terms can be expected to increase the housing options in those lower bands.

Figure 3-1: Huntly Housing Demand and Capacity 2017-2046

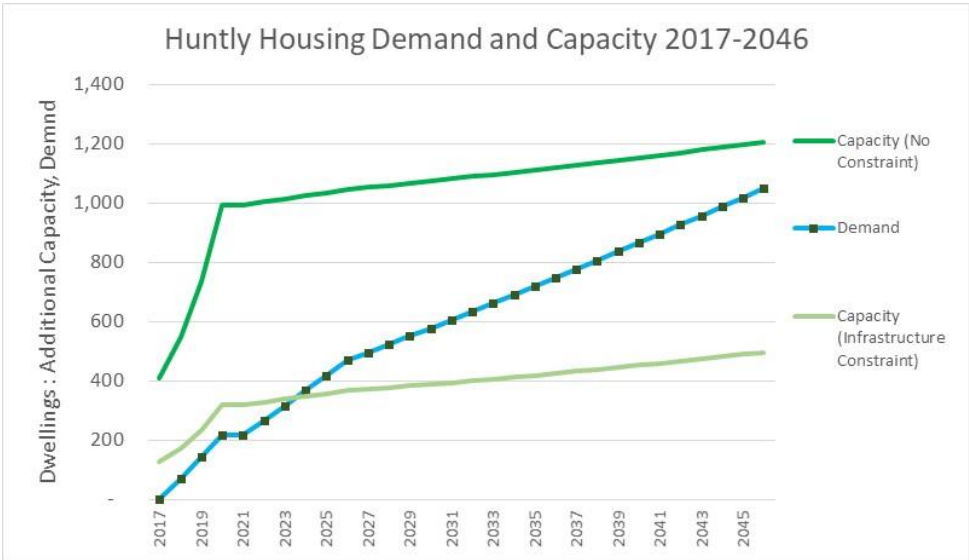
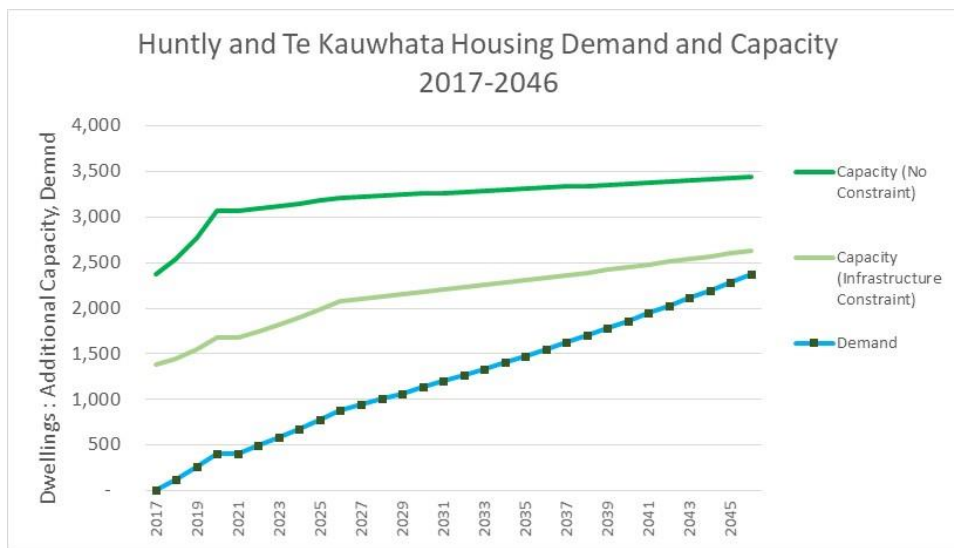




Figure 3-2: Huntly and Te Kauwhata Housing Demand and Capacity 2017-2046



3.5 Implications

The indicated dwelling pricing and what appears to be an affordable price for workers employed in the TCG factory raised important questions about the proposed OSP and the re-zoning.

There has not been clear evidence offered in the subsequent statements that shows the proposed development would contribute materially to housing affordability.

If the proposed housing is not affordable to much of the workforce, then the link between the rationale for the TCG factory, and the rationale for a very large area of housing in Ohinewai, is considerably weaker. The main rationale for having housing there depends on the link with the factory space. If the proposed housing is not affordable, then it is unlikely that many in the workforce would be able to afford living in Ohinewai.

The immediate question then is what demand would the proposed dwellings in Ohinewai service. That raises the wider issue of whether housing capacity in that location is consistent with the Waikato District’s strategic direction, including whether it would contribute to an efficient distribution of housing capacity in the District, taking into account the distribution of employment, education, shopping and services, public facilities and so on, and peoples’ ability to access these.



4 OSP Labour Force

Another important matter (1.2.3 above) is the size of the labour force required for the OSP development, in relation to the current and projected total labour force in the locations around Ohinewai which would be available to support the industrial and retail activities enabled.

It is important, given that labour needs not met from the local workforce will need to be attracted from further away, the main candidate locations being Hamilton and Auckland. Where the labour force is drawn from is a key issue because that directly affects journey to work travel, and the region's energy consumption and emissions, as well as affecting private travel costs to households.

These matters have not been addressed in the reports or the evidence in support of the application.

This relates to the scale of the proposed development, in relation to the size of the local economy, and is a key matter in regard to the issue identified in the expert conferencing of the need to consider *“whether the proposal is the most appropriate location from an economics perspective taking into account the implications on Huntly and other towns.”*

4.1 APL Workforce Estimates

The proposed development would have a labour force of around 2,400²² with the completion of the 100,000m² Sleepyhead factory, the 137,000m² of other factory space, and the retail and service activity. The location of the workforce is important because of the implications for travel to work, and consequent travel efficiency.

The application material (PEL Report) indicates that some 20% of the OSP labour force would come from the local area (now defined as the localised catchment), and another 30% from elsewhere in Waikato District. The other 50% would be drawn from other locations, primarily but not only other parts of Waikato Region.

A substantial share of the OSP labour force is indicated to come from the proposed development of affordable housing. If that does provide 1,100 affordable dwellings, by implication it would mean residences for 1,100 of the projected workers. It is not clear whether the workers who could reside in Ohinewai are counted in the applicant's evidence as being part of the 20% local workforce (as noted, there is uncertainty as to what proportion of the 1,100 dwellings which would be enabled are intended to be affordable dwellings for solely the employees of TCG. A smaller

²² ITA Table 8, p34



number of affordable dwellings would mean a correspondingly smaller share of the projected workforce would be accommodated there).

There is also uncertainty about the assumed processes by which the residential growth would occur, and the extent to which those coming to reside in Ohinewai would be net additional population growth for the Huntly-Ohinewai area, or those re-locating from the local area, or other parts of Waikato District.

The indicated pricing is in similar or higher price bands than Huntly and at the over \$500,000 end close to Te Kauwhata dwellings, which suggests affordability may not be a strong influence to re-locate there. This indicates the proposed housing development would depend primarily on workers being attracted to Ohinewai because of employment opportunity close by. While employment opportunity is certainly one influence on housing and location choice, and attracts some people to re-locate themselves and their families, there are many other determinants, including access to shops and services, entertainment, schooling, community size and diversity. Absent significant price competitiveness – which seems unlikely according to the APL material – the rationale for a substantial number of households to re-locate to a small new town with few services, remains unclear, as considered above (3.2.4).

4.2 Potential Labour Force for OSP

To accommodate this uncertainty, the assessment of labour force availability and travel flows covers both circumstances, that is with the housing development and without it. It is important to note however that the “with housing” assessment adopts the most optimistic position, that all workers and households residing in Ohinewai would be net additional to the area, and not re-locations from within the primary catchment or other parts of Waikato District. The “with housing” labour force flows are estimated as if the proposed development can draw on the Ohinewai workforce and the potential workforce from the primary catchment, and from the rest of Waikato District, before any additional labour force needs to be drawn from Hamilton or Auckland.

4.2.1 Sources

In most situations, a business activity which is new to an area would expect to attract its labour force from three main sources:

- a. Existing businesses in the area. Some of the workers in existing businesses will be attracted to the new work opportunity, key influences including the potential earnings, travel distance, and employment security. The share attracted would be generally higher for locations closest to Ohinewai, and generally lower for the more distant parts of the primary catchment;



- b. Workers who live in the new development's primary catchment, and are currently commuting out to jobs in other locations, elsewhere in the District, and Hamilton and Auckland. A share of these workers is likely to be attracted to the new opportunity, especially as it would mean a shorter journey to work;
- c. Workers entering the workforce, as the labour force grows with any increase in the working age population. A share of this growth is likely to be attracted to the new opportunity

There is no set formula by which the shares from each source can be calculated. The numbers of workers attracted to the development's labour force will depend on a range of factors, including the nature of the work on offer, the potential earnings, other employment opportunities, and the location relative to place of residence. As context, employment in manufacturing attracts 9.5% of the workforce nationally, and slightly higher shares in Waikato District (10.9%) and the Huntly area (12.3%).

The PEL report and Mr Heath's evidence indicates that employment in the TCG plant itself would generate relatively modest earnings for much of the workforce, and that is a key reason for the proposal to provide affordable dwellings for that workforce.

4.2.2 Labour Force Catchments

The labour force potential will vary by location, with the proposed development more attractive to those living in closer proximity, and progressively less attractive as distance and commuting costs (\$ and time) increase. The likely primary labour force catchment for the OSP development's labour force is determined mainly by proximity to Ohinewai, as per the localised catchment.²³. These areas are geographically those closest to Ohinewai, and lie generally within around 20km.

The assessment does not assume that all of the labour force would be drawn or need to be drawn from this catchment. However, it is useful to identify the potential supply of labour within the closest catchment, as well as from other parts of Waikato District – Pokeno and Tuakau in the north, the west across the Waikato River, the southern parts to the west and east of Hamilton City, and Raglan in the south west.

²³ As defined by Mr Osborne (see above). The wider catchment would extend to Mangatangi and Maramarua SA2 areas in the north; Whitikahu and Taupiri in the south east, and Ngaruawahia and Horotiu in the south west.



4.3 Potential Labour Force attracted

4.3.1 Existing Businesses 2019

The current labour force in existing businesses in the localised catchment has been estimated at 5,180 MECs²⁴. This is 21% of the Waikato District total, and includes 860 in farming and primary production, 490 in manufacturing, 600 in construction and 220 (2%) in utilities. The potential for the OSP development is based on “capture” of 5% of Huntly and Te Kauwhata employment, with lesser shares from existing businesses further away. This indicates potential for some 380-420 workers to be attracted from existing businesses²⁵. We note that this assumed capture is relatively high (that is, the estimate is deliberately conservative) given the relative stability of the local economy.

4.3.2 Outward Commuters

The second potential source is workers who reside in the primary catchment, and work outside that catchment, especially those commuting to Hamilton or Auckland, or elsewhere within the District. Current patterns show there is a relatively strong internal focus²⁶ of journey to work patterns. Some 68% of the labour force works locally (within the home CAU) and another 6% works elsewhere within Waikato District. Around 13% work in Hamilton City, another 12% in Auckland (Figure 4-1).

The other key aspect to consider is labour force commuting flows into the primary catchment. That also reflects a localised pattern (Figure 4-2). Some 80% of the workforce lives locally or within the primary catchment, and another 11% drawn from other parts of Waikato District. Only 7% of the labour force is drawn from Hamilton, and less than 1% from Auckland.

These localised patterns for the labour force are important, particularly given the high share of the OSP labour force which would need to be drawn from Hamilton, in particular. Overall, an estimated 2,000 persons who reside in the primary catchment currently commute outward, from the Huntly-Te Kauwhata-Rural East areas.

Allowance is made for the OSP development to “capture” some 12% of the outward commuter flows from the Huntly – Te Kauwhata area, and 5% from Ngaruawahia (mainly to Hamilton) and the eastern areas (Auckland and Hamilton). This equates to some 450-480 workers. As with the

²⁴ Statistics NZ Business Frame identifies for the primary catchment the number of business entities (geographic units or geos), and the number of employees (Employee Count or EC) as at February 2019. Within Waikato District, the total employment is 24,860 MEC²⁴s, which includes 19,650 ECs (79%), with working proprietors accounting for around 21% of total employment in the District.

²⁵ A range is used, so as to not indicate precision when the figure is a broad estimate.

²⁶ This data is from Census 2013. There is no data available from Census 2018.



other components, the estimate of commuter “capture” is conservative – that is, relatively high shares are applied.

Figure 4-1: OSP Primary Catchment – where the Labour Force works (2013)

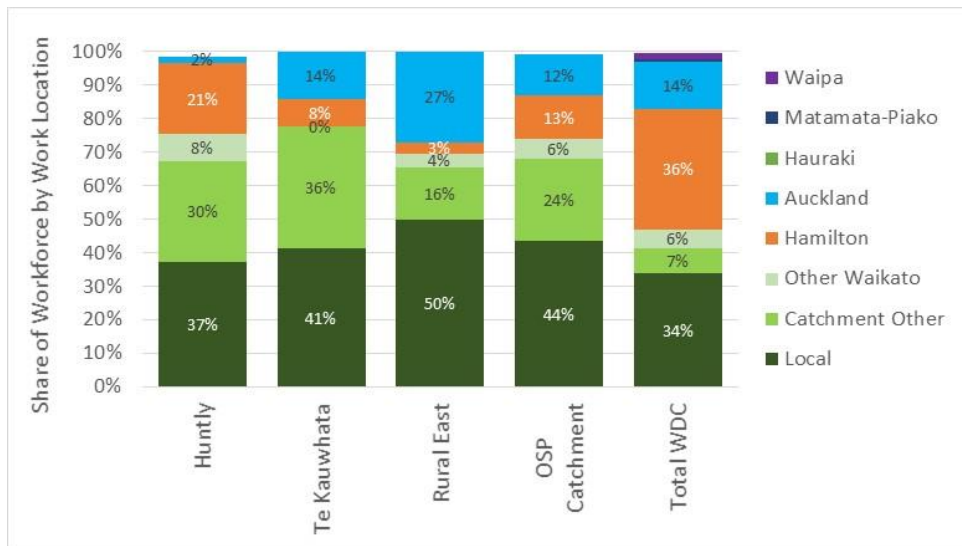
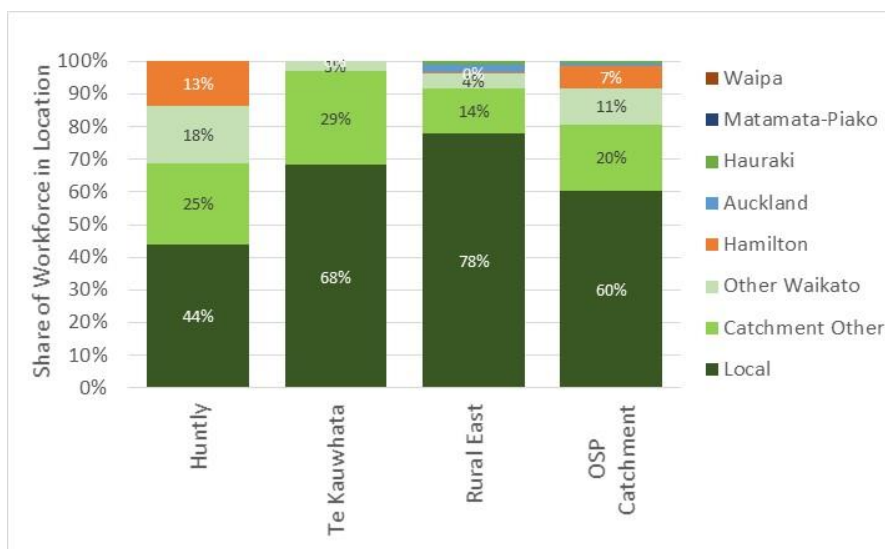


Figure 4-2: OSP Primary Catchment – where the Labour Force is drawn from (2013)



4.3.3 Future Labour Force Growth

The third main source of the development’s labour force would be from growth in the numbers in working age bands. The growth in the labour force has been estimated from StatisticsNZ age-specific population projections, with allowance for the labour force participation rate, as per the proportion of the working age population which is actively engaged.



The most recent SNZ population projections indicate that the labour force in the primary catchment is projected to increase by 1,500 persons by 2033 (from the 2018 base) in the medium future (low 800, high 2,100).

If allowance is made for the OSP development to attract a relatively high share (19%) of the total increase in the Huntly-Te Kauwhata labour force, and 7% of the increase in Ngaruawahia and eastern rural areas, that would equate to 380-420 workers. The estimate is again deliberately conservative (the OSP development is assumed to attract a relatively high share).

4.3.4 Total Labour Force Attracted

The figures are only estimates. Nevertheless, they offer a baseline indication of the potential for the proposed OSP development to attract a labour force from its primary catchment and other areas of Waikato District, in the order of 1,200-1,300 persons (medium projection), within a range of 1,000 (low) to 1,400 (high).

The estimates do not include allowance for additional households and workers to live in the proposed new town.

4.4 Labour Force Inflows

This baseline estimate provides context from which to assess the likely labour force commuting flows with the OSP proposal fully developed, at the scale indicated, with the base case employment figure is 2,400 as per the agreed information.

4.4.1 Base Case – 1100 Dwellings

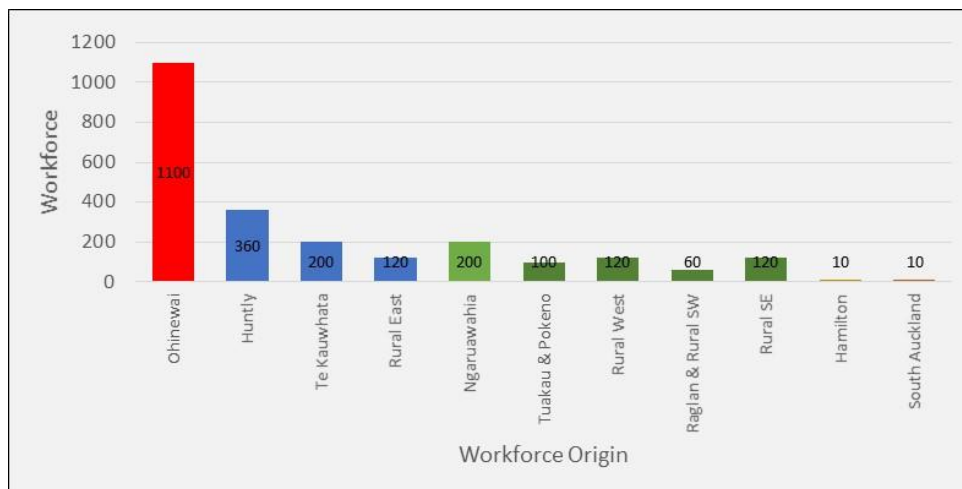
The base case is the position portrayed in the application, with employment of 2,400 persons and 1,100 affordable dwellings built at Ohinewai. It is assumed there would be 1 worker in each dwelling.

Figure 4-3 portrays the implied labour force flows, taking account of those living in the town itself, and the diversion/capture rates above (existing businesses, re-directed outward commuter flows, growth in the working age population).

With development to the full 1,100 dwellings, the labour force flows would be around 46% from Ohinewai (1,100), and another 28% (680) from the primary catchment. Some 600 (25%) would be from elsewhere in Waikato District, outside the primary catchment to the OSP development.



Figure 4-3: OSP Labour Force Inflow – Full Development and 1100 Dwellings

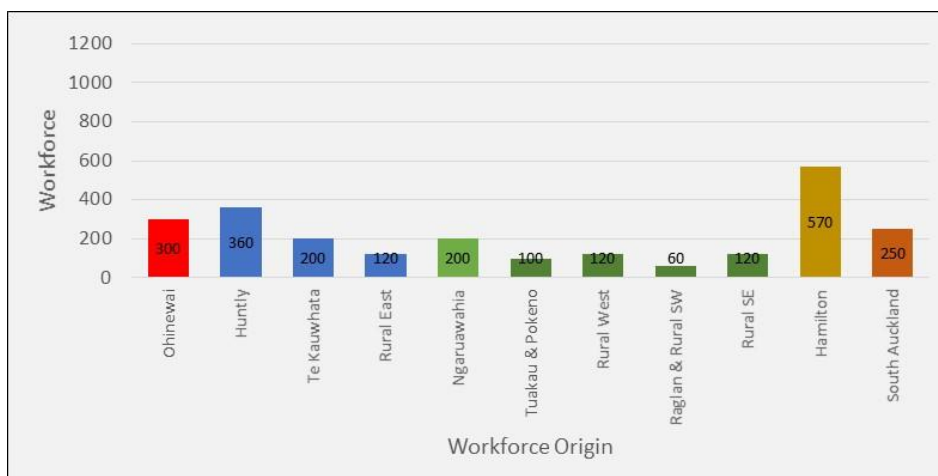


4.4.2 Fewer Dwellings Built

The flow pattern is sensitive to the number of affordable dwellings built at Ohinewai. To illustrate, I have also assessed a future where only 300 affordable dwellings would be built, and be specific to the OSP workforce. Figure 4-4 shows the implied labour force inflow for the base case employment with 300 dwellings at Ohinewai.

That future would see 13% of the workforce (300) from Ohinewai, 28% still (680) from the primary catchment, and 25% (600) from other parts of the District. Around 34% (820 workers) would come from Hamilton and Auckland, and 59% (1,420 workers) would be drawn from outside the primary catchment.

Figure 4-4: OSP Labour Force Inflow – Full Development and 300 Dwellings

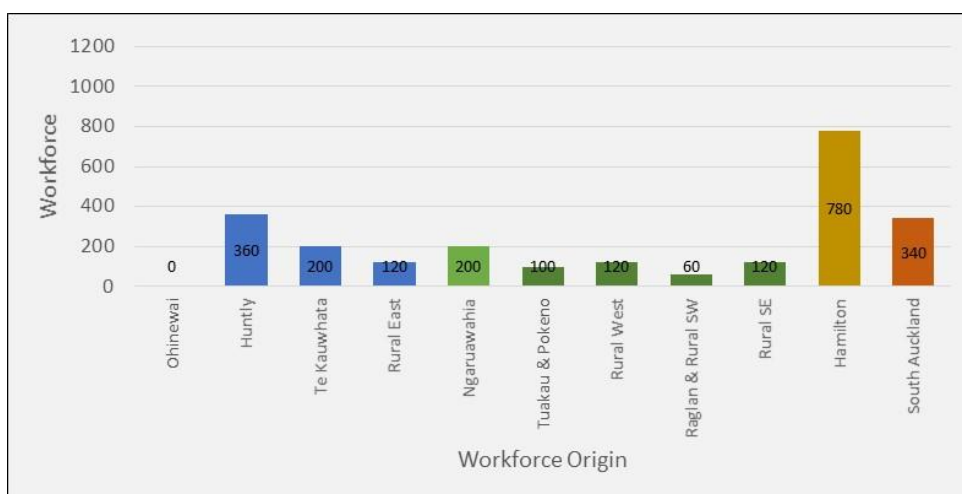




4.4.3 No Dwellings Built

If there were no dwellings built at Ohinewai, and no inflow of additional households and workforce there, the implied worker travel patterns would show more from outside the District. Figure 4-5 shows the implied labour force inflow for the base case employment with no dwellings at Ohinewai. That would see 28% (680) from the primary catchment, and another 25% (600) from other parts of the District. Around 47% (1,120 workers) would come from Hamilton and Auckland. In total, around 72% (1,720 workers) would be drawn from outside the primary catchment.

Figure 4-5: OSP Labour Force Inflow – Full Development and No Dwellings



4.4.4 TCG Factory Only with 300 Dwellings

Figure 4-6 shows the implied labour force inflow if only the TCG factory were developed (1,000 persons employed) and the 300 affordable dwellings were built at Ohinewai. This would see the plant's employment served mostly from the affordable dwellings (28%) and the primary catchment (64%). The other 8% would come from other parts of the District. There would be no labour force needing to be drawn from Hamilton and Auckland.



Figure 4-6: OSP Labour Force Inflow – TCG Only and 300 Dwellings

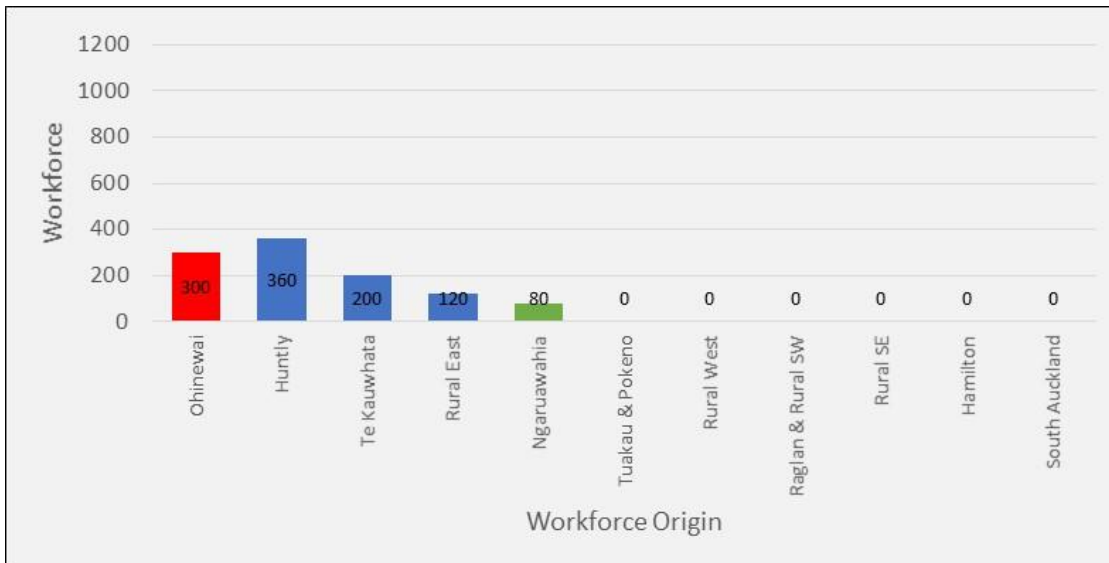
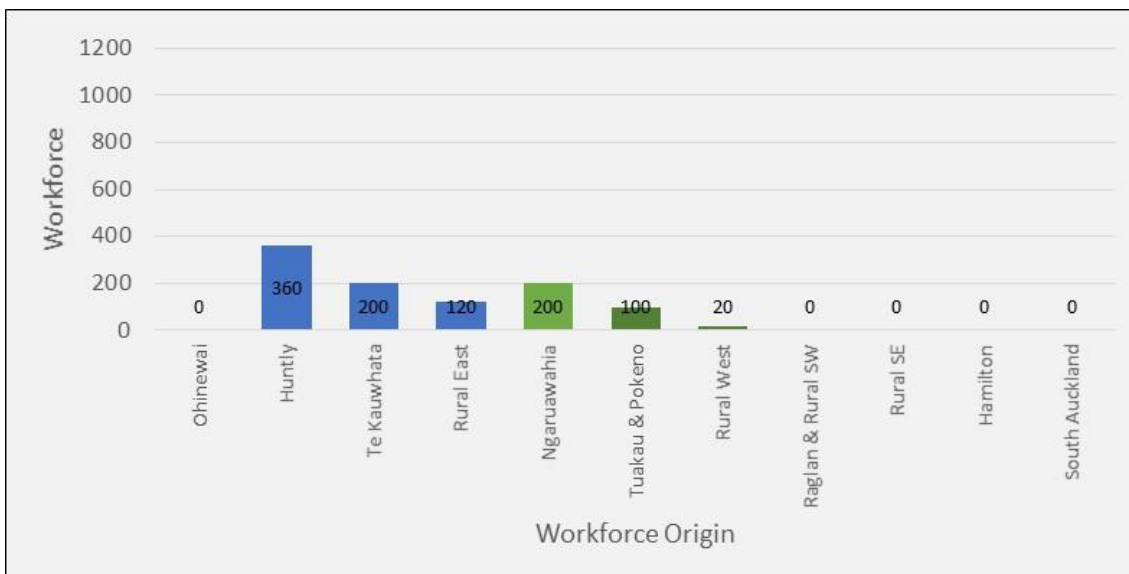


Figure 4-7 shows the implied labour force inflow for the TCG factory only (1,000 persons), but with no affordable dwellings built at Ohinewai. This would still see the plant’s employment served mainly from the primary catchment (68%), and the other 32% from other parts of the District.

Figure 4-7: OSP Labour Force Inflow – TCG Only & No Dwellings





4.5 Implications

The indicated labour force travel flows generated by the proposed development are quite substantial. The flows are sensitive to how much affordable housing would be developed in the OSP area.

This is consistent with the relative scales of the proposed development, and the economy of the Huntly 'receiving environment'. Simply, the proposed industrial development is city-scale, while the local economy is a modest rural-small town economy with a limited workforce and population base, and a correspondingly modest growth outlook.

The implied labour force flows are driven primarily by the scale of the development relative to the workforce, and whether or not the affordable housing is developed. The figures are not highly sensitive to the estimates of the locally available labour force (for example, with a workforce of 2,400 and 300 dwellings built, there would be 820 workers commuting from Hamilton and Auckland. If the capture from the primary catchment were one-third higher, then there would be an estimated 560 workers commuting from Hamilton and Auckland. If no affordable dwellings were built, even with high worker capture from the District labour force there would be around 850 workers drawn daily from Hamilton and south Auckland.

This assessment of labour force travel highlights one of the effects of a city-scale development occurring in a modest rural economy. These pressures for the workforce capacity and travel efficiency are evident at any scale of development above the Sleepyhead factory alone, unless a significant number of affordable dwellings are provided.

One obvious issue pertains to energy and travel efficiency, in respect of RPS Policy 6.5 (Energy Demand management), and associated method 6.5.1 for energy efficient urban development.

The scale of the development – 2,400 workers – indicates some 550,000 journey to work round trip movements annually (2,400 workers x 230 days).

To my knowledge, there has been no assessment of the travel implications of the proposal, for journey to work. Nor has there been assessment of the travel generated by Ohinewai households to meet their goods and services needs in Huntly and Hamilton.



5 Economic Assessment

5.1 OSP Development in Business Growth Context

One important matter agreed through the JWS process is the question of whether the proposal is in the most appropriate location from an economics perspective, taking into account the implications on Huntly and other towns²⁷

Key rationale offered in support of the factory's development in that location include the difficulty of acquiring a similar site elsewhere at equivalent prices, and the proximity to the railway (NIMT). Mr Osborne identifies the company's two main goals as consolidating operations to one location, and so improve productive efficiency, and to create an opportunity to provide housing for employees given they typically earn lower wages and face financial difficulties in securing living arrangements in Auckland²⁸.

5.1.1 Location

Mr Osborne²⁹ also identifies locational criteria for business location, including access water and electricity, digital capability, good access to transportation hubs, access to major roads, room for expansion on site, potential to secure resource consent, peak travel congestion, exposure/profile and land and property costs. I agree that those are common site attributes taken into account in business locations choices.

However, Mr Osborne also identifies proximity to an appropriate labour supply, location of domestic and international markets, and location of suppliers. I do not agree that the proposed site is strong in those attributes:

- i. The site is 85km from the nearest export and import Port of Auckland, and it is around 130km from the Port of Tauranga. This does not suggest Ohinewai it is a port-oriented location.
- ii. It is around 85km from the largest domestic market (Auckland), and about 45km from the otherwise nearest domestic market (Hamilton).
- iii. Similarly, it is around 45 km from the nearest large labour supply at Hamilton. The proposal identifies that even with a very high level of migration by the workforce to re-locate to

²⁷ Joint Witness Statement of Experts in Relation to Economics Dated 12 June 2020,

²⁸ Mr Osborne evidence at 3.2.

²⁹ Mr Osborne evidence at 4.2.



Ohinewai, somewhat more than half of the total workforce would need to be drawn from elsewhere in Waikato District, or elsewhere in the region (notably Hamilton).

- iv. The local resident workforce if the residential component of the development occurs would not be well serviced from the limited facilities in Ohinewai itself, and be largely dependent on Huntly. That is likely to limit the attractiveness of Ohinewai as a place to live, and the development may be faced with well over half of its workforce commuting a significant distance (from Hamilton).
- v. There is limited business activity in the Ohinewai location. There is a sawmill approximately 2.5km away to the north, and the opportunities for linkages with that seem accordingly limited. This suggests that Ohinewai would be a stand-alone development.

5.1.2 Other Factory Space

There is as yet no indication of which types of industries or entities might occupy the other 130,000m² + of factory space proposed. The available material does not indicate any sectors which may have close links with the TCG factory which would be able to realise benefits from co-location. That means the rationale for other activities to establish in that location is not apparent beyond being adjacent to the Sleepyhead factory.

Given the substantial distances to an existing labour force, to other industries as suppliers or to intermediate markets (the main concentrations of industry are in Hamilton), access to export and import points (aside from proximity to the rail), to domestic markets (assuming Hamilton, Auckland), *a priori* we would expect some quite detailed rationale as to why the proposed site represents a sound location relative to District and regional employment strategies, including for business activity and employment opportunity. There is none apparent in the PEL Report or the Q&W Report. Nor is there indication of whether such activities would opt to be involved in providing housing for the workforce, or whether they would instead opt to draw their workforce for Huntly and Hamilton.

5.1.3 The Business : Housing Link

A key aspect of the proposed development is the intended involvement of TCG in providing housing for the workforce. The potential options include purchase, or a rent-to-own scheme as suggested by Q&W.

The development of housing would be a very substantial investment. It is noteworthy that the indicated expenditure on housing is considerably greater than that indicated for the Sleepyhead factory itself. The original PEL Report³⁰ indicates construction costs of \$327m for housing, and

³⁰ PEL Report, Table 11



\$478m for land development. If the land development cost were apportioned according to developed land area (excluding open space and other), then the total expenditure for housing would be in the order of \$529m, considerably more than expenditure on the TCG factory itself.

Mr Heath and Mr Osborne have both stated that the proposal needs to be considered as an entire development, and that the factory development will not proceed unless the whole new town development is able to proceed.

This raises the question of whether the proposed development is primarily about developing housing, rather than manufacturing capacity, particularly if the housing were not affordable for the Sleepyhead workforce. Given the lack of specificity about the affordable housing provisions and how they would be implemented, what the nexus would be between the TCG workers and the dwellings, the numbers of dwellings which might be constructed, and the numbers of dwellings which be released to the open market rather than be affordable dwellings dedicated to the TCG workforce, it is difficult to be confident about the likelihood of the whole new town development proceeding even if approval is achieved.

5.2 Economy Impact

These matters place further emphasis on the question of location, and whether the proposal is in the most appropriate location in terms of its overall economy impact. That is consideration of the overall effect of establishing the proposed activities at that scale together with significant residential capacity in the form of a new town, in that location. When assessing the economy impact, the key matters are the nature of proposed activity(ies), the scale and the location, as well as the timing. From a first principles perspective, these four aspects – nature, scale, location, timing - provide for a comprehensive framework for any assessment.

That is consistent with the requirements of RMA s32, as any plan change needs to be assessed in relation to at least the operative plan provisions, in order to understand what the likely effects will be. That is especially the case when a proposal is of significant size and scope, in relation to the size of the local or district economy and community. That is certainly the case here, as the proposed development would result in increases of:

- i. 46% in employment in the localised economy over the decade
- ii. 21% in the household count
- iii. 10% in total Waikato District employment
- iv. 4.4% in household numbers in the total District.

These increases would occur in the limited Huntly-Ohinewai local economy which currently represents around 21% of the total District economy, and about 18% of current District employment in manufacturing.



Developments of such substantial scale require correspondingly substantial assessment (certainly in terms of s32(1)(c)) particularly when effects are likely to extend beyond the immediate location, and when they are likely to directly affect the direction and timing of growth in the economy and community. Location is almost always a key consideration, as many effects arise from not simply the economic and social processes on site, but from the interactions with other parts of the economy, which always have a spatial component. To meet s32 requirements, a fundamental question relates to the location of the proposal, relative to alternative location(s) and in the context of effects, efficiency and effectiveness.

All development proposals occur in a statutory planning context, with councils required to have in place plan objectives and policies and strategies to accommodate growth and change. That means the baseline counterfactual for any proposal is assessment in relation to what is currently intended, at regional and district level, and local level. That includes assessment in the context of relevant NPS mechanisms.

The range of effects arising from major industrial development and major residential development in combination in a currently rural location mean that the appropriate scale of assessment is an economy impact, because the proposal is clearly very significant for the local economy and community, and for Waikato District and the FPP sub-region, which accounts for just over half of the Waikato region economy and community. The implications need to be considered not only individually at a sector level – as economic and social impacts - but also in combination as the whole of economy impact. That requirement is implicit in the focus agreed in the JWS to consider the appropriateness of the Ohinewai location, especially as the nature and scale of the development mean its significance extends well beyond the Ohinewai locality:

- i. It is a large industrial activity, which would see an eight-fold increase in manufacturing activity in the local economy. As context, New Zealand has fewer than 10 manufacturing entities with a single-site workforce of 900 persons or more, and fewer than 60 such entities across all sectors, according to Statistics NZ³¹. Almost all are in major cities.
- ii. its labour force requirements are greater than what the localised catchment would sustain, and may generate substantial workforce flows from Hamilton or southern Auckland.
- iii. the town development at the scale proposed with limited local services would mean demand for most services would need to be met from Huntly, or Hamilton. The additional demand would stimulate the Huntly economy, though the extent to which Ohinewai households' needs would have to be met from Hamilton is not clear.
- iv. the proposal would likely generate significant household travel, including journey to work flows into Ohinewai, and household and other journey to work flows outward from

³¹ StatisticsNZ Business Frame 2020



Ohinewai. The travel distance to Huntly CBD as the likely main destination for Ohinewai residents is around 10.5km by road. Although as Mr Olliver points out Ohinewai is a few kilometres north of the indicated Huntly urban limit, the modest growth projected otherwise for Huntly suggests its urban edge will not close on Ohinewai in the medium term.

- v. the proposal would enable a significant new node of industrial activity in addition to the network of industrial nodes serving the District and the FPP sub-region. That in itself is not a negative, however the existing network has considerable capacity for growth, and its capacity and distribution is oriented to available labour forces, travel efficiency, other nodes of business activity and commerce for inter-industry transactions, road and rail links, and expected population and household growth within the region. There is as yet no indication of which other industries may opt for Ohinewai as a location, rather than other industry nodes within the Waikato.
- vi. With a projected size up to 1,100 households, Ohinewai town would be around 80% the size of Raglan, and would likely require a range of services including public sector activities.

However, economy-level assessment is not evident in the evidence presented, nor in the previous reports.

The economic assessments which have been undertaken are primarily on a marginal and sectoral basis. That is not to undermine their validity in and of themselves, but the scale of the proposal does emphasise the need for the various aspects to be drawn together in an holistic way. I consider specific aspects of the housing and economic evidence below.

5.3 Evidence on Economic Effects

5.3.1 Mr Heath

Mr Heath's primary evidence largely confirms the matters on residential development and retail effects presented in the PEL Report. I have addressed housing matters above (Section 3).

In regard to retail impacts, I agree with Mr Heath that with the DFO centre no longer proposed, the development would not have significant adverse impacts on the retail and service roles of Huntly or Te Kauwhata, and that the addition of up to 1,100 households would increase demand for outlets in those centres.

However, I note that his sales estimates (Table 2, p9) for the neighbourhood centre of 2,500m² imply low sales performance, in the order of only \$3,000-3,500 per m² for retail and around \$2,500-3,000 per m² for retail and services combined. The main store in the proposed centre would likely contain a grocery outlet of 1,000m², and it would be the closest grocery source for



the Ohinewai residents³². His sales estimates indicate spend per household of only around \$3,600 per household, which suggests the store would serve about 35-40% of community food and grocery needs, and 4-8% of other retail and services needs. That indicates considerable spending flows and associated household travel out of Ohinewai to access goods and services.

It also indicates a low level of service for resident households in terms of their demand for goods and services, which in turn would impact materially on the attractiveness of Ohinewai as a place to live. In his response to Ms Hackell's concerns about the potential for Ohinewai to be a dormitory town³³, Mr Heath contends there would be *"high levels of amenity in retail and recreational spaces."* His view is not consistent with the low level of retail sufficiency proposed for Ohinewai, in my opinion.

To illustrate, Census data shows that Raglan had 1,251 resident households in 2018, placing it around 15% larger than what is indicated for Ohinewai. As at 2019, Raglan businesses had 950 persons employed in activities other than manufacturing and farming, across a range of industries, around 3 persons for every 4 resident households. If the same level of service were provided for Ohinewai, there would be 800-850 persons engaged locally, compared with the 60 indicated for retail and services. Pokeno and its surrounds, within 9km of Tuakau, had 1,360 households and employment of 610 persons other than farming and manufacturing.

I do not agree that a road travel distance of around 9.1km represents *"close proximity"* and supporting a high level of *"social (and economic) cohesion"*.

Mr Heath has not examined the issue of whether the proposal is overall the most appropriate location from an economics perspective. He does state in his Rebuttal³⁴ *"When considered in the round the OSP development represents a significant economic opportunity for Huntly and its regeneration."* In my view, Mr Heath has placed emphasis on the potential positive aspects of the proposed OSP, but he has not examined carefully the potential downsides, including those identified by Ms Hackell, and aspects such as ability to secure a local workforce and the workforce travel implications, and the limited level of household services in the proposed town.

5.3.2 Mr Osborne

Mr Osborne has provided an assessment of the economic impacts in terms of construction impacts, and his estimates of retail spending retention. However, the subsequent removal of the

³² PE Report at 3.6, p21

³³ Mr Heath rebuttal at 3.2

³⁴ Mr Heath rebuttal at 4.5



DFO centre from the proposal means his regional impacts are over-stated, as he acknowledges in his Rebuttal (para 6.1).

I agree with his view that employment in the Huntly localised area has declined since 2012, although I note that his estimates of employment (Table 2 p14) are based on only the Employee Count and do not allow for working proprietors who are not employees, and so undercount total employment by around 16%.

In his Section 6, Mr Osborne has identified a number of general advantages which arise from business growth, and which would likely accrue to the District from development at OSP. I agree with that, as these are commonly associated with business growth.

Mr Osborne identifies that all of the TCG factory³⁵, and one-fifth of the other industrial floorspace, and that 350 of the proposed 1,100 dwellings would not occur in the District if the TCG proposal did not proceed. While I consider it is reasonable to allow for some flow on effects beyond the TCG factory itself, I do not agree that those other developments would not occur unless the TCG development proceeded. In particular, there is considerable population and housing growth anticipated for the District, and considerable employment growth is expected from both the endogenous increases, and the proximity of two large urban economies in Auckland and Hamilton.

His economic impact assessment is limited to the “unique” additions to the economy, and he relies on Dr Wheeler for the overall impact of the OSP³⁶.

I note his estimate of construction economic impact³⁷ appears to be based on gross output, as distinct from the value added (GDP) component of the construction activity. That is not clear from his description. At Table 5 (p22) he provides an estimate of ongoing economic activity generated regionally of \$222m, though he offers detail for only \$126m of his estimate.

Mr Osborne’s assessment of location is specific to, and limited to, the TCG factory. He states that

“On balance, the site is considered to better satisfy the key industrial locational criteria in this unique circumstance than other industrial zoned options in the wider Waikato Region. The scale of TCG’s site requirement of circa 35-40ha narrows down the options considerably, and is of such a scale that the Sleepyhead Factory could not be sleeved into an existing industrial area and meet TCG specific site requirements from an operational and

³⁵ Mr Osborne at para 7.1

³⁶ Mr Osborne evidence at 8.5

³⁷ Mr Osborne Table 4, p21



function perspective, as well as its objective of increasing the competitiveness of the business from both an international and domestic perspective³⁸.”

Mr Osborne has relied on Mr Gaze’s position that if the OSP does not proceed, then the TCG factory will not eventuate. Obviously, Mr Gaze is able to speak only for TCG. Mr Osborne offers nothing to indicate that the other aspects of the proposed development – the unspecified general industrial activity – would only occur in the district or region if the TCG proposal proceeds.

In my view, taking account of the characteristics of the Ohinewai location relative to other industrial nodes in the FPP area and the region, other locations would be at least equally attractive as places to undertake industrial activity. Accordingly, the potential economic opportunity cost of not proceeding with the OSP is limited to the proposed TCG development, and not to all of the business activity indicated.

Mr Osborne identifies “further support” from a 2020 report which identified demand for 460 ha of industrial land over the next 30 years, and a recommendation that a “*developable area of at least 280 ha should be immediately planned at Ohinewai.*” I note that an area of 280 ha would accommodate industrial employment in the order of 5,600 persons (at 20 per ha) to 7,000 persons (at 25 per ha). For context, that scale implies a manufacturing sector for Huntly-Ohinewai which is twice the current size of Napier City’s manufacturing (2,850 persons), or in the same range as Tauranga City (6,640 persons as at 2019). In my view, such claims are extravagant.

5.3.3 Dr Wheeler

Dr Wheeler has provided estimates of the economic impact of the proposed development, applying a multiplier analysis and an investment assessment.

I have major concerns about Dr Wheeler’s multiplier analysis. First, he appears to have used his estimates of gross output rather than using value added to indicate the development’s contribution to GDP. At 2.16 he estimates GDP impacts as \$8,475.1 million. However, he previously identified that same figure as being ‘Estimated Output’ which is not the same as GDP.

The total output figure is always substantially larger than the GDP figure, because it involves double counting. The value added figure is considered the most reliable indicator of economic activity, and is consistent (more or less) with GDP. Value added is a generally accepted indicator of the degree to which the Waikato District and Waikato regional economy will be larger as a result of a project such as the OSP proposal. Within Waikato District economy, value added is in the

³⁸ Mr Osborne evidence at 4.8



order of 25-40% of gross output. That suggests Dr Wheeler by using his output estimates rather than value added will have over-stated the GDP effects by 2-3 times.

Dr Wheeler then at 2.29 equates his output figures with benefits. That is simply inaccurate. Total output is not all benefit, nor is the value added component. All economic activity incurs costs including labour inputs. While it is not possible to calculate how much of value added may be counted as benefit to the economy and community, previous estimates by Butcher and others have indicated it may be in the order of 10-15% of value added.

While economic growth is generally seen as positive for the community, it is not appropriate to apply even GDP figures (let alone gross output figures) to indicate net benefit, as Dr Wheeler has done in his table at 2.29.

Moreover, Dr Wheeler's figures suggest he has very substantially overstated the contribution of the proposed development to the regional economy. He estimates a contribution to GDP of \$8,175m in present value terms over 10 years.

To place this in context, the total Waikato District economy is valued at around \$2,858m according to Waikato Regional Council's WISE modelling. The total Waikato Region economy is estimated at around \$27,000m.

Dr Wheeler's estimates would mean that the OSP development would increase the size of the total regional economy by around 4%. In my view, that massively overstates the economic impact.

In his assessment of "Overall Economic Effects" Dr Wheeler has limited his assessment to use of the OSP site, by comparing farming output with industrial output.

He has identified the NPV value of housing at \$2,350 million over 10 years. It is not clear where that figure has come from. Given that the OSP development would see at most 1,100 dwellings developed, Dr Wheeler's figure equate to \$2,137,000 per dwelling in present value terms. That is about seven times the direct construction cost of the housing as identified by Mr Heath. Typically, the impact of residential construction covers the construction phase, but thereafter the costs of household operation are examined in terms of household expenditure.

Having considered Dr Wheeler's economic assessment, in my view he has very considerably overstated the effects of the proposed development on the economy, and significantly over-stated the benefits.

Finally, I note that Dr Wheeler has not examined the key issue agreed at the conferencing, as to whether the proposal is the most appropriate location from an economics perspective.



6 Conclusions

For a proposal to develop a new town in a rural setting, in my view there is not sufficient information to justify substantial re-zoning of rural land to enable urban uses.

That is especially so for the re-zoning to enable a large area of residential, since the nexus that housing would be affordable for the Sleepyhead workforce is not demonstrated. A number of matters arising from a proposal for a new town which have not been covered with sufficient detail or clarity.

Those matters are directly relevant from the resource management perspective especially because the proposal is for a new development in a rural location, around 9km from the nearest town, where the residential component depends on the proposed industry, and where the new town's population would depend on Huntly or Hamilton for many goods and services.

Such conditions distinguish the proposal from a development(s) which is of similar scale and nature, but which is incremental development to an established town, and part of the urban network in the Waikato.

The case for enabling a large area of industrial use in that location, especially in relation to the District's and the FPP's development strategy is not well established.

Further, given the uncertainties and the strong inter-dependencies of each element on the other elements - especially because the proposal is for a new town – it does not appear to be sufficient to base the assessments on a single assumed outcome.

Finally, the material provided does not offer an overall economy impact assessment. The large scale of the development in relation to the limited size of the Huntly-Ohinewai economy and community, the likelihood that the effects will flow well beyond the local economy, the distance between the proposed new town and the source of many of its goods and services, and the prospect of considerable costs as well as claimed benefits, require that such an assessment is important. It raises in particular the question of the location of the proposed development, given its scale and likely effects relative to the size of the Huntly-Ohinewai community.

Dr J D M Fairgray

1 September 2020