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INSIGHT | ECONOMICS

Technical Memo

To:	Environmental Protection Agency	From:	Insight Economics
Date:	Monday, 9 December 2024	Page:	14 (including this page)
Subject:	Ashbourne Fast Track Referral - Preliminary Economic Assessment		

Introduction

Unity Developments engaged Insight Economics to provide economic services for the master planning, consenting and design of Ashbourne. Ashbourne is located approximately 1.8 kilometres south-west of the centre of Matamata in the Waikato and comprises a total area of 125 hectares. Ashbourne is a multi-use development that includes four key precincts:

1. A new **residential community**, comprising circa 520 new residential units with a variety of densities, a green space and a commercial node;
2. A multi-functional **greenway** that weaves from the neighbourhood centre and commercial node to the Waitoa River on the site's western boundary with an active-mode pathway along the length;
3. A **retirement living core**, comprising circa 218 units, an aged care service and supporting facilities that will be provided across a staged development; and
4. Two **solar farms** which will provide a sustainable energy resource onsite, with the potential to integrate into the wider electricity network to generate energy outside of the immediate development.

This three-stage development, with each of the four key precincts having their own sub-stages, will ensure demand is met over the short, medium and long term.

The 42-hectare residential community is underpinned by a series of design principles, which focus on creating a well-connected, legible and diverse community on the edge of Matamata. The eight-stage development is framed around a central spine road which runs from Station Road to the north of the site, down to the eastern boundary. Intersecting this is a secondary spine road connection to link the wider residential precinct to the commercial node, green space and greenway. This transport network, supported by local roads, pedestrian and cycle connections, enables a legible grid structure in the residential area. A range of housing typologies and densities are proposed to meet the growing and changing needs of the housing market to ensure there are options for future residents.

The commercial node located in the heart of the development includes a number of amenities and services to support the Ashbourne development, wider community and local economy, such as local shops, a childcare facility and a café. The commercial node comprises an area of 0.75 hectares in the centre of the Ashbourne development, that includes a number of commercial properties, café, childcare facility and superette. This element of the proposal has been scaled to support the density proposed in the residential and retirement village components to ensure it does not threaten the primary purpose of the town centre of Matamata.

The multi-functional greenway links the commercial node and open spaces of the Ashbourne development area. This corridor interconnects infrastructure, cultural narrative, ecological wellbeing, connectivity and amenity to support a place-based identity. A number of uses are proposed along this corridor to encourage future residents to interact with the greenway, such as sheltered rest areas for relaxation and socialisation, active mode pathways, and play areas.

To support the growing demand for retirement living in Matamata, Ashbourne is anticipated to deliver circa 218 retirement living units, as well as the supporting healthcare and community facilities across an area of 19 hectares. A staged approach is proposed, from north to south, to establish a high-quality development overlooking the greenway.

Two solar farms are proposed to produce energy for over 7,000 homes per year, with the ability of powering not only Ashbourne but the wider community. The northern solar farm has an area of 12.7 hectares, while the southern solar farm is twice the size with an area of 24 hectares. An underpinning design principle of the solar farms is the dual-use, with agrivoltaic farming proposed to be undertaken underneath the solar panels to promote sustainability and preserve the identified highly productive land. Typical landscaping, planting and security will complement the solar farms to ensure their integration with the wider Ashbourne development.

Structure of this Memo

The remainder of the memo is structured as follows:

1. High-Level Policy Review
2. Need for Additional Retirement Living Capacity
3. Initial Assessment of Likely Economic Effects
4. Scope of Future Assessment
5. Qualifications and Experience

High-Level Policy Review

NPS-UD

The National Policy Statement on Urban Development (**NPS-UD**) came into effect in August 2020. Matamata-Piako District Council (**MPDC**) is classed as a Tier 3 local authority under the NPS-UD and is therefore required to provide "at least" sufficient development capacity "at all times" to meet expected future demand for additional housing well into the long-term.

Because it is neither a Tier 1 nor Tier 2 local authority, MPDC is not required to complete a Housing Capacity Assessment (**HCA**). Despite that, an HCA has been helpfully provided[1], which we acknowledge and appreciate. Unfortunately, however, the HCA has some issues that may limit its usefulness. They include that it:

- Is based on an unorthodox and very high-level approach to estimating capacity, which is highly likely to overstate it by failing to account for various factors that limit development outcomes.
- Does not explicitly model the commercial feasibility, nor likely realisability, of each parcel and appears to rely on theoretical, plan-enabled capacity instead.
- Does not explicitly test sufficiency over each NPS-UD timeframe by reconciling estimated supply and demand.
- Provides little, if any, information about the key inputs and assumptions used to determine each site's development potential.

[1] *Housing Assessment 2022 Matamata-Piako District Council*, Paula Rolfe Consultancy Ltd, Updated 20 November 2023.

Notwithstanding these concerns, the HCA still concludes that extra dwelling capacity is required over the longer term to meet demand. We acknowledge this looming shortfall, but consider it potentially more imminent than the HCA foresees.

NPS-HPL

The National Policy Statement for Highly Productive Land (**NPS-HPL**) came into force in October 2022 and aims to protect our most productive land for land-based production. It requires Councils to map highly productive land (**HPL**), and closely manage the subdivision, use and development of it by avoiding inappropriate use and development.

Residential / Retirement Living

Clause 3.10 of the NPS-HPL allows territorial authorities to allow the development of HPL if three sequential criteria are met, namely that:

1. there are permanent or long-term constraints on the land that mean the use of the highly productive land for land-based primary production is not able to be economically viable for at least 30 years; and
2. the subdivision, use, or development:
    a) avoids any significant loss (either individually or cumulatively) of productive capacity of highly productive land in the district; and
    b) avoids the fragmentation of large and geographically cohesive areas of highly productive land; and
    c) avoids if possible, or otherwise mitigates, any potential reverse sensitivity effects on surrounding land-based primary production from the subdivision, use, or development; and
3. the environmental, social, cultural and economic benefits of the subdivision, use, or development outweigh the long-term environmental, social, cultural and economic costs associated with the loss of highly productive land for land-based primary production, taking into account both tangible and intangible values.

While the first two limbs of the test are outside our area of expertise, we are confident that the residential and retirement living components of the proposal satisfy Clause 3.10(c) from an *economic* perspective. Upon successful referral, we will demonstrate this by using the total economic value (**TEV**) framework to compare the likely economic costs and benefits of the proposal to those of potential future rural production on the subject site. The TEV framework helps capture the full spectrum of economic effects, not just those that are readily quantifiable.

Solar Farm

The consenting pathway is different for solar farms. Clause 3.9 of the NPS-HPL concerns protecting HPL from inappropriate use and development and provides a list of activities that are **not** considered inappropriate. This clause was updated in August 2024 to make it clear that "specified infrastructure" can be constructed on HPL. This includes energy infrastructure like solar farms, which is a "lifeline utility". See Clause 3.9(2)(j)(i) below.

2. A use or development of highly productive land is inappropriate except where at least one of the following applies to the use or development, and the measures in subclause (3) are applied:

    j) it is associated with one of the following, and there is a functional or operational need for the use or development to be on the highly productive land:

        i. the development, operation, or decommissioning of specified infrastructure, including (but not limited to) its construction, maintenance, upgrade, expansion, replacement, or removal.

Accordingly, the proposed solar farm must be assessed against Clause 3.9(3), which is reproduced below.

3. Territorial authorities must take measures to ensure that any use or development on highly productive land:

    a) minimises or mitigates any actual loss or potential cumulative loss of the availability and productive capacity of highly productive land in their district; and

    b) avoids if possible, or otherwise mitigates, any actual or potential reverse sensitivity effects on land-based primary production activities from the use or development.

Upon successful referral, we will assess the proposed solar farm against Clause 3.9(3) from an *economic* perspective, with input from an agricultural business specialist.

In short, having considered the interrelated requirements of the NPS-UD and the NPS-HPL, we consider that the proposal can be supported from an economic perspective.

Need for Additional Retirement Living Capacity

While the HCA provides information on the overall supply and demand for housing in the district, it does not assess individual sub-markets, such as retirement village living.

To quantify this, we delineated a 45-minute drive time catchment for the site, then determined future supply and demand for retirement village living within it. Figure 1 shows the catchment used, while Table 1 sets out the demand calculations, which adopt the Statistics New Zealand (**Stats NZ**) high growth scenario.

Figure 1: 45-Minute Drive Time Catchment Used to Assess RV Supply and Demand

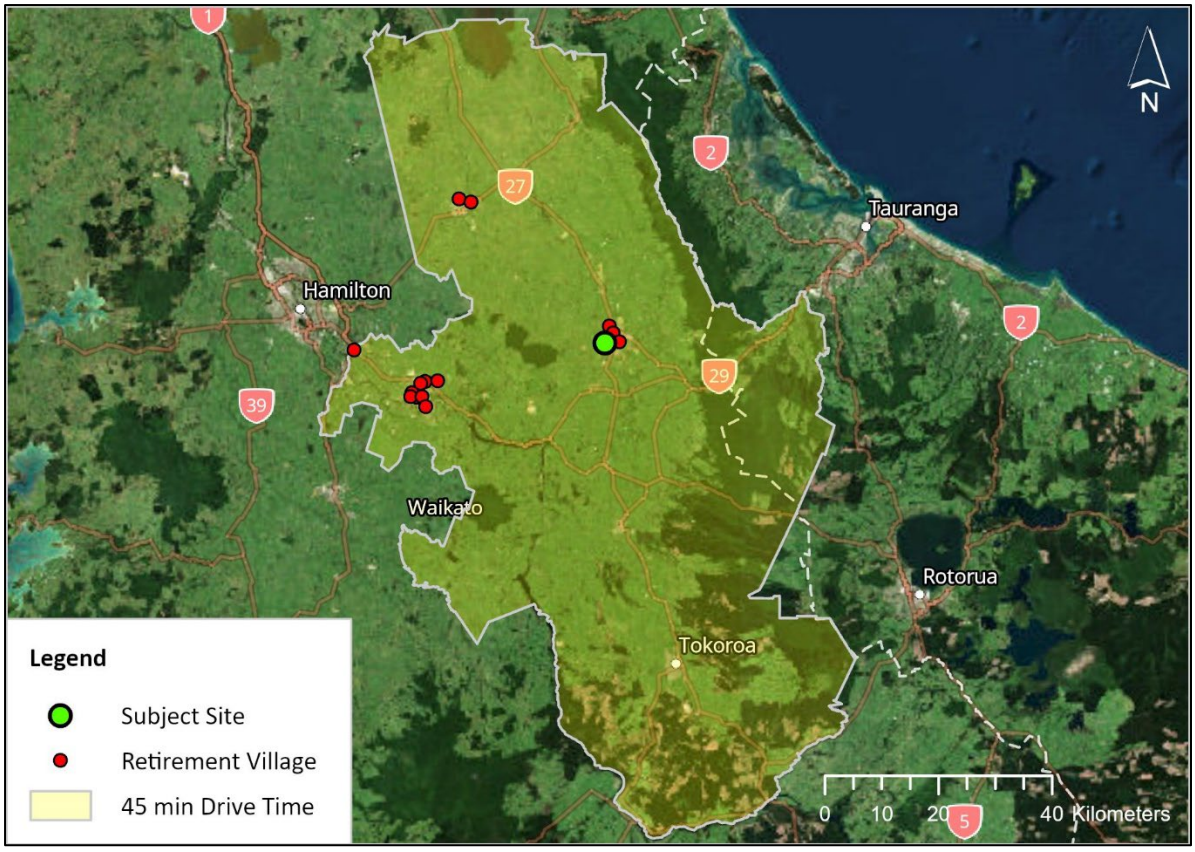


Table 1: Calculation of RV Unit Demand for 45-Minute Drive Time Catchment

Measure	Base Year (2023)	Short-term (3 yrs)	Medium-term (10 yrs)	Long-term (30 yrs)
Population 75+	9,400	10,490	13,275	22,380
Penetration Rate[2]	18%	18%	18%	18%
RV Residents	1,720	1,920	2,425	4,090
Occupation Rate[3]	1.3	1.3	1.3	1.3
RV Unit Demand	**1,322**	**1,475**	**1,867**	**3,148**

These calculations translate to the following estimates of growth in demand:

- 153 RV units over the short term (3 years);
- 545 RV units over the medium term (10 years); and
- 1,826 RV units over the long term (30 years).

By comparison, our analysis identified capacity for only an additional 650 retirement village units within existing and emerging villages over the medium to longer term. This suggests that there will be significant unmet demand (of about 1,200 retirement village units) over the longer term. The proposal acknowledges this unmet future need and directly responds to it, thereby helping to meet the needs of an ageing local population. For additional detail, see **Appendix A**.

[2] This is the current penetration rate in the catchment, which is calculated by dividing the estimated RV resident population by the 2023 population estimate for the 75+ age group.
[3] As per the New Zealand retirement villages whitepaper: New Zealand Retirement Village Database (NZRVD) and Aged Care Database (NZACD), published by JLL.

Initial Assessment of Likely Economic Effects

We now briefly consider the likely economic effects of each component of the proposal.

Residential Precinct

Following are the likely economic impacts of the proposed residential precinct:

- **Boosting the Supply of Housing –** This will help narrow the gap between future supply and demand, which will help the market be more responsive to growth in demand, thereby reducing the rate at which house prices grow over time (relative to the status quo).

- **Catering to a Variety of Budgets and Preferences –** The proposal provides for a wide range of section sizes. This, in turn, enables the development of a variety of dwellings to cater to a range of prospective occupants. Importantly, this includes more smaller sections than are currently available in Matamata (see **Appendix B**). This will directly improve housing affordability and make ownership more accessible to a wider range of households than is currently the case in Matamata.

- **Critical Mass to Support the Matamata Town Centre –** As the proposed dwellings are developed and occupied, spending by future residents will help create critical mass to support the ongoing health and vitality of the Matamata Town Centre.

Retirement Living Precinct

The proposed retirement living precinct will confer similar benefits to the residential development, as well as the following:

- **Meeting the Needs of an Ageing Population –** The proposal caters to a specific demographic of older people who wish to live in a community with others at a similar life stage. This is important, because not only is the local population growing, but it is also ageing. In fact, the number of catchment residents aged 75 and over is projected to grow by 138% in the next 30 years.

- **Releasing Existing Housing to the Market –** By providing housing options that cater specifically to older residents, this frees up existing housing for others. For example, older, larger dwellings could be made available for younger families or first homebuyers, for which they are likely to be better suited.

- **Socioeconomic Benefits of Retirement Villages –** Retirement villages offer numerous socioeconomic benefits. For example, they enhance wellbeing, support social connection, and often provide a continuum of care, enabling residents to move from independent living to managed care if/when required without the need to relocate.

Solar Farms

The likely economic impacts of the two solar farms proposed include:

- **Investment and Infrastructure Development**[4] – The capital investment required for solar farms often leads to improvements in local infrastructure, such as roads and electrical grid connections. This can have lasting benefits for local communities and can attract further investments from other sectors, fostering regional economic growth.

- **Reduction in Energy Costs**[5] – Solar farms can help lower electricity prices by increasing the supply of renewable energy, making energy more affordable for households and businesses. This reduction in energy costs can be particularly beneficial in regions with high energy prices or limited access to reliable power sources.

- **Economic Resilience and Stability** – By diversifying the energy mix and reducing dependence on fossil fuels, solar farms can contribute to greater energy price stability and resilience against fluctuations in global energy markets. This stability benefits both consumers and industries that rely on affordable and predictable energy supplies.

- **Environmental and Health Benefits**[6] – Solar farms generate electricity without emitting greenhouse gases, reducing air pollution and its associated health risks. An acre of solar panels can offset more carbon emissions per year than an acre of carbon-sequestering trees.[7] This contributes to public health improvements and can significantly offset carbon emissions, providing a cleaner environment.

- **Land Use and Agrivoltaics**[8] – Solar farms can be integrated with agricultural activities, a practice known as agrivoltaics, where land is used simultaneously for farming and solar energy production. This can increase farmers' incomes and make better use of available land without compromising food production.

- **Distributed Generation**[9] – Solar power installations contribute to distributed generation. This means electricity is generated close to where it is used, reducing the need for long-distance transmission networks and decreasing electricity losses.

Commercial Node

The key economic considerations of the proposed commercial node include:

- **Access to Goods and Services –** The proposal enables a small amount of supporting commercial activity so that future residents and visitors can access day-to-day goods and services without the need for private motor vehicle travel.

[4] https://www.solarfeeds.com/mag/impact-of-solar-farms-on-local-communities-and-economies/
[5] ibid
[6] ibid
[7] https://news.climate.columbia.edu/2022/10/26/solar-panels-reduce-co2-emissions-more-per-acre-than-trees-and-much-more-than-corn-ethanol/
[8] https://www.treehugger.com/how-do-solar-farms-work-5201378
[9] https://www.eeca.govt.nz/insights/energys-role-in-climate-change/renewable-energy/solar/

- **Retail Distribution Effects –** It is critical to ensure that any future commercial activity enabled onsite does not challenge the primacy, health, and vitality of the existing Matamata town centre. To avoid such risks, the proposed commercial area has been designed to be as small as possible while ensuring that it is large enough to serve its intended role and function as a local convenience centre. See **Appendix C** for further detail.

Wider Economic Impacts

In addition, the proposal will generate a range of wider economic impacts. These include:

- **One-Off Economic Impacts –** Constructing the new homes, retirement units and associated facilities, solar farms, and commercial amenities enabled by the proposal will generate significant one-off economic impacts.
- **Ongoing Employment –** In addition, once operational, the various elements of the proposal will likely sustain a sizable and diverse workforce.
- **Highest and Best Use of Land –** The proposal will also enable the land to be put to its highest and best use, which is a precondition for economic efficiency to hold in the underlying land market.
- **Foregone Rural Production –** They key economic cost of the proposal is forfeiting the site for alternative uses, such as rural production. This cost will be reduced by enabling farming to occur underneath the two solar panels (agrivoltaics).

Scope of Future Assessment

Upon successful referral, we will provide a comprehensive assessment of the likely economic impacts of the proposal. This will build upon our initial assessment above, and include additional context on the local housing market. In addition, we will quantify the likely one-off economic impacts of the proposal, and estimate the ongoing employment sustained across the site.

Qualifications and Experience

Insight Economics are New Zealand's leading economic experts on resource management, property development, and local infrastructure. We have prepared economic assessments for several major developments under the Covid-19 Fast-Track process, including:

- A retirement village in Parnell, Auckland (granted)
- A world-class "green hydrogen" facility in Taranaki (granted)
- The $1 billion Lakeview development in Queenstown (granted)
- A 1,600-lot comprehensive development on the edge of Hamilton City

In addition, we have helped gain RMA planning approval for dozens of large-scale projects across New Zealand worth more than $30 billion, including:

- New Zealand's largest gas field (Maui)
- New Zealand's largest mussel farm
- Auckland Airport's future second runway
- Kiwirail's $1 billion freight hub in Palmerston North

Fraser Colegrave is the founder and managing director of Insight Economics. He has 27 years of commercial experience, including 24 as an economic consultant. Fraser has worked extensively for many of the largest companies in New Zealand, and regularly advises local and central Government on a range of associated policy matters. He has provided economic expert evidence at more than 120 hearings before Councils, Independent Hearing Panels, the Land Valuation Tribunal, the Environment Court, Boards of Inquiry, the Family Court, and the High Court of New Zealand.

I trust that this memo provides all the information that you need for now, but please let me know if you need anything further.

Sincerely,

Fraser Colegrave
Managing Director
Insight Economics Limited

Appendix A: Need for Additional Retirement Living

Drive Time Catchment Methodology

To delineate our catchment, an isochrone representing a 45-minute drive time from the subject site was derived using the 'OSRM' package in R Studio. This package enables an interface between R and the Open Source Routing Machine (OSRM) API, which is a routing service based on the commonly used OpenStreetMap data.[10] The resulting isochrone was then used to define the catchment area by overlaying SA2[11] data and selecting the SA2s whose centroids intersected with the 45-minute drive time isochrone. The resulting list of SA2s is provided in the table below.

Table 2: SA2 Units in Catchment

Territorial Authority	SA2 2023 Code	SA2 2023 Name
Waikato District	173400	Tamahere South
Matamata-Piako District	173500	Tahuna-Mangateparu
	173600	Mangaiti
	173700	Tatuanui
	173801	Tahuroa
	173901	Morrinsville North
	173902	Morrinsville East
	174001	Morrinsville West
	174100	Te Aroha East
	174200	Te Aroha West
	174300	Waihou-Manawaru
	174400	Waitoa-Ngarua
	174500	Richmond Downs-Wardville
	174601	Waharoa-Peria
	174701	Okauia
	174801	Hinuera
	174901	Matamata North
	175001	Matamata West
	175002	Matamata East
	175100	Te Poi
Waipa District	181800	Kaipaki
	182000	Hautapu Rural
	182300	Fencourt
	182400	Hautapu
	182500	Karapiro
	182600	Cambridge North
	182700	Cambridge West
	182800	Cambridge East
	182900	Cambridge Park-River Garden
	183000	Oaklands-St Kilda

[10] See http://project-osrm.org/ for further information.

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

	183101	Pukerimu
	183200	Cambridge Central
	183500	Leamington West
	183701	Leamington South
	183800	Leamington Central
	183900	Leamington East
	184900	Maungatautari
	185000	Rotongata
South Waikato District	185800	Tīrau
	185900	Putāruru Rural
	186000	Putāruru
	186100	Kinleith
	186200	Paraonui
	186300	Parkdale
	186400	Matarawa
	186500	Stanley Park
	186600	Strathmore
	186700	Tokoroa Central
	186800	Moananui
Western Bay of Plenty District	191400	Kaimai

Retirement Village Capacity

We identified 14 established or emerging retirement villages within the catchment area, and estimated their existing and future capacity using various sources, such as Eldernet, Village Guide, and RV operators own websites. Table 3 below shows the results.

Table 3: Capacity of RVs in Catchment

Retirement Village Name	Territorial Authority	Capacity (RV Units)		
		Existing	Short Term	Medium-Long Term
Lockerbie Retirement Village	Matamata-Piako	33	83	165
Tasman Village	Matamata-Piako	88	88	88
Matamata Country Club	Matamata-Piako	43	86	132
Matamata Country Lodge	Matamata-Piako	28	28	28
Matamata Longlands	Matamata-Piako	242	242	242
Tamahere Country Club	Waikato	147	179	198
Cambridge Oaks	Waipā	204	204	204
Summerset Cambridge	Waipā	50	130	260
Bupa St Kilda Village	Waipā	99	99	99
Cambridge Resthaven	Waipā	83	83	83
Patrick Hogan Village	Waipā	20	93	185
Te Awa Lifecare	Waipā	40	40	40
St Andrews Cambridge Metlifecare	Waipā	62	62	62
Arvida Lauriston Park	Waipā	183	183	183
Total		**1,322**	**1,600**	**1,969**

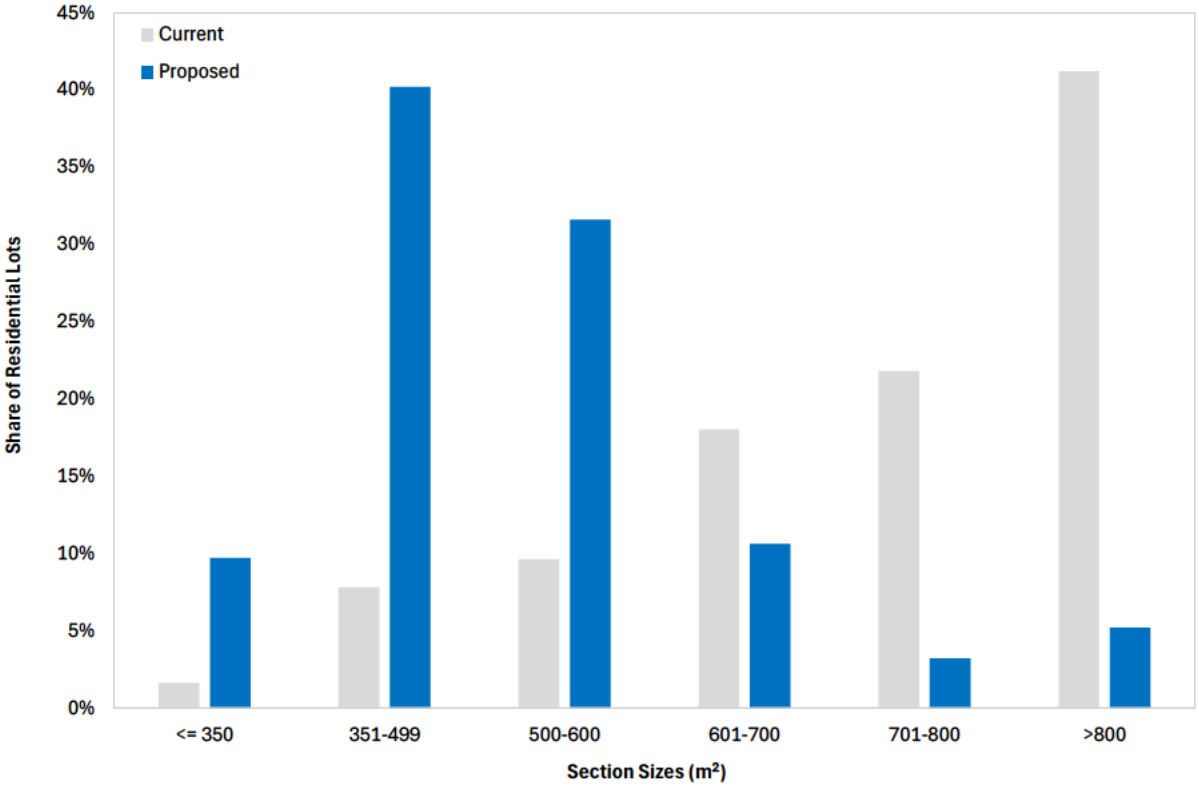
This translates to the following estimates of growth in capacity:

- 278 RV units over the short term; and
- 647 RV units over the medium-long term.

Appendix B: Anticipated Section Sizes

The chart below compares the section sizes envisaged by the latest masterplan for the proposal (as shown by the blue bars) with the existing housing stock in Matamata (the grey bars). It confirms that the proposal will provide a lot more smaller sections than are currently available, which will directly improve housing affordability and make ownership more accessible to a wider range of households than is currently the case in Matamata.

Figure 2: Proposed Residential Lot Sizes (blue bars) vs Current Matamata Lot Sizes (grey bars)



Appendix C: Role and Function of Proposed Commercial Area

Like virtually all residential developments of this scale, the proposal enables a small amount of supporting commercial activity so that future residents and visitors can access day-to-day goods and services without the need for private motor vehicle travel. Despite being standard practice however, it is still critical to ensure that any future commercial activity enabled onsite does not challenge the primacy, health, and vitality of the existing Matamata town centre.

To avoid such risks, the proposed commercial area has been designed to be as small as possible while ensuring that it is large enough to serve its intended role and function as a local convenience centre. For example, according to the latest plans, the commercial area will span less than one hectare, and much of that area will be devoted to open space and a proposed childcare centre. Consequently, only a small amount of land will be available for purely commercial uses. Overall, we expect it to yield about 1,350m^2 of commercial gross floor area (**GFA**). Based on other similar centres, we would expect it to contain a café, takeaways, a small superette, and a few convenience-focussed stores.

To put this in context, we used Core Logic's Property Guru to extract information on the scale and scope of the existing town centre, which is only about 1.5km from the site. In short, the existing town centre spans nearly 37 hectares, and accommodates more than 120,000m^2 of GFA, including more than 73,000m^2 of commercial GFA. Table 4 provides the details.

Table 4: Existing Town Centre Land and GFA by Use

Land Use	Properties	Land Area m^2	GFA m^2
Commercial	148	179,500	73,300
Industrial	55	90,600	32,700
Residential	78	56,700	10,100
Other	16	41,600	6,200
Totals	**297**	**368,400**	**122,300**

With the site's proposed commercial area spanning less than one hectare, and with retail and other commercial uses expected to span only about 1,350m^2 of GFA, there is virtually no chance of negative adverse effects arising on the existing town centre given its much larger size and pulling power.