

Summary Statement of Adam Thompson for Silverwood Corporation Limited (Future Urban Zones)

Mr Osborne has commented on my evidence in his rebuttal statement dated 5 July 2022. I note I received this statement on 28 June 2022.

Mr Osborne claims that the **supply and demand curve** in Figure 14 of my evidence has an error. This is not correct. Mr Osborne notes that the independent variable price is on the x-axis rather than the y-axis. This figure represents the existing land market which is supply-constrained and uncompetitive. In this market there are too few developers and they supply fewer houses to the market than demanded. This results in higher prices. I agree however with Mr Osborne that Figure 14 should represent a competitive land market in which there are many developers and they supply enough houses to the market to meet demand. This would result in lower prices with some affordable housing. This is because developers must compete to sell to all buyers, including lower income and first home buyers. I note that the NPS-UD requires a competitive land and development market. I illustrate the respective figures in Appendix 1.

Mr Osborne's view is that the supply of land as zoned by Council in a **district plan has a minor impact on the price of housing** and that high house prices are therefore inevitable:

"I would agree with Mr Thompson that the supply of houses is a factor (relative to demand) of prices, however Mr Thompson vastly underestimates the complexities of the property market ignoring the impacts of GDP (the other key factor in the ratios he has utilised, interest rates, speculation (based on the return on investment relative to other opportunities), access to capital, the costs of construction, etc). (para 12)

Mr Osborne's view is that other macroeconomic factors including GDP, interest rates, investor speculation and construction have more impact on house prices than the supply of zoned land. This is incorrect. GDP, interest rates and investor speculation are the same across NZ however the price of housing changes significantly across cities. Christchurch, for example, is NZ's second largest city and has an average household income that is similar to the other large cities. I recently completed a study of the impact of greenfield land on dwelling prices in NZ's main cities¹. The summary results are shown below. The average price of a dwelling in Christchurch was \$570,000, which is much lower than the other main cities (\$725,000-\$910,000). The explanation is the large quantity of 'zoned and serviced [greenfield development] land' which at 2,200 hectares enables 24 years of growth. Mr Osborne's view is inconsistent with the findings of this study and the economic law of supply and demand. This study confirms that Christchurch's efficient housing market is able to provide housing that is around \$250,000 less expensive than other cities which had a constrained supply of greenfield development land. The additional house price results in significant economic costs, particularly for lower income households and first home buyers.

Figure 1: Greenfield Development Land Supply for NZ Main Cities

Particular	Christchurch	Hamilton	Tauranga	Auckland	Wellington	Queenstown
Zoned Land (hectares)	2,440	340	280	4,230	510	180
Zoned and Serviced Land (hectares)	2,200	170	180	2,720	150	140
Zoned and Serviced Land Dwelling Yield	35,200	5,600	5,580	49,400	2,400	2,180
Greenfield Annual Housing Demand*	1,470	620	800	5,160	610	580
Years of Zoned and Serviced Land	24	9	7	7	4	4
Number of Parcels	1,090	40	20	370	70	20
Average Section Price	\$185,000	\$395,000	\$305,000	\$520,000	\$300,000	\$350,000
Average New House Price	\$570,000	\$770,000	\$725,000	\$935,000	\$900,000	\$910,000

Source: Auckland Council, Christchurch City Council, Hamilton City Council, Hutt City Council, Porirua City Council, Queenstown-Lakes District Council, Tauranga City Council, Wellington City Council, Urban Economics, Corelogic, Trademe
* includes latent demand in Auckland

Mr Osborne notes that I have not considered the **marginal costs and benefits** of infill and greenfield housing, for example increased infrastructure costs, reduced agglomeration economics and displaced rural production. He presents these costs and benefits in his Figure 1. His view is that house prices will be higher in Porirua as a result of his recommended supply constraint, however that this significant cost is offset by the benefits from intensification. I have quantified the cost of housing in a supply-constrained market to be approximately \$250,000 per household. It is correct that neither I nor Mr Osborne have quantified the marginal social benefits of infill housing, and to do so would be a difficult task, however for Mr Osborne's policy

¹ Greenfield Development Land in New Zealand's Main Cities 2020

recommendations to have a net economic benefit, these benefits would need to exceed \$250,000 per household. It is unlikely that the benefits identified by Mr Osborne would exceed this amount.

“...these social costs are not simply theoretical and in terms of land provision are often represented by increased marginal costs for infrastructure, reduce agglomeration benefits, and opportunity costs associated with replacing other land uses” (para 17)

“[greenfield land]... provision can have other costs (externalities) that are not as prevalent, other capacity options result in an economically efficient outcome where these costs are considered and prices for this [greenfield housing] option are higher with a lower quantity demanded than if they were not. As identified above, these costs are real with someone (generally the community inter-generationally) paying them and in turn slanting the market, inefficiently, towards greenfield development.” (para 19)

In my evidence, I raise concerns about the **quantity of affordable houses** enabled by the PDP. I refer to NZ having an affordability ratio of 11.2. Mr Osborne notes that this relates to Auckland. I have assessed Porirua and it has an affordability ratio of 8.2. This is considered to be ‘severely unaffordable’ in the Demographia report. Only 11 international cities are less affordable than Porirua. It is worth noting that Porirua has overtaken Auckland as the most expensive city in NZ to rent a house, with rents now at \$700 per week (based on Trademe data).

Figure 2: Porirua Affordability

TAs	Median House Price	Median Household Income	Income-Dwelling Ratio
Kapiti Coast	\$920,000	\$73,000	12.6
Porirua	\$845,000	\$103,000	8.2
Upper Hutt	\$860,000	\$94,000	9.1
Lower Hutt	\$850,000	\$92,000	9.2
Carterton	\$715,000	\$71,000	10.1
Masterton	\$665,000	\$65,000	10.2
South Wairarapa	\$938,000	\$81,000	11.6
Wellington City	\$1,030,000	\$124,000	8.3
Wellington Region	\$911,000	\$100,000	9.1

Source: REINZ, Stats NZ

Mr Osborne claims that there are **infrastructure efficiencies** from infill compared to greenfield. The Silverwood Group property is located near to established transport and other infrastructure, and commercial centres. The development of this site would not require additional public investment, as the provision of infrastructure within the development would be a private cost, borne by the developer, and then passed on to the consumer. Mr Osborne has identified that the site ‘makes economic sense as a natural expansion of Porirua City’ because it has these locational and infrastructure benefits and does not displace highly productive soil (section 7 of his report Porirua Future Urban Zone Economics Overview, April 2022).

Mr Osborne notes that he has relied upon the **NPDC for the ‘plan enabled capacity’** for 53,392 dwellings within the commercial zones and however that he did not verify these estimates (para. 32). Given this is an important input of his capacity model this data should be verified.

Mr Osborne’s refers to the **MDRS capacity modelling** and states that my concerns about the PDP capacity modelling have been ‘entirely negated’ by the additional capacity enabled by the MDRS (para. 24). Mr Osborne claims that I should have relied upon the MDRS capacity modelling however that I was ‘adamant’ that I required the PDP modelling data instead. At the time of preparing my primary evidence, the MDRS capacity modelling data was not available. I requested the MDRS modelling results and reporting from Mr Osborne on 29 June 2022 however was advised that the results were not able to be provided and no reporting had been completed.

Mr Osborne estimates that the **MDRS** would increase the realisable residential capacity to 25,911, from the 10,957 under the PDP (para 34). There is no reporting or other information available on the MDRS modelling. It is therefore not possible to understand or comment on the implications of this modelling for the PDP. I would highlight to the Panel that unless the MDRS modelling demonstrates there is sufficient housing,

including 5,900 large family dwellings priced under \$600,000, that the capacity should not be considered 'reasonably expected to be realised', as required under the NPS-UD. I note Mr Osborne has not estimated the price of dwellings that are demanded and whether this demand across different price range is able to be met by the PDP based on the capacity model results. This is a fundamental requirement of the NPS-UD. I have included this analysis in my evidence.

Mr Osborne does not agree with my view that there is a need for a large **number of greenfield developers** to ensure a competitive land and development market. If there are many developments underway then developers are incentivised to diversify their product in terms of type and price and this ensures some developers provide affordable housing. This is what has happened in Christchurch. Mr Osborne states that the current developer owns other sites so would not add to the competitive land and development market. This is not correct as each development would have a different market position. It is the number of developments more so than the number of developers that is critical.

I support a **balanced approach** that does not constrain either infill or greenfield housing, but rather enables both. This ensures affordable housing and also the benefits from infill housing. I note that new masterplanned developments are often significantly more intensive and include a large proportion of terrace houses. This is a viable option to increase the average density within a City.

Enabling additional FUZ land provides more options for consideration for future development. This flexibility is important as it is difficult to predict future changes. For example, I note that the **National Planning Statements** on highly productive soil and fresh water will potentially diminish the supply of FUZ land. I have completed a study in Auckland that found that over three quarters of FUZ land is potentially impacted by these National Planning Statements.

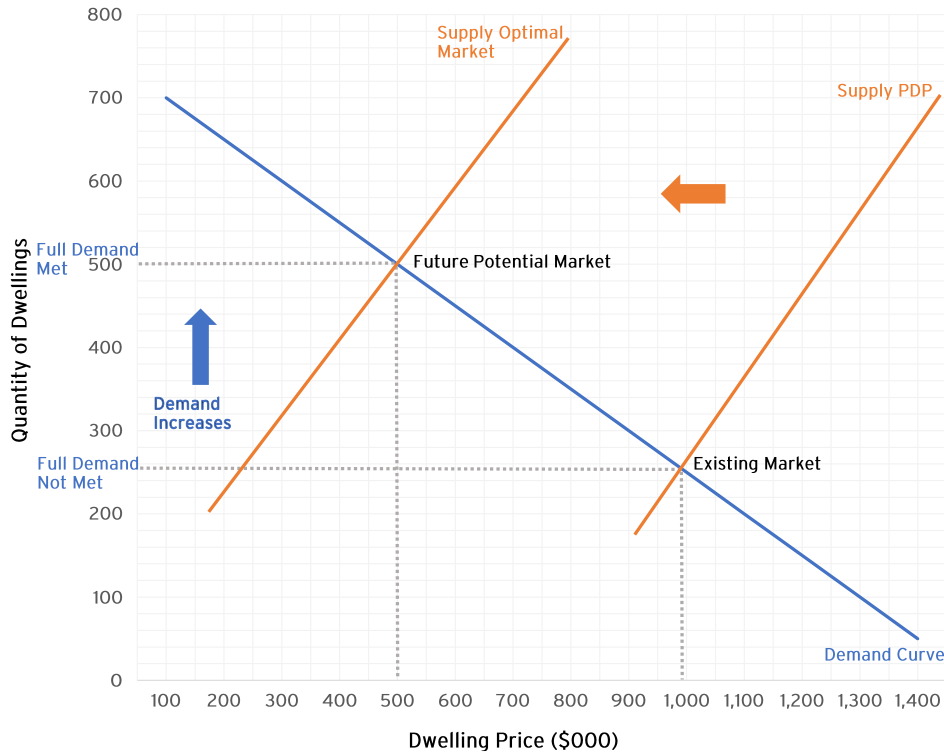
Adam Thompson

4 July 2022

Appendix 1: Supply and Demand Curves

Supply-Constrained Demand and Supply Curve

- There are too few developers, resulting in market concentration.
- Developers choose to reduce supply to a quantity below demand and increase the prices.
- Developers achieve a supernormal profit.
- This is an uncompetitive land and development market.



Un-Supply-Constrained Demand and Supply Curve

- There are many developers that compete strongly in the market.
- Developers choose to supply all potential consumers including low income and first home buyers.
- Developers achieve a normal profit.
- This is a competitive land and development market.

