BEFORE THE SELWYN DISTRICT COUNCIL

UNDER	the Resource Management Act 1991
IN THE MATTER	of Proposed Plan Change 78: East Rolleston
APPLICANT	Urban Estates Limited

STATEMENT OF EVIDENCE OF JOHN STACEY BALLINGALL

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Anthony Harper

1 Qualifications And Experience

1.1 My full name is John Stacey Ballingall.

1.2 I graduated from Massey University in Palmerston North with a Bachelor of Applied Economics and a Master of Applied Economics. I am a Chartered Member of the Institute of Directors.

1.3 I am currently employed as a Partner at Sense Partners, an independent economics consultancy, and have held that position since January 2019.

1.4 My previous work experience includes being the Deputy Chief Executive at the New Zealand Institute of Economic Research for 11 years, and the Deputy Director of the Economics Division at the Ministry of Foreign Affairs and Trade.

1.5 I have 23 years' experience in the application of economics to a wide range of business and policy issues, including regional economic development and land demand and supply analysis.

1.6 I have been involved in several relevant Environment Court cases and District Plan hearings, including:

(a) Lot 6 at Queenstown airport;

(b) Potential uses for industrial-zoned land in Upper Hutt;

(c) Stream 13 rezoning hearings in the review of parts of the QLDC District Plan;

(d) Stage 3 appeal on the Queenstown Lakes Proposed District Plan, looking at rezoning industrial-zoned land to business mixed use and/or residential use.

1.7 My role in relation to Urban Estate's Private Plan Change 78 (PC78) to develop approximately 750 residential sites has been to provide advice in relation to economics, and specifically housing demand and supply assessments.

1.8 In preparing this statement of evidence I have considered the following documents:

1.9 PC78 documentation;

(a) Greater Christchurch Partnership's July 2021 Greater Christchurch Housing Development Capacity Assessment; HDCA21

(b) Selwyn District Council's November 2020 Housing and Business Development Capacity Assessment Update;

(c) Economic evidence provided for other Plan Changes in Selwyn;

(d) Selwyn District Council's section 42A report for PC78; and

(e) The real estate evidence of Mr. Sellars.

2 Code Of Conduct For Expert Witnesses

2.1 While this is not a hearing before the Environment Court, I confirm that I have read the Code of Conduct for expert witnesses contained in the Environment Court of New Zealand Practice Note 2014 and that I have complied with it when preparing my evidence.

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

3 Scope of evidence

3.1 I have prepared evidence in relation to:

(a) Existing and projected demand for, and supply of, residential dwellings in Selwyn under a range of population and capacity assumptions;

(b) An assessment of the PC78 against the relevant RMA matters.

4 Summary

4.1 House and vacant section prices in Selwyn have surged in the past year. The demand for housing is clearly outstripping available supply and is putting further pressure on housing affordability and rental prices.

4.2 Actual population growth in Selwyn has been considerably higher than expected in previous housing demand and capacity assessments, driven in part by families being priced out of suitable homes in Christchurch City.

4.3 Actual housing capacity in Selwyn, in contrast, is likely to be considerably lower than expected in those assessments in the short- to medium-term.

4.4 Stronger-than-expected demand and lower-than-expected capacity point to dwelling shortages in Selwyn becoming more severe than current Council projections. Given uncertainties around both housing demand and capacity, I use a range of projections to estimate:

(a) An immediate-term (2021-2024) surplus of up to 526 dwellings, or a shortfall of up to 963 dwellings if more conservative capacity scenarios than used in the HDCA21 are adopted;

(b) A shortfall of between 2,089 to 6,920 dwellings for 2021-2031, when FUDAs are not included in the capacity estimates;

(c) A surplus of between 167 to 4,961 dwellings for 2021-2031, if all FUDAs are included in capacity at a density of 15hh/ha, unless the highest demand and lowest capacity scenario occurs, in which case there would be a shortfall of 1,213 dwellings;

(d) Significant shortfalls in the longer-term, with demand projected to outstrip capacity by between 8,498 and 19,369 dwellings by 2051.

4.5 Given PC78 proposes around 750 dwellings to be built, in my opinion, this is clear evidence that it will make a signification contribution to dwelling supply in Selwyn in the medium term (2021-2031).

4.6 I estimate the construction of the proposed dwellings will generate an estimated 225 jobs per year in the region, inject around $50 million of wages over into the local community to support economic well-being and directly generate around $100 million of value-added of GDP.

4.7 The economic costs are limited to the opportunity cost of GDP generated by the land under its current Rural Inner Plains zoning, which I estimate to be around $60,000 per year.

4.8 As such, rezoning the land to generate new housing for 750 families and inject $100 million of GDP into the local economy represents an efficient use of a natural resources.

5 Economics and the RMA

5.1 The Resource Management Act 1991 (the **RMA**) directs decision-makers to explore important issues such as:

(a) Section 5's reference to enabling economic well-being for the community;

(b) Section 7(b)'s reference to the efficient use and development of resources; and

(c) Specifically when considering a plan review, section 32's consideration of alternatives, assessment of costs and benefits.

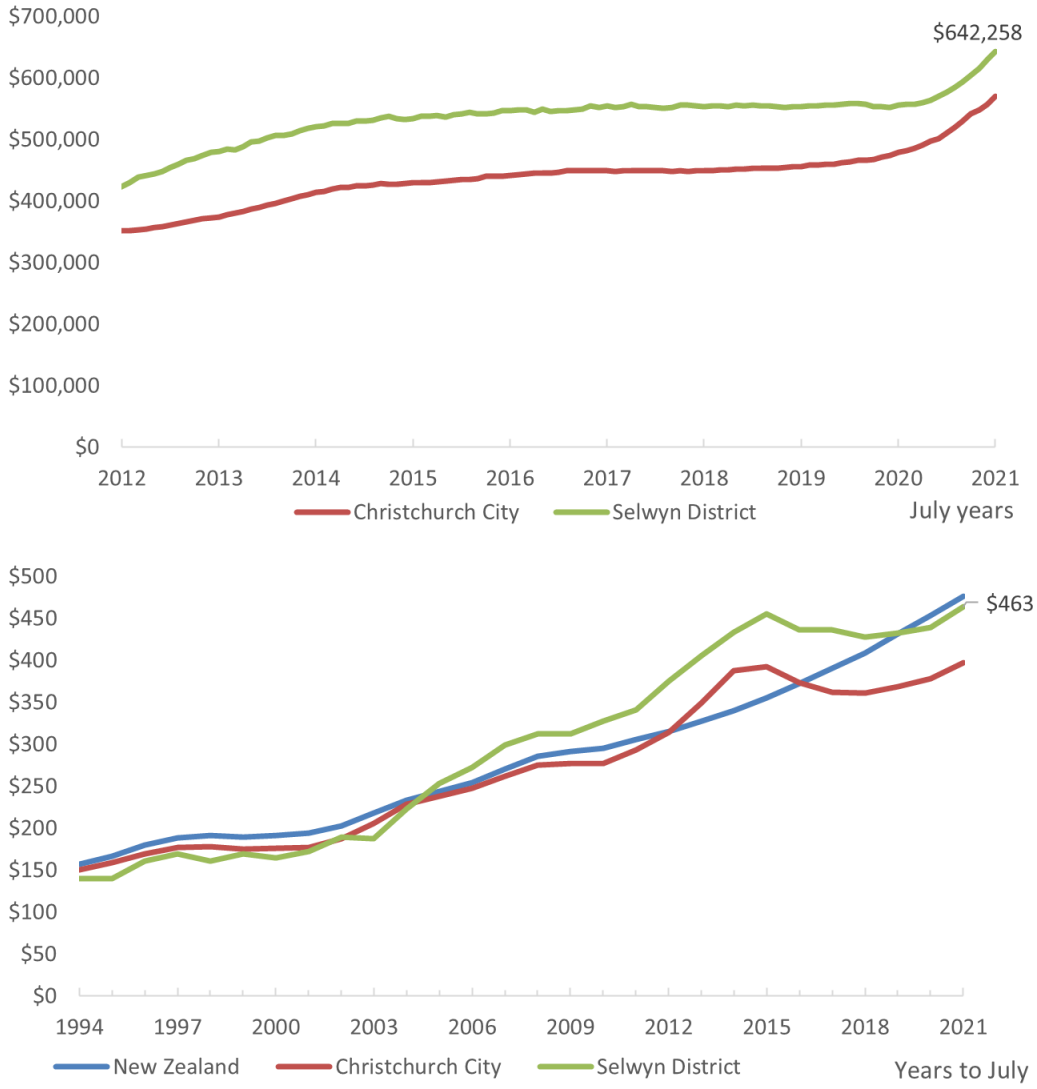
5.2 Economics tells us that scarce resources (in this case land in Selwyn) are allocated efficiently – and thus in a way that maximises community well-being – when the marginal benefits of an additional unit of activity equal the marginal costs, after accounting for externalities (or external effects).

6 Context: Housing affordability is under considerable pressure in Selwyn

6.1 Rising house prices and rental prices in Selwyn indicate the current balance between the demand and supply of housing is out of kilter (see Figure 1). The

median house price has risen 16% in the past year, and rents have increased by around $25 per week.[1]

Figure 1 Median house prices and mean weekly rentals



Source: REINZ; https://www.tenancy.govt.nz/about-tenancy-services/data-and-statistics/rental-bond-data/

6.2 Both measures of housing affordability are at their highest (i.e., worst affordability) level on record.

6.3 The evidence of Gary Sellars[2] in support of this Plan Change confirms the trend in rapidly increasing house prices. This includes a finding that the price of sections of similar size and within the same subdivisions have seen price increases of more than 105% in the year to August 2021.

[1] Note the median house price in Christchurch City will be for a smaller house than that for Selwyn.
[2] Plan Change 78: 'Statement of Evidence of Gary Russell Sellars on Behalf of Urban Estates Limited'. 18 October 2021.

7 The HDCA outlook indicates medium-term and long-term housing shortages

7.1 The *Greater Christchurch Housing Development Capacity Assessment* (HDCA21) bases its housing demand estimates on population growth projections using Statistics New Zealand's (StatsNZ) 2018 'High' series, adjusted using insights from an independent demographer.

7.2 Those demand estimates, along with its estimates of housing capacity are replicated below in Table 1.

Table 1 HDCA21 estimates of Selwyn housing demand and capacity

	2021-2024	2021-2031	2021-2031		2021-2051	
	No FUDAs		FUDAs 15hh/ha	FUDAs 12.5hh/ha	FUDAs 15hh/ha	FUDAs 12.5hh/ha
Demand with NPSUD buffer	2,714	8,541	8,541	8,541	25,338	25,338
Capacity	4,578	6,452	13,502	12,208	13,502	12,208
Balance	**1,864**	**-2,089**	**4,961**	**3,667**	**-11,836**	**-13,130**
Balance excl. Darfield & Leeston	1,082	-4,745	2,305	1,011	-14,492	-15,786

Source: HDCA21, pp6-7.

7.3 The HDCA21 projections indicate a short-term (2021-2024) surplus of capacity and a medium-term shortage of almost 2,100 dwellings when the Future Urban Development Areas (FUDAs) are not considered.

7.4 The projected shortage widens to 11,836 to 13,130 by 2051, even after FUDAs at a density of 15hh/ha are incorporated into the capacity estimates.

7.5 The HDCA21 estimates include 2,656 plan-enabled dwellings in Darfield and Leeston. However, these areas fall outside of the Greater Christchurch Urban Area as defined in Our Space.[3] Excluding these from the balance results in considerably worse medium- and long-term dwelling shortages for urban areas such as Rolleston.

7.6 The HDCA21 notes the medium-term shortage can be provided for using FUDAs, though we note the view of another economist[4] that they should not be included under the NPSUD as they are not specifically zoned for housing and thus unable to be assessed as 'plan enabled'.

[3] Greater Christchurch Partnership. 2018. *Our Space 2018-2048.* Figure 1, pp. 2.
[4] Plan Change 73. 'Statement of Evidence of Fraser Colegrave (Economics)'. 13 September 2021.

7.7 Mr. Sellars' evidence refers to a recent subdivision consent granted for a 970-allotment subdivision under the Covid 19 fast track legislation, and within a FUDA. This would qualify as plan enabled, short-term, capacity.

7.8 Mr. Sellars also refers to a significant area of FUDA identified land (173.3230 ha) which is not subject to a plan change application, and therefore which he considers is long term potential land. As such, this area of land would significantly reduce the predicted medium-term surplus of land identified in the balance line of the HDCA analysis above.

8 Population growth in Selwyn has been consistently higher than Council expectations

8.1 Unfortunately the 'High' population growth series used in the HDCA21 has already proven not to be 'high' enough. As Selwyn District Council itself recently noted, "population growth has outstripped the official Statistics NZ projections and Selwyn's own projections… *It is clear that growth in the district has recently exceeded all reasonable expectation*".[5]

8.2 In 2018, StatsNZ projected Selwyn's 2020 population to be 68,500. The latest estimate of actual population in Selwyn for 2020 is 69,700 – some 1,200 or 1.75% higher than projected.[6] This is equivalent to an *additional* forecast demand of 414 dwellings between 2018 and 2020, using the HDCA21 estimate of 2.9 people per dwelling.[7]

8.3 While the HDCA21 does go on to adjust its projections to reflect a higher 2020 base year, it still uses the same 'High' *growth* rates as the 2018 projections. These growth rates have been shown to be consistently conservative over the past 20 years when compared to actual population growth in Selwyn (see Appendix A).

9 More people than expected means more housing demand than expected

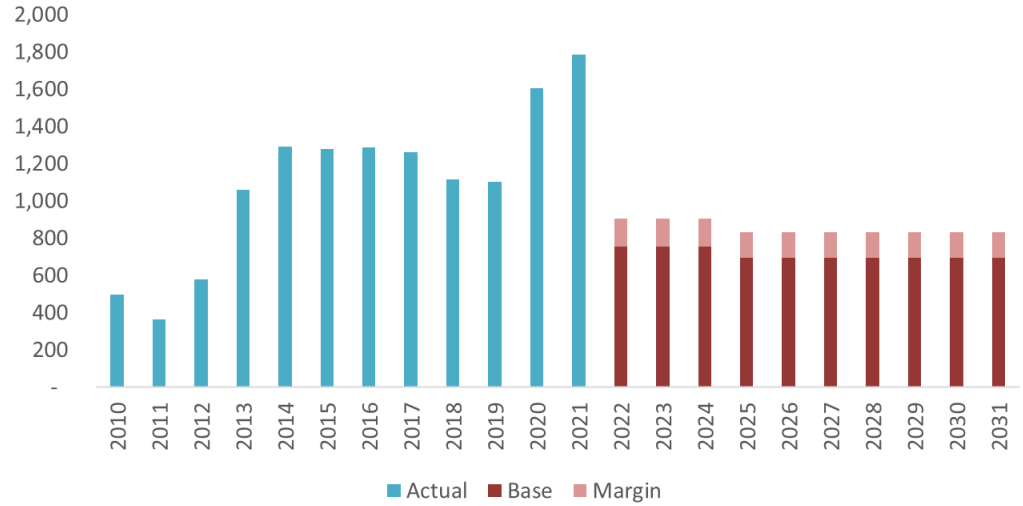
9.1 Figure 2 shows Selwyn residential building consents totalled 1,782 in the year to June 2021, more than double the 854 dwellings per year implied between 2021 and 2031 in the HDCA21.

9.2 Consents per 1000 residents in Selwyn have been on average 2.9 times as high as those for Christchurch City since 2011. Selwyn has consented 25.1 dwellings

[5] Baird, B. 2021. 'Growth Planning in Selwyn District'. Appendix 7 of 'Section 42A Report: Report on submissions relating to Plan Change 78: Urban Estates Limited request to rezone approximately 63.3 hectares of Rural (Inner Plains) Zone land at Lincoln-Rolleston Road and Selwyn Road in Rolleston to a Living Z Zone', 13 October 2021. My emphasis.
[6] HDCA, 2021, p.17
[7] HDCA, 2021, p.18

per 1000 residents in the year to March 2021, much higher than Christchurch (7.7), Auckland (10.2), and New Zealand as a whole (8.0).

Figure 2 Consenting trends: Selwyn



Source: StatsNZ for 2010-2021, HDCA21 projections for 2022-2031

10 Given population growth is highly variable due to migration swings, there is value in using a range of projections when considering housing demand

10.1 It is difficult to accurately forecast future population growth, as evidenced by the consistent underestimation of population growth by StatsNZ.

10.2 Population growth projections are based on views over several decades about births, deaths and migration. Birth and death rates are generally stable over long periods of time. Migration – both international and internal – can change rapidly and frequently, causing significant swings in population when compared to projections.

10.3 Migration can be impacted by events which are impossible to predict, especially over the longer term. International migration is primarily affected by immigration policy settings and economic prospects in New Zealand compared to the rest of the world, and clearly the COVID-19 pandemic is currently having a major impact.

10.4 Internal migration (i.e. within New Zealand) is also challenging to project with confidence. A recent example is the shift in internal migration in Canterbury caused by the 2011 earthquakes, whereby population rapidly moved away from Christchurch City into surrounding suburbs, including Selwyn. A current driver of internal migration into Selwyn is the lack of availability of affordable housing in other parts of Canterbury.[8]

[8] This is also noted in Appendix 7 of the s42A report, para 67.

10.5 Given the inherent uncertainty of population projections, especially with respect to international and internal migration, I believe it is helpful to use a range of projections rather than relying on a single point estimate.

10.6 I also believe the most appropriate course when considering future dwelling capacity is taking a least regrets approach. In my view, it is better to have a surplus of appropriately zoned land for housing than a deficit. This is recognised in the NPS-UD and embedded in the form of the 20% medium term and 15% long term demand buffers.

11 Sense Partners has developed its own model for projecting population at the regional and territorial authority levels.[9]

11.1 Our model provides probabilistic[10] population estimates for Selwyn based on a Monte Carlo simulation, where key inputs such as fertility, mortality and immigration are varied randomly and repeatedly (500 times) to produce distributions over future values, rather than point estimates. This approach also helps to emphasise the considerable uncertainty that exists about the future and the extent to which this uncertainty grows the further out we look.

11.2 I use a common starting point of 69,700 for Selwyn's population in 2020, based on Stats NZ's latest official estimate. I then convert these population projections to dwelling demand using projections of people per dwelling. I include a 20% buffer for the 2021-2031 period and a 15% buffer for 2031-2051, as per the NPSUD.

11.3 The probabilistic projections for the number of additional dwellings demanded in Selwyn out to 2051 are shown in

11.4

11.5

11.6 Figure 3 and compared to those used by the HDCA21.

11.7 Given historical trends and current consenting demand, and our preference for a least regrets approach, it seems unlikely our P50 or P25 projections are relevant for this analysis. I focus therefore on the P75 and P95 projections to provide a range of realistic demand estimates (see Table 2 below).

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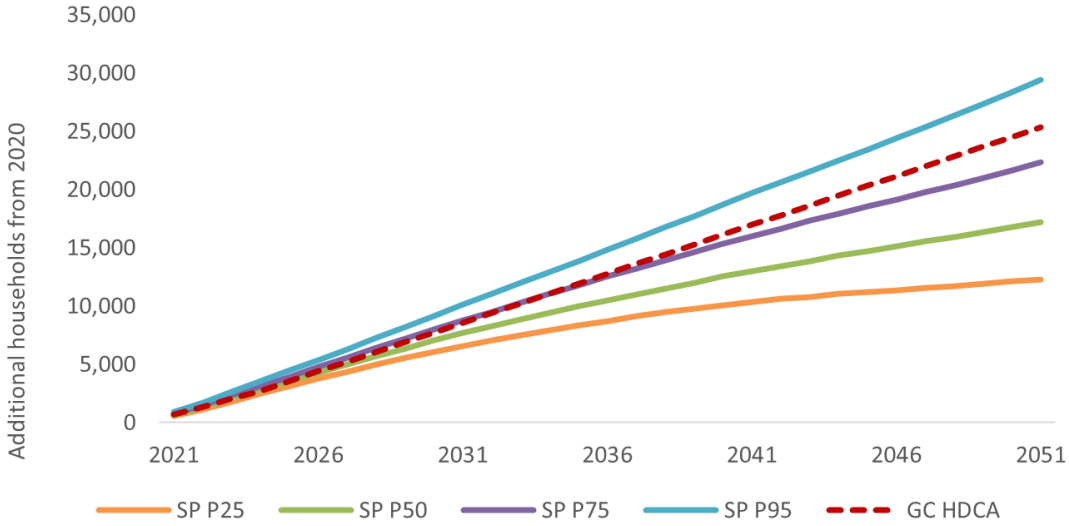
[9] This model was developed for Greater Wellington Regional Council (2021). Sense Partners' expertise in analysing and predicting migration trends has been called on by central government agencies including the New Zealand Treasury (for the 2018 Budget and Economic Fiscal Update) and StatsNZ (who we assisted to develop models for estimating migration in 2019).

[10] In the discussion that follows, SP P50 (for example) indicates there is a 50% probability that the actual population is lower than the Sense Partners (SP) projected population. Therefore SP P95 may be seen as an upper bound.

Figure 3 Projections of additional dwellings required in Selwyn (including NPSUD buffer)



Source: Sense Partners

Table 2 Range of Selwyn household demand projections, including NPSUD buffer

Demand with NPSUD buffer	2021-2024	2021-2031	2021-2051
HDCA21	2,714	8,541	25,338
Sense Partners P75	3,118	8,743	22,304
Sense Partners P95	3,525	10,123	29,386

Source: Author's calculations based on Sense Partners' population model

12 Capacity is also likely to be lower than projected, especially in the short-term and medium-term

12.1 As economic experts for other Plan Changes have pointed out[11], and as I have confirmed with my Sense Partners colleague and respected housing expert Shamubeel Eaqub and with Urban Estate Limited, the HDCA21 assumption that 75% of greenfields sites will be available for residential development is optimistic. I use a conservative assumption, based on evidence from Fraser Colegrave submitted in support of Plan Change 73, that 60% of existing greenfields sites is available for housing.

[11] Plan Change 73. 'Statement of Evidence of Fraser Colegrave (Economics)'. 13 September 2021. Paragraph 38.

12.2 Evidence from Gary Sellars[12] in support of this plan change also indicates that capacity within Rolleston is considerably less than anticipated by Selwyn District Council in the short-term and medium-term.

12.3 In particular, Mr Sellars refers to a significant area of FUDA identified land (173.3230 ha) which he considers is long term potential land. As such, this area of land would significantly reduce the predicted medium term surplus of land identified in the balance line of the HDCA analysis above.

12.4 Using the revised assumptions on development outside of Rolleston and the assessment by Gary Sellars of capacity within Rolleston, adjusted capacity projections are shown in Table 3 and compared to those in the HDCA21.

Table 3 Housing capacity projections: Selwyn

Period	**2021-2024**	**2021-2031**	**2021-2031**		**2021-2051**	
	No FUDAs		FUDAs 15hh/ha	FUDAs 12.5hh/ha	FUDAs 15hh/ha	FUDAs 12.5hh/ha
HDCA21 capacity	4,578	6,452	13,502	12,208	13,502	12,208
Adjusted capacity	3,240	5,505	11,211	10,250	13,806	12,319
Adjusted capacity excl Darfield & Leeston	2,562	3,203	8,909	7,948	11,504	10,017

Source: HDCA21, author's calculations

13 Implications for demand/supply balance

13.1 The sections above intend to demonstrate that reasonable changes in assumptions can lead to non-trivial changes to either demand or capacity estimates. Both series are challenging to estimate over the medium-long term, which points to the value of using ranges to account for uncertainty.

13.2 Using these demand and capacity ranges, several potential combinations can be considered, generating a range of housing surplus or shortfall estimates. We show in Figure 4 the results for three sets of demand projections and three sets of capacity estimates (so nine potential balances):

(a) Demand: HDCA21; SP P75; SP P95;

(b) Capacity: HDCA21; Adjusted; Adjusted excluding Darfield & Leeston.

13.3 These estimates suggest:

[12] Plan Change 78: "Statement of Evidence of Gary Russell Sellars on Behalf of Urban Estates Limited. 18 October 2021.

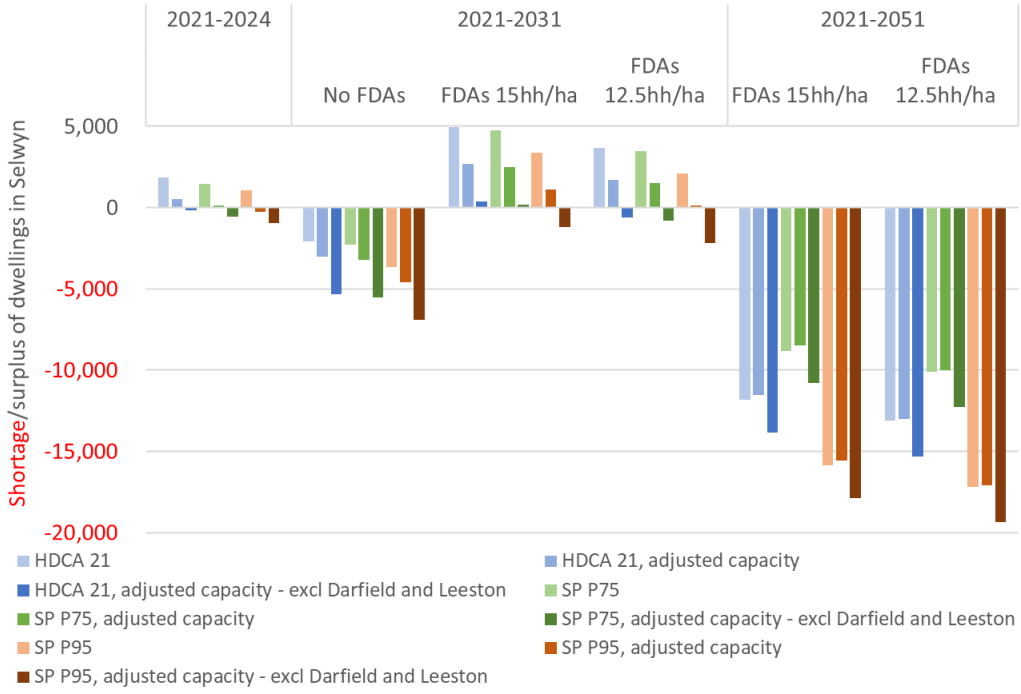
(a) An immediate-term (2021-2024) surplus of up to 526 dwellings, or a shortfall of up to 963 dwellings if more conservative capacity scenarios than used in the HDCA21 are adopted;

(b) A shortfall of between 2,089 to 6,920 dwellings for 2021-2031, when FUDAs are not included in the capacity estimates;

(c) A surplus of between 167 to 4,961 dwellings for 2021-2031, if all FUDAs are included in capacity at a density of 15hh/ha, unless the highest demand and lowest capacity scenario occurs, in which case there would be a shortfall of 1,213 dwellings;

(d) Significant shortfalls in the longer-term, with demand projected to outstrip capacity by between 8,498 and 19,369 dwellings by 2051.

Figure 4 Selwyn housing surplus or shortfall estimates



Source: HDCA21, author's calculations

13.4 In summary, under a range of reasonable assumptions reflecting the inherent uncertainty around demand and capacity, I expect Selwyn to face consistent and material housing shortages *without* FUDAs for 2021-2031.

13.5 I also expect housing shortages to worsen for the 2021-2051 period, even when FUDAs are brought on- stream.

13.6 Given this, the around 750 dwellings that would be developed under proposed PC78 would make a significant contribution to meeting this projected shortfall and ameliorating housing affordability challenges.

14 Economic benefits from construction

14.1 The construction of around 750 dwellings planned under PC78 will generate substantial economic activity that will promote community well-being.

14.2 This proposed development will support an estimated 225 Full Time Equivalent (FTE) jobs per year for a period of four years.[13]

14.3 At an average construction income of $55,805 per annum, this represents $12.5 million in wages per year for four years being injected into the local community.

14.4 In addition, a housing construction project of this scale will require the purchase of around $105 million per year of intermediate inputs – largely construction materials, plumbing services, electrical installation work, etc.[14] It is reasonable to expect most of these inputs will be sourced locally, providing a further boost to the local community.

14.5 The direct impact of this development on the local economy will be around $25 million per year of value-added (or GDP), or $100 million over a four-year construction period.[15]

15 Economic costs from Rezoning of PC78 Land

15.1 The only quantifiable economic costs associated with the proposed Plan Change is the potential loss of output from existing uses of the land in question. As I understand it, the 63.3 hectares of land covered by PC78 is currently zoned Rural Inner Plains. It comprises farmland and rural residential holdings.[16]

15.2 In the Canterbury region, GDP per hectare for all agricultural land types is around $940 per year.[17] This suggests, even if all the existing rural-zoned land is used for farming purposes, its GDP contribution would be around $60,000 per year.

15.3 This is – by an order of magnitude – tiny compared to the potential GDP boost associated with constructing the dwellings proposed under the proposed Plan Change.

16 Conclusion

[13] Based on the national average over the past decade of the ratio of dwellings to construction sector employees of 1.20 and a four-year construction period,
[14] Derived from Stats NZ's latest input output tables.
[15] Derived as per the footnote above.
[16] Urban Estates. 2021. '*Request for a Change to the Selwyn District Plan Selwyn Road and Lincoln Rolleston Road, Rolleston'*, December 2020.
[17] Calculated using StatsNZ 2019 regional GDP by industry data and the Agricultural Census 2019. This may underestimate the GDP per hectare of *productive* land, but even if my estimate is out by a factor or 10 or 100, the opportunity cost of the land in its current use is still very small.

16.1 Housing affordability is worsening in Selwyn. In part this is because the demand for housing – both to purchase and rent – has been far stronger than implied by previous population projection exercises.

16.2 My evidence demonstrates that under a range of plausible assumptions for housing demand and capacity, recognising the inherent uncertainty in using point estimates for either, Selwyn will face a shortfall of between 2,089 and 6,920 dwellings by 2031 if the FUDAs are not zoned.

16.3 A significant dent in this shortfall would be made by approving PC78, releasing around 750 new dwellings onto the market.

16.4 As well as reducing housing affordability pressures, the construction of these dwellings over four years would generate around $100 million of GDP and support 225 FTE jobs per year. This will promote local community economic well-being.

16.5 The alternative use of the PC78 land in question is for rural activities or lifestyle properties, which generate very little economic output. As such, rezoning the land to generate new housing for 750 families and inject $100 million of GDP into the local economy represents a much more efficient use of urban land, a scarce natural resource.

John Stacey Ballingall

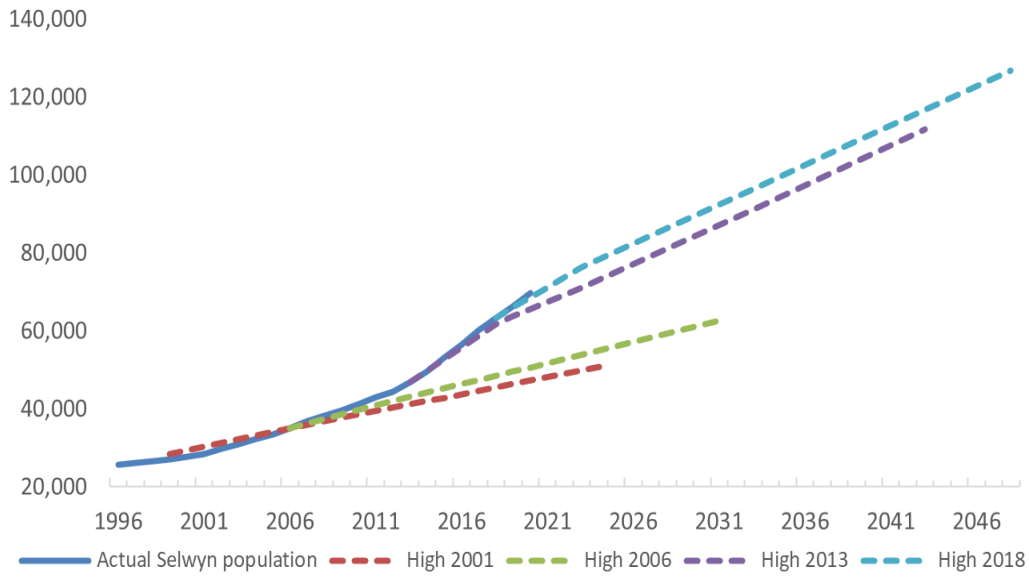
19 October 2021

Appendix A Comparison of projected population against actual population

2 Figure 5 shows the actual path of Selwyn's population growth (blue line) compared to a range of StatsNZ's population projections since 2001, all of which used the 'High' series assumptions.

3 All recent projections have consistently underestimated how fast Selwyn's population would grow, and hence how many dwellings will be required.

Figure 5 StatsNZ High population projections over time vs actual population: Selwyn



Source: Author's analysis of StatsNZ population projections