



# Auckland **Economic** Quarterly

Chief Economist Unit



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## Greenfield development that works for Auckland

- Auckland has a housing shortfall. Despite huge upzoning in existing urban (brownfield) areas through the Unitary Plan, pressure to develop previously undeveloped (greenfield) land is strong.
- But there are huge infrastructure costs in opening up greenfield land, as well as several other external costs. These costs are routinely ignored by many proponents of large-scale greenfield development.
- When greenfield infrastructure is announced, land there receives huge windfall gains, yet there is currently no commensurate requirement and little incentive for landowners to rapidly deliver land to the retail market to boost housing supply.
- If central and local government commit to accelerate greenfield infrastructure at a developer's request, even if funded by a targeted rate or infrastructure levy on that land, the developer agreement should require the land to be sold on the retail market within a set time of the infrastructure being provided.

### Auckland needs more houses, fast

Auckland's housing shortfall is [at least 46,000 dwellings](#), the result of many years of very few new dwellings being built in the wake of the Global Financial Crisis, and over the last six years, of exceptional population growth.

In fact, only in late 2018 did annual new dwelling consents begin to balance recent population growth, not yet eating into the shortfall. Even so, it will likely take up to two years for most of the newly consented dwellings to be delivered.

### The Unitary Plan and the missing pot of money

Given the housing shortfall, a planning response was needed to allow a surge in development opportunities to help stimulate the delivery of more housing.

The Unitary Plan, which became largely operative in November 2016, rezoned the city to allow for one million **additional** dwellings just in existing residential areas, or around 20 times the current shortfall and almost twice as many dwellings as currently exist in Auckland.

The bulk of these new development opportunities are in brownfield areas. The separate Future Urban Land Supply Strategy (FULSS), allows for the staged

development of around 140,000 greenfield dwellings over 30 years.

Some have argued that this planning response is from an ideological council opposed to greenfield growth. Almost always ignored in the discussion are other, pragmatic reasons for favouring a compact city, not least of which is that providing infrastructure for greenfield land is eye-wateringly expensive, requiring a staged approach to ensure adequate funding.

The FULSS estimated the cost of council-provided infrastructure and central government-funded transport infrastructure (i.e. not schools, healthcare, police stations or other central government services) at \$21 billion, or roughly \$140,000 per dwelling. Developers currently contribute less than one third of this figure on average through development contributions. The ratepayer and the taxpayer are massively subsidising new development.

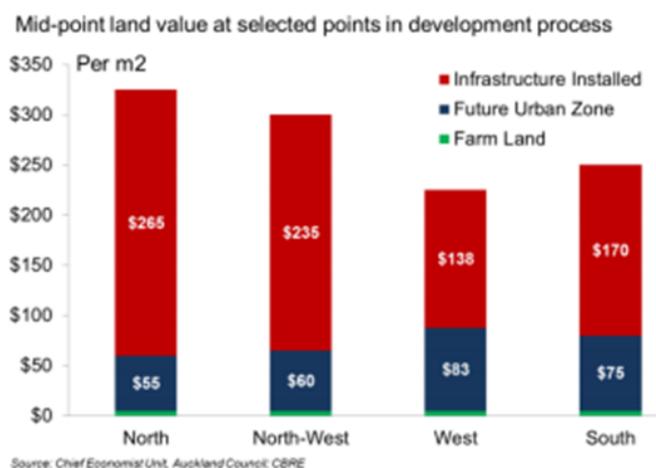
If those pushing for faster development in greenfield areas chip in the \$13 billion cost to ratepayers and \$8 billion cost to taxpayers for this infrastructure, development could happen a lot faster. This seems unlikely.

### Land is not housing, and the difference matters

Yet central and local government face constant pressure to accelerate the delivery of infrastructure in greenfield areas, with big subsidies to land owners, or seen from the other side, at great cost to taxpayers and ratepayers. The rationale is that this infrastructure will help “live-zone” more land and thus speed up the delivery of housing.

When the council expresses concern at this approach that would require much larger rates increases, this is usually labelled as “anti-growth” ideology. In reality, it is often simply the absence of funding, and an acknowledgement that it is unreasonable for existing ratepayers to pay for windfall gains to land owners.

### How zoning and infrastructure raise land values



As [this work](#) has pointed out, a huge proportion of the difference in land prices in residential and rural areas is explained by the value of infrastructure, itself a function of the cost of infrastructure, something comparisons of

the price of land in urban and rural areas almost never account for accurately.

Simply zoning for more development (upzoning) with the promise of coming infrastructure, yields [significant relative land value gains](#) to the owners of upzoned land, without necessarily delivering much more housing. In fact, the 154 Special Housing Areas established in Auckland, expected to be able to deliver over 63,000 dwellings, only consented 5,527 dwellings in the 45 months to June 2017, even as land owners enjoyed the windfall gain of being upzoned ahead of the Unitary Plan.

What people value is not **land**, but the ability to turn land into **housing** in the short- to medium-term. This means that when houses are under-supplied, the value of land with a house already on it, or with infrastructure already in place, or with soon-arriving infrastructure, will rise relative to land without. Infrastructured land is a placeholder for the value people place on being housed.

### But wait, there's more (costs of greenfields)

Economists love choice. Choice is good, on two conditions:

- we understand all the costs and benefits associated with a choice
- these benefits and costs are accurately priced.

The problem is that in the “release/don't release more greenfield land for development more quickly” debate, apples are seldom, if ever, compared with apples as we [pointed out here](#). Urban land close to jobs, schools, coffee shops and hairdressers is often compared to farm land 40 km from the CBD.

Inadequate allowance is made for the infrastructure **cost** borne by the ratepayer and taxpayer, nor its **value** in the land price for land that has or is about to have infrastructure. And apparently not a single study has been done on land price differentials inside and outside the existing urban boundary using data from **after** the biggest shake-up in zoning rules in New Zealand ever – the Auckland Unitary Plan.

But even beyond these obvious market pricing and methodological problems, there is little discussion or pricing of the negative externalities that expansive growth produces. These costs include:

- reduced financial viability of public transport relative to compact development, which means less choice and higher transport costs for everyone (not just the new residents in distant developments)
- the increased congestion costs from adding housing far away from the city and jobs, with limited or no viable public transport, which puts more strain on the entire transport network, affecting new and existing residents

- more carbon emissions for these two reasons
- piecemeal development leading to social isolation and a lack of resilient communities
- sub-optimal use of existing infrastructure, and an array of new infrastructure that will require maintenance and operational expenses for years before the new infrastructure is used anywhere close to its capacity
- the poorer value for money likely to be achieved on new infrastructure given the price inflation we're currently experiencing on the back of massive demand for construction workers.

This means the more housing we can get close to jobs and other amenities, reducing travel times and using existing infrastructure, the better, as we highlighted in two previous reports [here](#) and [here](#).

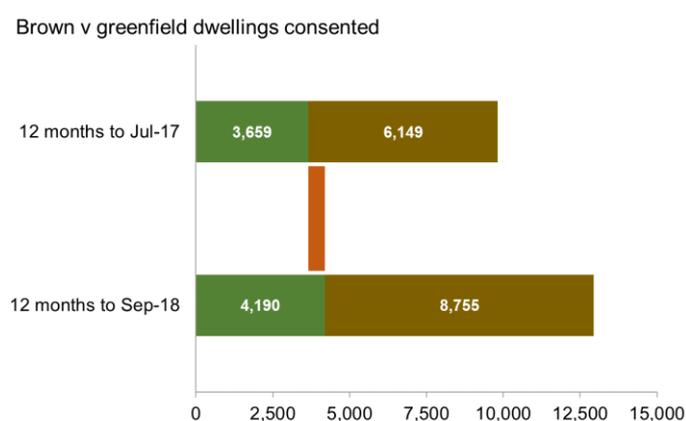
### Being careful what we wish for

There's another cost that gets little coverage, already alluded to in this paper. In addition to the \$21 billion estimate of infrastructure costs in the FULSS, immediately opening up greenfield land would trigger literally billions of dollars in **additional** costs for central government (at a time when there are too few workers to go around).

The estimated 140,000 new dwellings in FULSS areas would imply around 70,000 new school-aged students, or about 140 primary, intermediate and high schools. That's \$3 billion in capital works, conservatively. Add police stations, healthcare centres, fire stations and you start to grasp the central government financial exposure this would generate.

To which the astute reader will surely respond, "But obviously central government won't build all those schools and hospitals in one go. They'll stage it." That is exactly the point. Staging makes sense because there's no way all that demand will materialise overnight. Staging makes sense because central government can't afford to chip in the \$3 billion for new schools right this minute.

### More than 80% of dwelling consent growth is brown



Source: Chief Economist Unit, Auckland Council; Statistics New Zealand

So why would anyone expect local government to press ahead with large-scale infrastructure delivery in greenfield areas when demand on that infrastructure may take years to eventuate? Plus, all the evidence over the last 15 months is that new development chooses brownfields over greenfields almost 70% of the time (and accounts for more than 80% of growth in consents in the last 18 months) even though a lot of both types of development have been made possible.

### Give a little?

There's one final problem with the pressure being exerted to accelerate greenfield land delivery. Announcing that infrastructure will be arriving early, typically funded at great cost to the taxpayer or ratepayer, leads to surging land prices and a generous windfall gain in value for the property owner, as we have [previously shown](#).

But there is seldom, if ever, any commensurate requirement on the land owner to bring that land to the retail market in a timely manner. Instead, they receive the windfall gains, but can hold onto the land for as long as they like as they watch land values climb.

To reiterate: the landowner gets the profits that earlier infrastructure brings, pays a fraction of the full cost of infrastructure largely funded by others, and selects a development timing of their choosing. In return, central and local government get no extra certainty that much additional **housing** will get built quickly. Where is the win for Auckland in this?

### Toward a better model

One exciting improvement on the status quo is the new Milldale development, where central government and the Auckland Council family have stumped up more than \$80 million to deliver infrastructure sooner than would otherwise be the case. It will enable more than 8,000 new homes, but is part-funded by a targeted rate-like infrastructure levy.

Targeted rates and infrastructure levies have many advantages over development contributions. They can be levied immediately, provide certainty over when the costs for infrastructure will be recouped, and provide some incentive to the landowner to bring land to market sooner. But at roughly \$650 to \$1,000 per new dwelling per year, the incentive value is limited.

What central and local government need is certainty about how much infrastructure will be required, when, and how it will be funded. Milldale is a strong step in the right direction. But in the case of future private Unitary Plan change requests, there should be a contractual obligation to deliver the land to the retail market within a set time limit.

Here's how that could look:

- central and local government accelerate infrastructure provision, promising to deliver it all within **X** years, with penalties for not doing so
- the accelerated infrastructure is covered by a targeted rate (as per Milldale arrangement) on the benefitting land
- the developer is required to on-sell the entire development to the retail market within say **X+4** years, with penalties for failing to do so (e.g. immediate recouping of the cost of the infrastructure).

This approach or versions of it have been used in developments in Canada and the US state of Washington. But overseas it is much more common to require the developer to pay for and deliver **all** the infrastructure for Stage One before they are allowed to continue to Stage Two, for instance.

In other words, unlike in many parts of New Zealand, developers overseas are themselves required to deliver large bulk infrastructure if they want their development to proceed. Yet in New Zealand today, the authorities take the vast bulk of risk on bulk infrastructure provision and timing and potential infrastructure over-supply, with only a partial contribution by developers.

## In summary

A real-world, post-Unitary Plan analysis of the impact of restricting growth in greenfield areas based on infrastructure and external costs listed here has yet to be done. The discussion on whether the existing urban boundary artificially inflates land prices would benefit from a methodologically-sound, agenda-neutral analysis.

Meanwhile, infrastructure is expensive, and staging of greenfield growth is inescapable. If we want more actual housing delivered, a requirement to deliver land to the retail market within a strict timeframe must be applied to developer agreements. Only then can central and local government confidently provide infrastructure knowing that it will be used to support real housing growth in the short to medium-term. Yet even then, we would not be overcoming the external costs of this type of expansive development not captured in the market price of land.

# Auckland Economic Commentary

David Norman

Chief Economist, Chief Economist Unit

- House prices remain flat, with supply and demand broadly balanced, while affordability has recovered significantly in the last year and is likely to continue to through 2019.
- Growth in building activity is likely to be more mild in 2019 after an exceptional 2018, but of particular interest is the remarkable amount of non-residential work still in the pipeline.
- We don't share the view that the unemployment rate is set to rise sharply; still modest wage growth and slowing migration, accompanied by still steady economic growth, is expected to create opportunities.
- After a dip, guest nights are recovering, while retail trade continues to truck along at 4% annual growth.

## Housing – more, and more affordable

We have been tracking the extraordinary rise in building consents over the last 17 months as the Unitary Plan began to have an impact on what and where new dwellings are being delivered. Since new dwellings consented began to soar in August 2017, we've seen an astonishing 28% increase in the annual figure, and 18% in the latest year. As we said a few months ago, we're now consenting new homes at a gross rate commensurate with population growth. In net terms, of course, some of these new homes will replace old ones being demolished for a larger number of new ones.

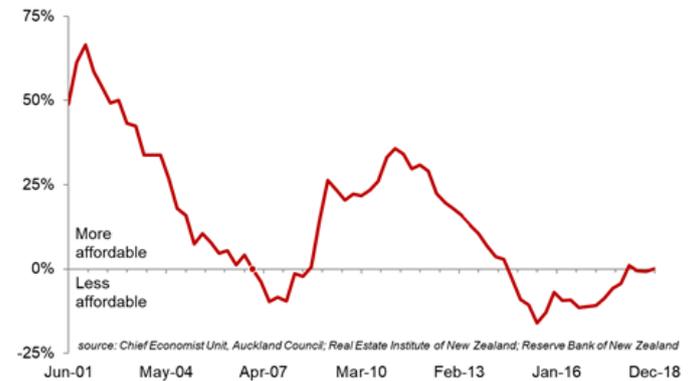
The first signs are emerging that this surge is beginning to slow to a more sustainable rate. The step change the Unitary Plan stimulated has now occurred, and we expect growth in new dwelling consents to be far more modest this year, probably somewhere in the 2% to 6% range. We know both Housing New Zealand (via HLC) and Kiwibuild have ambitious plans for growth this year. There will be some limited additive effect from both these programmes.

But the strain on the industry's capacity is real. We'd do well to get to 14,000 new dwellings consented this year.

Meanwhile, the median priced dwelling is now more affordable to the median income household than it has been since September 2014, and affordability is back at the level it was in December 2006.

The recent surge in housing affordability is the result of flat house prices and interest rates for two years, and growing household incomes, even after allowing for the fact that household sizes have increased due to unaffordability. We have a long way to go to make housing truly affordable in Auckland, but there are some promising signs. Wages

SAM median house price affordability relative to December 2006



are growing at around 2.7% a year in Auckland today, and more growth is likely, as migration slows, reducing the flow of labour into the country that has played a role in keeping wage growth low in recent years and boosting labour force participation.

For renters, the news is better than it was a short while ago. The geometric mean rent to median household income ratio is now 27% in Auckland, compared to an average of 28.5% over the last five years. Rents are up a more modest 1.5% in the last year, according to MBIE.

At the same time, we do not expect a Sydney-esque decline in house prices. Sydney and Melbourne have both consistently maintained a **rate** of building far greater than ours over the last 11 years, despite population growth rates similar to ours.

This means they don't have the same scale of shortfall, and in many ways have repeated the mistakes we made in the early 2000s – overbuilding city apartments for a market that evaporated as quickly as it arrived.

Still, a number of dampers on house prices – the foreign buyer ban, extension of the bright line test, an expected change to ring-fence losses from rental properties among others – will be finely balanced against the underlying demand, very low unemployment, and an economy still growing in the late 2% or low 3% range. We're unlikely to see houses fall more than a couple of points further if at all by the end of the year.

## In other news

A number of other bits of data also point to an economy that will remain relatively resilient. Non-residential consented floor area is up a mind-boggling 42% year on year. Much of this is yet to be delivered, so there is a strong pipeline of work beyond housing.

Visitor guest nights have recovered after a dip over the last several months, growing 0.9% in the latest year.

Retail trade grew 4% nominally year on year in Auckland, up a smidgeon from the rate it has achieved over the previous six months, a solid result in real terms.

## Data up and data down

It is prudent to highlight two data anomalies that are making it harder to predict where the economy is headed, and that mean we will be ceasing reporting on another data set altogether.

First, the Auckland unemployment rate. Looking at the raw data, the rate plummeted by 0.5 percentage points in the September quarter, then bounced 0.6 percentage points in the December quarter. The New Zealand level backing-out was of a similar scale. Even the seasonally-adjusted figures showed a 0.3 percentage point change. This is very unlikely to accurately reflect what has happened. We saw a similar pattern in data reversal even in seasonally-adjusted terms in 2015/16.

Some commentators have jumped on this to suggest unemployment is now genuinely rising. This seems premature given the still relatively-subdued rate of wage

growth, at least in Auckland. We expect unemployment to remain around the 4% mark for a while.

Second, and more frustratingly, is the change in how migration data is measured by Statistics New Zealand. Over the long-term (think 12 to 16 months), this will mean more accurate net permanent migration data. But short-term, the data is less reliable, in our view, than the old data series.

For instance, Statistics New Zealand's revised annual net migration figure for the November 2018 year is up 4,600 from their estimate a month earlier, presumably because of the number of people who have revealed their true intentions during the last month.

Statistics New Zealand is also not currently publishing new regional migration data for Auckland. Hopefully as the process gets refined, we'll be able to include this again, and the data overall will prove more meaningful.

Data summary provided by [Ross Wilson](#) - Analyst, RIMU

Indicator	Latest quarter	Last quarter	12 months ago	5-year average	Rest of NZ latest
<b>Employment indicators</b>					
Annual employment growth (%pa)	1.7%	3.9%	3.4%	4.0%	0.5%
Unemployment rate (%)	4.3%	3.7%	4.1%	5.1%	4.4%
Unemployment rate among 20 to 24 year olds (%)	9.9%	6.4%	9.2%	9.7%	7.5%
Unemployment rate among 15 to 19 year olds (%)	21.5%	16.2%	17.5%	21.6%	21.1%
<b>Earning and affordability indicators</b>					
Annual nominal wage growth (%pa)	2.7%	2.8%	3.6%	2.2%	3.1%
Annual geometric mean rent growth (%pa)*	1.5%	4.0%	5.3%	4.4%	3.7%
Geometric mean rent to median household income ratio (%)*	27.0%	26.6%	27.9%	28.5%	24.4%
Annual median house price growth (%pa)*	0.2%	0.2%	0.6%	7.2%	1.5%
Mortgage serviceability ratio (relative to Dec-06)*	0.1%	-0.7%	-4.2%	-6.2%	19.5%
<b>Construction</b>					
Annual new residential building consents growth (%pa)	18.4%	25.5%	8.4%	15.3%	-0.4%
Annual m2 non-residential building consent growth (%pa)	42.3%	47.5%	25.8%	10.6%	12.7%
<b>International connections</b>					
Annual guest night growth (%pa)	0.9%	-0.6%	-0.9%	2.2%	2.6%
Annual net migration	NA	31,417	36,152	29,753	NA
<b>Confidence</b>					
Annual retail sales growth (%pa)	4.0%	3.7%	4.5%	-0.6%	3.8%
Quarterly Survey of Business Opinion (net optimists)	-28.6%	-26.1%	-9.3%	11.2%	-11.7%
Westpac Consumer Confidence*	109.5	98.2	107.5	114.2	109.1

Sources: Chief Economist Unit, Auckland Council; Statistics New Zealand; Ministry of Business Innovation and Employment; Real Estate Institute of New Zealand; New Zealand Institute of Economic Research; Westpac; Reserve Bank of New Zealand. \* Rest of New Zealand figures are for all of New Zealand including Auckland. Data is not seasonally-adjusted.

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