

The economic case for Inclusionary Zoning in QLDC

An important piece of the
puzzle

Report for community consultation
21 October 2020



SENSE PARTNERS
DATA LOGIC ACTION



Key findings

- QLDC asked Sense Partners to scope the economic costs and benefits of implementing an Inclusionary Zoning (IZ) policy.
- There is pressing need for affordable housing in the region. Inclusionary zoning aims to bring affordable housing to unaffordable areas. This has significant wider economic, social and wellbeing benefits, by reducing extreme housing stress for a cohort of the population.
- Our analysis of inclusionary zoning in QLDC so far show no perceptible negative impact on housing supply, house prices, house size or quality – the main concerns raised in international literature.
- Housing affordability is a \$1b problem in QLDC. That is roughly how much the region's incomes would need to increase by to make its house prices and rents as affordable as the national level (which itself is not very affordable).
- Housing affordability is a contributing factor in QLDC's very high labour turnover rate. We estimate that the higher labour turnover rate is costing businesses and the local economy \$105m-\$200m a year. For each worker we can make more secure and stable in their home, community and work, the economic benefit is \$55,000 - \$110,000.
- We estimate up to 1,000 IZ homes may be delivered over the next 30 years. We take a conservative approach in valuing the economic benefits.
 - The largest benefit is from improved labour market outcomes and stability (reduced turnover), which adds \$27m-\$53m of economic benefits, discounted over 30 years at 6%.
 - There are modest positive economic benefits from improved mental health, education, and household bills. There are larger associated wellbeing benefits, but they tend to inflate benefit estimates but are a source of contention. There are also potential benefits from reduced commute times for some households, we have left that for our detailed s32 analysis.
 - If we conservatively estimate a permanent 1% increase in house prices in our low (bad) scenario, even though we found no evidence of IZ houses increasing neighbouring house prices, then existing homeowners would be better off and future homeowners worse off.
 - In our worst case, the total economic benefit of the IZ policy would be \$3m over 30 years discounted at 6%.
 - In our conservative best case, the total economic benefit of the IZ policy would be \$101m.



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- We have not presented total benefit case in this analysis in this report, which includes wider wellbeing benefits (not just the economic and direct social benefits). Which we estimate may be as high as \$170m.

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1. Proposed policy

QLDC is proposing new developments are subject to Inclusionary Zoning provision, which have been used in the past:

- Historical Plan Changes established a voluntary contribution rate of 5% of lots transferred to the Council.
- Special Housing Areas initially required a 5% affordable housing contribution (under the Housing Accords and Special Housing Areas Act 2013).
- This was increased to 10% in 2018. QLDC data shows that the contribution is based on lots transferred to the Council (although some SHAs allowed for contribution of cash, lots or lots and house packages).

So, the policy is not new. Rather it will be formalised to a compulsory and applied widely. The policy needs to apply broadly under the Resource Management Act, but with due consideration for commercial feasibility for different types of developments (greenfield vs brownfield for example).

Past application was mainly applied on land that was up-zoned from rural to urban land use, which significantly increased economic value of the land and inclusionary provisions only had a modest impact on financial returns.

A more widely applied policy including on existing residential use land would not have the same zoning uplift to compensate. So, the Inclusionary Zoning policy needs to be more nuanced. If the requirement is set too high, it will make some projects unfeasible and delay supply. Set too low, and there will not be enough affordable housing.

The following is proposed for initial s32 assessment (which is likely to be refined):

Development type	District plan provision	Notes
Large greenfield residential subdivision on land within urban growth boundary, within settlement or residential zone, e.g. more than 20 lots create	5% of lots transferred to the Council at no cost. Option via consent to provide equivalent off-site or in the form of a monetary contribution	Preference for lots within the development is to support mixed communities across the district
Smaller residential subdivision, 3 to 19 lots, on land within urban growth boundary, settlement, or residential zone	5% of the value of the lots created to be provided as a monetary contribution to the Council. Value to be based on valuer's report on likely sale value.	Contribution in form of money to be used for affordable housing. Cut off of 2 lot subdivision recognises potential for smaller development to add to housing supply options



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Rural Residential subdivision, Resort (Special) zone subdivision of more than 2 lots	1% of value of lots created to be paid as a contribution	Contribution level recognises higher value of lots created. Contribution reflects that development does generated indirect demand for affordable housing
Residential development involving more than 2 dwelling units. Includes Residential Visitor Accommodation and independent living units in retirement villages Exempt: <ul style="list-style-type: none">• Small units – less than 40 square metres• Boarding houses, worker accommodation• Managed care facilities.• Developments by Kainga Ora / Community Housing providers	2% of the value of the gross floor space created to be provided as a monetary contribution. Option for larger developments (e.g. more than 20 units) to provide contribution in the form of a unit or units, subject to consent.	Aimed at brownfield development. Lower rate reflects feasibility issues. To avoid double dipping, if built on a lot for which a contribution has already been made a subdivision stage, then no contribution would apply (i.e. a credit is recognised). Certain forms of residential development would be exempted

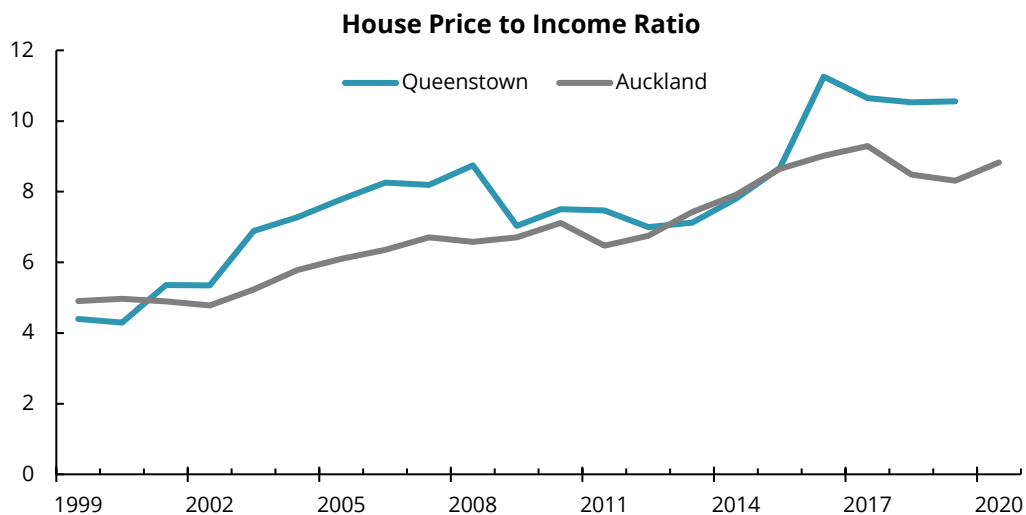


2. Local housing context

House prices have increased rapidly in New Zealand since the early 2000s, both in absolute terms and relative to incomes (which affects the ability to save the required deposit, and to repay the mortgage). Rents have also become less affordable over time.

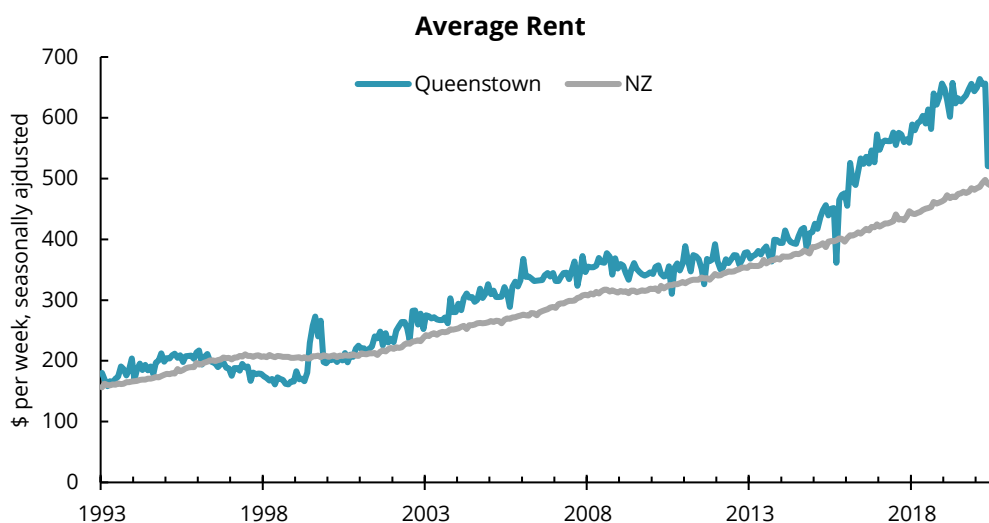
QLDC has been one of the hotspots of house price and population growth. It has experienced very strong population growth, driven by a desire to live in the region, invest in the region, as well as a booming tourism industry (until a sudden and likely temporary stop due to the Covid-19 pandemic).

FIGURE 1: HOUSE PRICES HAVE INCREASED RAPIDLY SINCE THE EARLY 2000S



Source: Statistics New Zealand, Sense Partners

FIGURE 2: RENTS HAD RISEN VERY SHARPLY IN RECENT YEARS, REFLECTING A SHORTAGE OF HOUSING





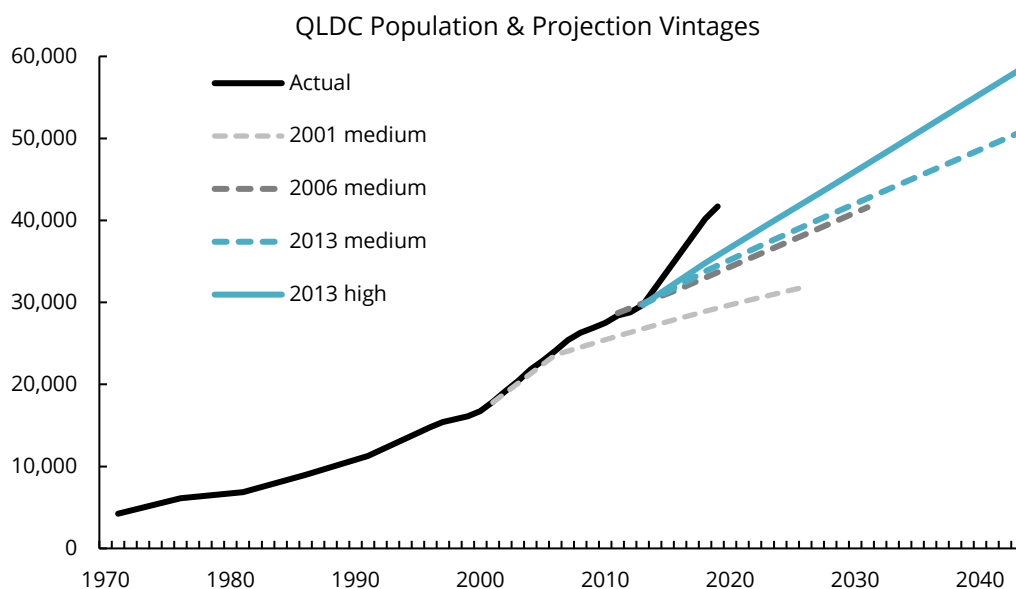
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Source: Statistics New Zealand, Sense Partners

2.1. Housing demand

A Housing Needs Assessment was commissioned by QLDC in November 2019. The assessment found that housing demand will grow significantly over coming decades. Queenstown’s population has grown rapidly since the 1970s (Figure 3) and has average 5% a year over the last 30 years.

FIGURE 3: POPULATION GROWTH HAS OUTSTRIPPED PROJECTIONS IN THE PAST DECADE



Source: Statistics New Zealand, Sense Partners

Population growth has also been stronger than projections over the last decade. For example, the latest estimate of the population in 2019 was 41,700, 42% higher than the 2001 census-based projections, and 21% higher than the high variant of the 2013 census-based projections.

In recent years, population growth has been boosted by very strong inward migration, of young people from overseas, and older people (over 60) from other parts of New Zealand.

There are costs in not planning for enough growth – as it leads to capacity constraints in the economy. Because land supply is not perfectly elastic, rapid increases in population growth and attendant housing demand lead to increasing rents, increasing house prices, overcrowding, and local workers and residents being displaced.

But there is also a cost in over-accommodating for growth if it does not materialise. Growth infrastructure is expensive and is often reliant on future population and economic growth to pay for it.



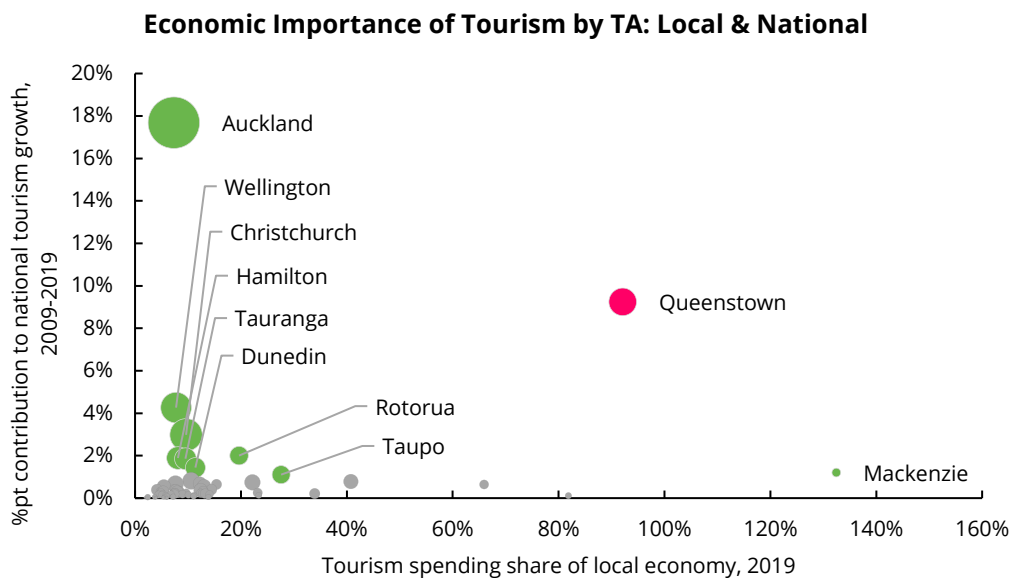
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QLDC projections¹ take a conservative approach to forecast population growth, averaging 2.2% a year to 2051, compared to 5%pa in the last 30 years and 5.2%pa in the last decade. However, if population growth surprises on the upside, there is ample feasible capacity in QLDC. A 2017 Housing Capacity Assessment² found commercially feasible capacity for an additional 23,900 dwellings within its UGBs and 24,200 dwellings within the total urban environment in the medium-term (to 2026).

Uncertain impact of Covid-19

The Covid-19 global pandemic has had a significant impact on the global economy and particularly international tourism. The New Zealand economy, and the tourism dependent economies of QLDC and surrounds. The IATA forecast global passenger traffic (revenue passenger kilometres) will not return to pre-COVID levels until 2024. This means there is good cause to be cautious in projecting population over the next few years, but history suggests we should also plan for long term growth that may surprise on the upside.

FIGURE 4: AUCKLAND HAS BEEN THE LARGEST CONTRIBUTOR TO TOURISM GROWTH IN THE LAST DECADE



Source: MBIE, Statistics NZ, Sense Partners

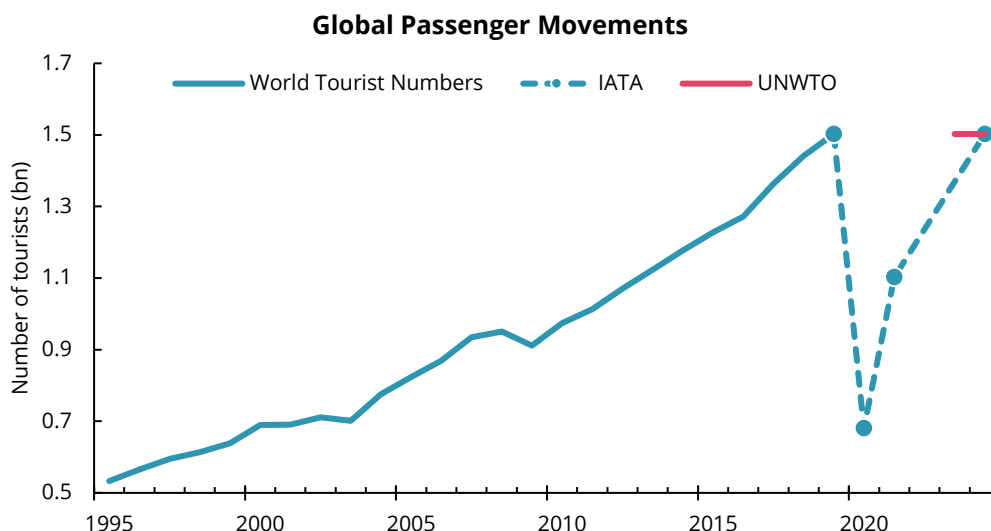
¹ <https://www.qldc.govt.nz/community/population-and-demand> 2020

² Market Economics (2018)



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FIGURE 5: GLOBAL TRAVEL MAY NOT RECOVER TO 2019 LEVELS UNTIL 2024



Source: UNWTO, IATA, World Bank, Sense Partners

2.2. Housing supply

House building has surged in recent years (Figure 6). However, the population has grown even faster. Housing building needs to remain high to meet projected demand, as well as current unmet demand (seen in affordability pressures, increased congestion due to commuting workers, and crowding for example).

In the 2018 Census 730 households reported needing more bedrooms in QLDC (Figure 7). This is consistent with our estimates of underlying housing demand and actual supply, which show that demand has outstripped supply from 2014 to 2018 (Figure 7).

Those with affordability constraints are crowding up. This is because the supply is not uniform across the housing continuum. Our analysis shows that while the housing stock has grown rapidly in recent years, the supply of rental housing has not. In the 5 years to 2018, the housing stock grew by around 775 dwellings a year. The increase in the rental stock was only around 185 a year over the same period, or 25% of the dwelling stock growth.

An Auckland evaluation³ of Special Housing Areas found that the policy boosted supply but did not improve affordability. QLDC also benefitted from the Housing Accord and Special Housing Area (HA-SHA) legislation, which had targeted 1,300 homes over three years (Figure 9). Targets changed over the years, but the approvals of projects appeared to largely keep pace with targets (Figure 10).

³ Fernandez (2019)



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QLDC population projections⁴ suggest recent supply trends will continue. However, recent experience shows that overall housing supply may not increase affordable housing supply for some time. This highlights the need for targeted policies such as Inclusionary Zoning to encourage affordable housing supply (which QLDC has been using since 2004 and is discussed later in the report).

FIGURE 6: SURGING CONSENTS IN RECENT YEARS IS WELCOME

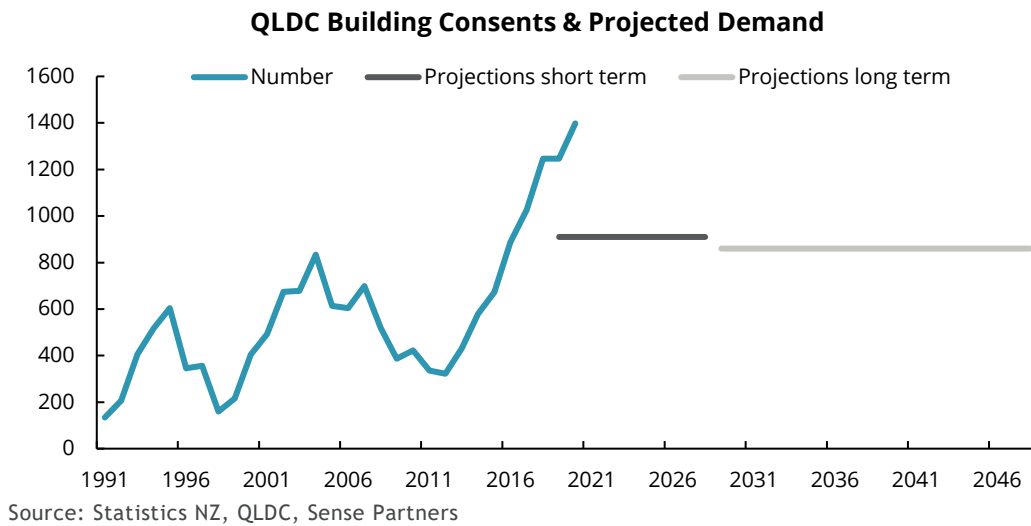
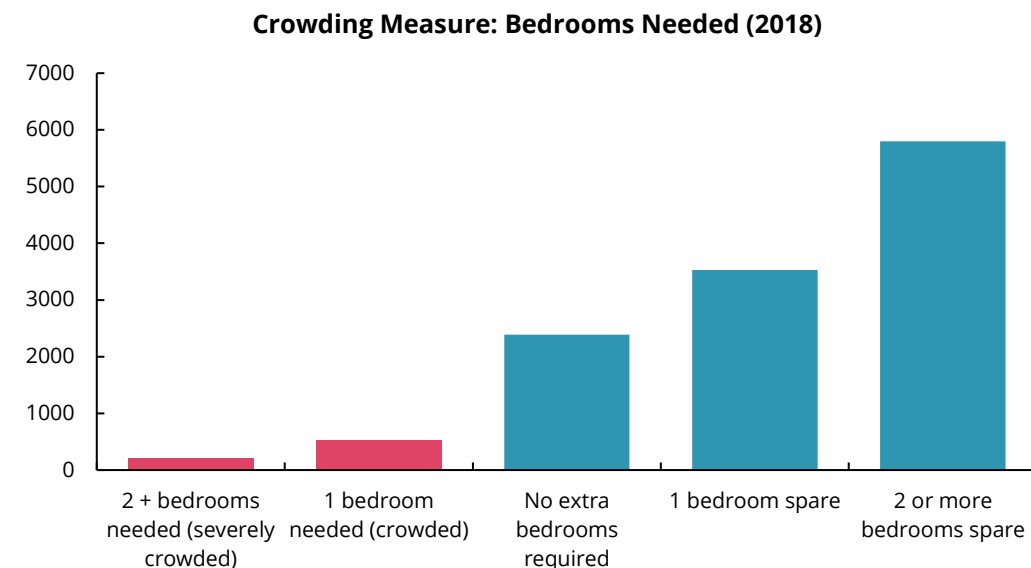


FIGURE 7: AROUND 730 HOUSEHOLDS WERE OVERCROWDED



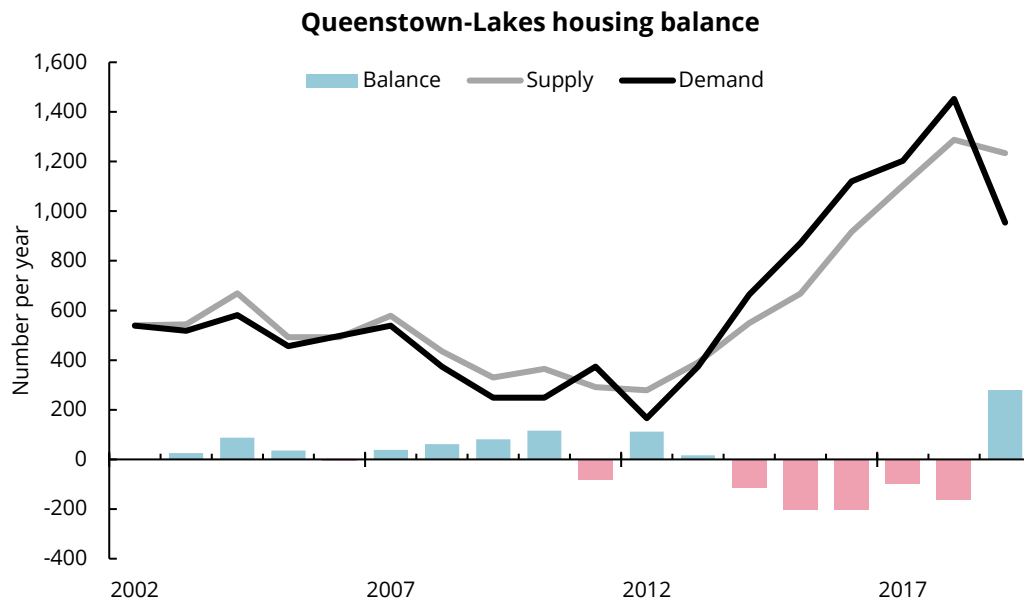
⁴ <https://www.qldc.govt.nz/community/population-and-demand> 2020



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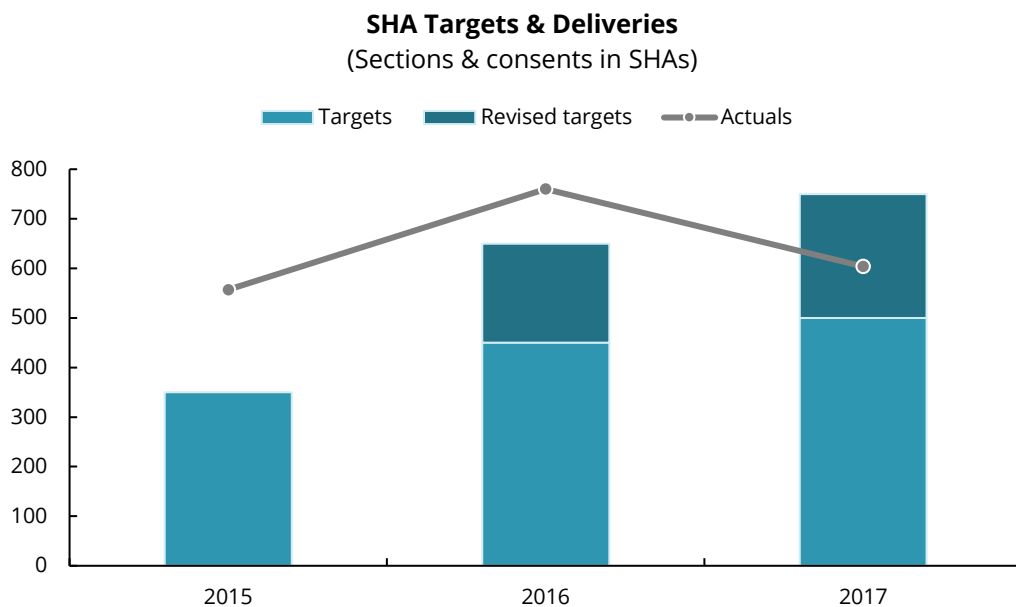
Source: Statistics NZ, Sense Partners

Figure 8: House building has surged in recent years, but demand has grown even faster



Source: Statistics NZ, Sense Partners

FIGURE 9: SHA TARGETS WERE MET...

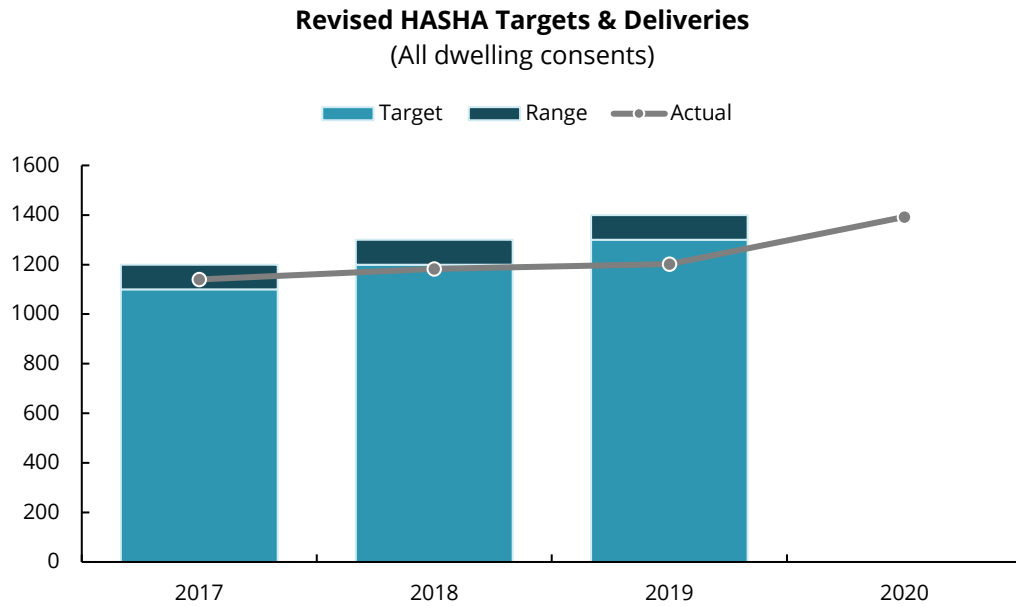


Source: MHUD, QLDC, Sense Partners



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FIGURE 10: ...AND LATER CHANGED TARGETS



Source: MHUD, QLDC, Statistics NZ, Sense Partners



3. Housing affordability and its consequences

3.1. A \$1b problem for the Queenstown Lakes District

Housing is extremely unaffordable in QLDC. According to interest.co.nz for example, the median house price in Jan 2020 was 14.3 times median household incomes, compared to 6.7 times nationally. Similarly, the average rent in QLDC is 45% of income, compared to 27% nationally.

To understand the scale of the housing costs, we can think about how much incomes locally would have to rise to match, say the national, housing cost levels. There can be plenty of arguments about what should be the most comparable region or number, but this exercise helps to illustrate the scale of the issue.

If the cost of housing remained the same and local incomes went up to match national levels, then incomes would have to rise by 68% (to restore rental affordability) to 115% (to restore housing affordability). Cumulatively, the wage bill in QLDC would need to rise by \$817m to \$1,392m. Roughly, the scale of the housing affordability issue in QLDC is \$1b.

A survey of renters in 2020 found that renters are more likely to be older, living with a partner, and children. The consequences of insecure housing are even greater for families than more mobile younger cohorts.

This is illustrated by the waitlist for the Queenstown Lakes Community Housing Trust (QLCHT). It shows those wanting help on housing are likely to work in relatively low-income jobs, and those with children (both single and two parent families) were in high need.

FIGURE 11: WAITLIST OF QLHT HOUSING, NUMBER OF HOUSEHOLDS BY COMPOSITION

QLCHT waitlist by composition and income

Share of households, %

Adults	1				2				Total
	0	1	2	3+	0	1	2	3+	
Children									
Income (\$)									
Under 30,000	4%	2%	1%	1%	1%	0%	0%	0%	8%
30,001-50,000	10%	5%	3%	1%	1%	3%	1%	0%	24%
50,001-80,000	12%	4%	2%	1%	6%	6%	7%	2%	40%
80,001-100,000	1%	0%	0%	0%	9%	4%	4%	1%	20%
100,001+	0%	0%	0%	0%	1%	2%	3%	2%	8%
Total	27%	11%	6%	3%	18%	15%	15%	6%	100%

Source: QLCHT



3.2. Impact on labour market

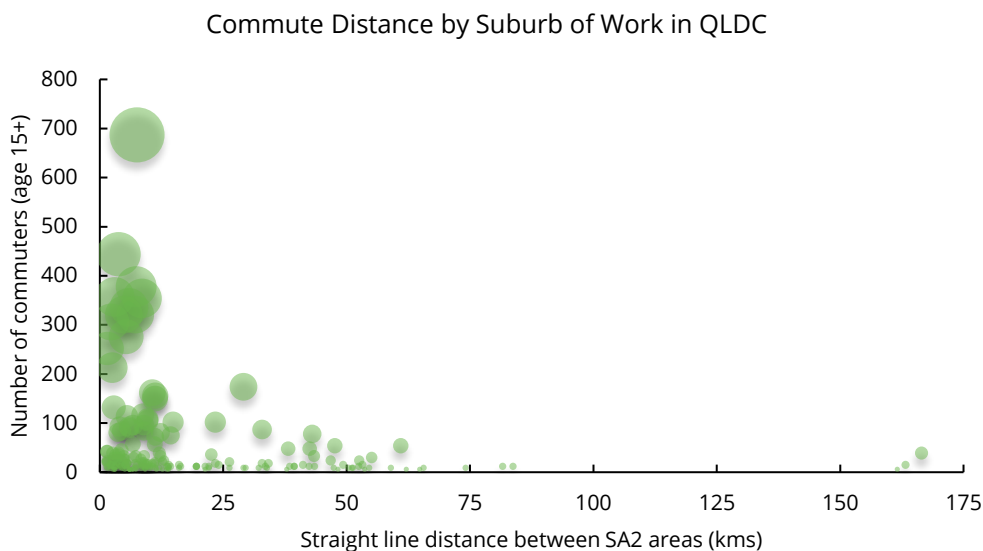
The cost of housing is impacting on the availability of worker, the quality of life of workers, often pushing them further away from their place of work and increasing their travel costs, increasing emissions and congestion. OECD's illustrative modelling showed that improved housing supply would increase labour productivity growth by 0.5% a year⁵.

One consequence of unaffordable housing is higher labour turnover and labour shortages. Businesses report finding it harder to retain and attract labour. Survey of Queenstown Chamber members for example⁶ show that workforce issues (finding workers and worker accommodation) are high on their priority list.

QLDC's largest sector is retail and accommodation, accounting for 30% of all jobs, but just under 20% of QLDC residents work in the sector. Many are commuting in from further away.

We can see this reflected in Census commuter data, which shows more people travelling further distances to work over the last three censuses. For example, the number of commuters from Frankton and Lake Hayes to Central Queenstown – which creates urban traffic congestion – has more than doubled between the 2006 and 2018 censuses, from around 460 people to 950. The number of people commuting from further away, such as Cromwell and Wanaka are also growing.

FIGURE 12: MOST COMMUTES ARE SHORT, BUT AROUND 300 LIVE MORE THAN 50KM AWAY FROM THEIR WORK



Each circle represents commute suburb pair (eg Frankton to Queenstown Central)
Circle size = number of commuters

⁵ Baker (2019)

⁶ <https://www.queenstownchamber.org.nz/business-connect/news-advocacy/news/membership-survey-results-2019/>



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Source: Statistics NZ, Sense Partners

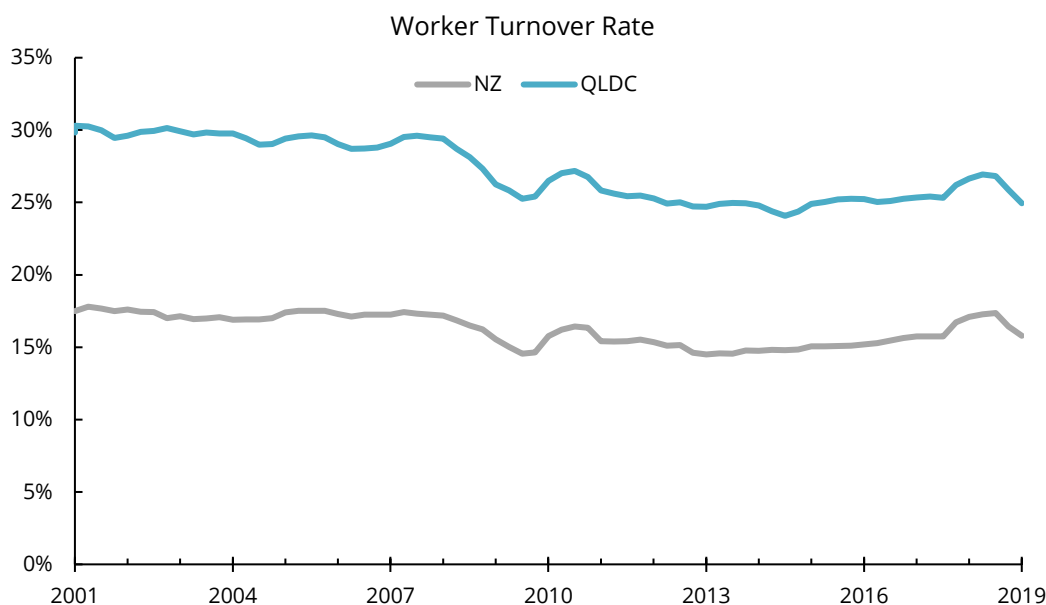
We estimate around 300 people have a commute of more than 50km each way⁷. Commuter data shows people prefer to live close to work (Figure 12), commute distances are increasing with attendant increase in traffic congestion, and associated economic and environmental costs.

Housing availability and choice are important determinants of labour supply, cost, and turnover. QLDC's tourism and service-based economy is labour intensive, but labour turnover, some of which is linked to worker accommodation, have direct economic costs.

This economic cost to business is visible in higher labour turnover in QLDC. Employee turnover is a real cost to business. It increases the cost of recruitment, training, and productivity loss. Business tools and international literature suggests turnover costs may be very high. For tourism intensive industries the cost of turnover is around 25% of an employee's annual salary. An US study found typical cost of ~20%⁸.

The labour turnover rate was 25% in QLDC in 2019, and 16% nationally⁹. A third of the difference was due to industry mix in QLDC (it has more employment in higher turnover industries like accommodation, and food and beverage services). But the remaining two-thirds (or 6% labour turnover) is due to other local factors, including a large number of short-term visiting workers from overseas. Small and remote communities tend to experience higher labour turnover. It is not a uniquely QLDC issue, but one that has real economic costs.

FIGURE 13: LABOUR TURNOVER IN QLDC IS MUCH HIGHER THAN THE NATIONAL AVERAGE



⁷ We calculated a straight-line distance between suburbs. This is likely to underestimate actual travel distance due to transport networks.

⁸ Glynn (2012)

⁹ Statistics New Zealand Linked Employer Employee Database (LEED)



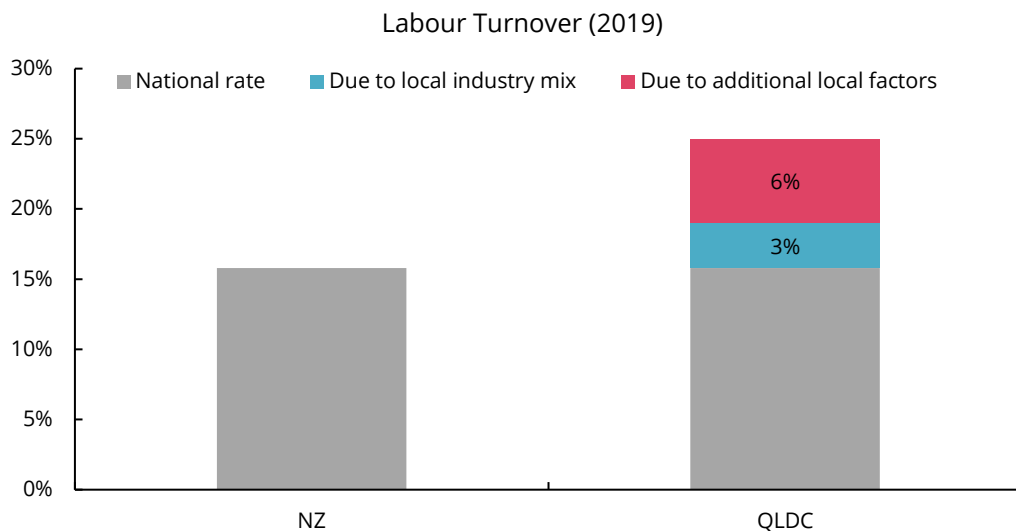
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Source: Statistics NZ, Sense Partners

We estimate that high labour turnover has significant potential costs to the local economy:

- We estimate this additional labour turnover adds \$20m-\$25m per year to labour costs of doing business in QLDC, compared to the national average.
- Similarly, we also found that higher labour turnover industries tended to have lower profits. The 6% excess turnover in QLDC would equate to return on assets being 5%-10% lower, or worth \$85m-\$175m a year.
- We estimate much higher labour turnover in QLDC is imposing economic costs worth \$105m-\$200m a year (3%-6% of QLDC's GDP).
- As a rough rule of thumb, we estimate every worker not unnecessarily moving jobs is worth \$55,000-\$110,000 to the local economy.
- Research¹⁰ shows reduced turnover of work and living arrangements also have wider benefits social and wellbeing benefits, particularly for work prospects and education outcomes.

FIGURE 14: ONLY A THIRD OF QLDC'S HIGHER LABOUR TURNOVER CAN BE EXPLAINED BY ECONOMIC MAKE-UP



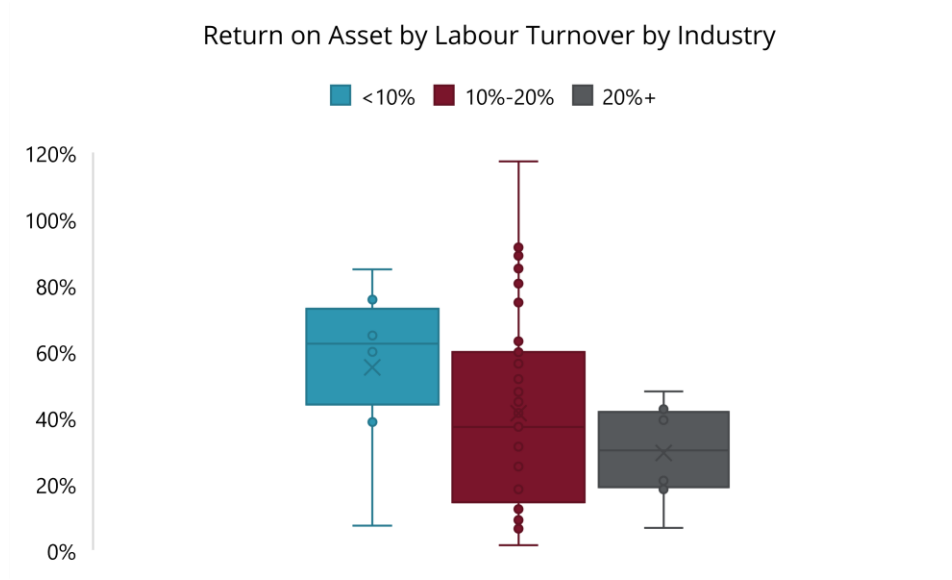
Source: Statistics NZ, Sense Partners

¹⁰ Treasury (2018)



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FIGURE 15: HIGH LABOUR TURNOVER INDUSTRIES TEND TO EXPERIENCE LOWER PROFITABILITY



Source: Statistics NZ, Sense Partners



4. Inclusionary Zoning as part of the solution

QLDC is afflicted by unaffordable housing. There is no one policy tool that can alleviate this. However, IZ is a targeted policy that deliberately produces affordable housing, although further support is often required to make houses affordable to those on very low incomes. The point of these policies is usually to increase the share of affordable housing, and to break up socioeconomic segregation of a city¹¹.

Planning system tools such as IZ work best when part of a wide whole-of-government strategy to address the continuum of housing needs¹². An OECD report in 2019¹³ suggested government delivery of affordable housing through KiwiBuild should be re-focused towards enabling the supply of land to developers, supporting development of affordable rental housing, and further expanding social housing in areas facing shortages. They noted that in Germany, the supply of affordable housing is increased through public subsidies in conjunction with inclusionary zoning, with rental housing generally targeted. The key messages are:

- The most successful applications of IZ are in places where the mechanism is simple to administer, there is an established delivery mechanism and the policy applied widely.
- Inclusionary zoning helps to supply lower value/affordable homes into supply. Without this, supply of this type of housing falls dramatically.
- IZ is not common in Australasia, but widely used in USA (more than 500 cities), UK and other parts of the world with varying degrees of success.
- In recent decades South Australia (around 5,500 units over a decade to 2015) and Sydney (around 2,000 units over a decade from 2009) have both used inclusionary zoning. Neither are sufficient to deal with housing stresses for all.
- There is some risk of reducing incentives for overall supply, but because IZ tends to be used in very expensive markets, good quality quantitative studies find no impact on overall supply. But the published evidence is mixed, although of varying quality and scope (many do not include wider social benefits).
- Inclusionary housing practice in both the US and UK reveals that schemes gain traction over time. Private developers accept inclusionary requirements *when they are known in advance and levied in a consistent way*.
- Even with IZ, low income families often need additional support to afford homes.

¹¹ Mock (2016)

¹² Gurran et al (2018).

¹³ Baker (2019)



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- IZ on its own cannot be the answer. As other mechanisms required to ensure housing supply is responsive to demand across the continuum of housing need.

Experience in QLDC to date, and internationally suggest such a policy is a complement to wider land use policies to increase housing supply. But left to their own devices, general housing supply may not provide sufficient *affordable* housing supply for some time.

QLDC began using IZ policy to create a stock of retained affordable homes in 2004. Inclusionary Zoning policy has changed in QLDC over time. It started with the agreement of stakeholder deeds between developers and the Council that dedicated around 5% of the residential land for affordable housing as part of the plan change approval process of rezoning rural land to residential subdivision. This rezoning process was further memorialised through a set of objectives, policies, and rules into the District Plan in 2013, and then further used through the HA-SHA (2013) Act.

The QLDC experience so far has been favourable against commonly cited issues internationally. The international literature takes a nuanced view on what successful IZ policy looks like. Success is often defined in terms of the impact on various channels¹⁴:

1. Create more affordable units. The international literature shows that IZ policy can increase affordable housing supply, but it can lag overall supply.
 - 1.1. QLDC shares a commonly found issue, that the supply of affordable housing lags¹⁵, but increases over time. We have seen that while housing supply has accelerated, the supply of rental stock has not kept paces (only 25% of the increase in the dwelling stock in the five years to 2018 were rentals).
 - 1.2. IZ policies vary by location, as do their scale. In South Australia, the policy contributed 15% of total supply in the decade to 2015. In Sydney about 1%¹².
 - 1.3. We estimate the proposed IZ policy will account for up to 1,000 units, or close to 6% of total new supply through to 2051. Although demand is likely to be around 2,000 units, meaning IZ needs to be a complement to wider housing supply delivery.
2. Retention increases wider social and economic benefits. The impact is higher the longer they are retained. Generally, IZ homes are retained for 30 years or more, but again the policies are heterogenous across jurisdictions.
 - 2.1. The proposed model specifically includes a retention mechanism to ensure the social and economic benefits are maximised.
3. May impact on housing supply. The evidence of IZ policy impact on housing supply is mixed. High quality studies have not found large negative effects on supply. Large cross jurisdiction studies have generally found no effect, or marginal effect on housing supply relative to non-IZ locations. Mitigation tools can reduce the impact, for example through

¹⁴ Ramakrishnan et al (2019).

¹⁵ Norris (2007)



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density bonuses, reductions in height, setback, parking and other requirements, and fast-tracked approvals.

- 3.1. Some international studies found housing supply slowed due to Inclusionary Zoning policies, but that depended significantly on the stringency of the inclusionary requirements¹⁶.
 - 3.1.1. However, when QLDC adopted more stringent Inclusionary Zoning requirements in 2013 (increasing them from 5% to 10% in SHAs) housing supply improved, both in levels and relative to population.
 - 3.1.2. There are other drivers, but it does not appear that Inclusionary Zoning policy had a discernible negative impact on housing supply.
4. Some international studies have also shown Inclusionary Zoning reducing the size and quality of homes (to compensate for margin impact)¹⁶.
 - 4.1. However, when we analysed Special Housing Area building consents, we found the average size and per square metre improvement costs were higher than QLDC average.
 - 4.2. Special Housing Area homes consented between 2015 and 2018 had an average floor size of 224 m² (we trimmed the top and bottom 5% to reduce the impact of extreme outliers) compared to 185 m² for all consents.
 - 4.3. The average value of improvements for Special Housing Area consents was \$2,700/m² compared to \$2,500/m² for all consents.
5. Increase Impact on house price. International evidence shows mixed impact of Inclusionary Zoning on house prices. Most show no impact, but some increased prices¹⁷.
 - 5.1. In literature that found a link, they found that IZ areas experienced faster house price growth during appreciating periods, and deeper declines during depreciating periods.
 - 5.2. If there is a one-off increase in house prices it would benefit existing homeowners but penalise others (now and in the future) looking to buy.
 - 5.3. Conservatively, we show the impact on existing owners (who enjoy higher house prices) and future buyers of new supply (who are worse off).
6. Improve economic opportunity for IZ beneficiaries? There is surprisingly limited research in this area. Our literature review suggests there are improvements in financial outcomes, some evidence of integration (when on site provision vs financial contribution), and can

¹⁶ Bento (2009), Powell (2010)

¹⁷ Shuetz (2011)



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increase economic opportunity through access to high opportunity neighbourhoods, schools, etc. We attempt to quantify these benefits later in the report.

5. The Cost Benefit Analysis

The CBA is broad based and uses a range of data sources.

We consider the implications of our analysis over a long period of time, 30 years. This is because housing is a long-lived asset, and changes in such long-lived assets need to be considered over a long period of time. Further, many gains and losses are incremental and may not appear material unless cumulated over a long period of time.

The typical analysis of such schemes tends to focus on the private monetised benefits. These tend to show that the scale of benefits of those housed is positive but may be outweighed by the cost borne by the original landowner, developer, or homeowner (through lower profits or higher prices of housing). When supply cannot keep up with demand, costs of IZ are likely to be borne by house buyers, rather than landowners or developers. When supply is responsive and the policy is widely applied, the price of landowners and developers will also share some of the cost.

The counterfactual presented tends to be one where unfettered market would supply more homes and, at least in the aggregate, everyone is better off. Future planning provisions are assumed as a given. This is understandable, but the true trade-offs are nuanced. Planning provisions that increase the property rights of a piece of land are additional endowments given by the community to the landowner. It may be considered as a transfer from the community to a private benefit.

Adding the inclusionary zoning requirements when rezoning is often easier. That is because additional rights, which have tangible economic value, compensate for the IZ. The policy needs to be applied as widely as possible to have the largest impact. But also needs to be consistent and coherent with wider objectives (including for example promoting density to reduce infrastructure demands). For example, difference in development economics for brownfields versus Greenfields means that we need to be cognisant of the reality of these issues.

Often, IZ is presented as a tax and an expensive way to meet the needs of a few. There are private and social benefits. The largest beneficiaries are those who can now live in affordable and healthy IZ homes in a high economic opportunity area. The extent of benefit can be financial (reduced outgoings) to much longer term (such as health, education opportunities for children in a better-quality school, and residential stability and lifetime outcomes. The likelihood of better lifetime outcomes through reduced housing costs, increased housing stability and living in a low-poverty area usually not counted. We also include estimates of the economic benefits of reduced labour turnover among IZ residents – which accrue to local businesses and the wider community.

We utilised the Treasury's analysis of the impact of planned urban regeneration in Porirua to help us make modest economic benefit estimates from mental health, education, and reduced energy cost estimates. Their analysis covered economic, wellbeing and fiscal domains. We



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have focused on the economic domain only. The fiscal domain is not relevant in this instance. Wellbeing domain drives large results but are not necessarily a relevant factor in s32 review.

5.1. Who loses?

How the IZ policy is defined will matter a great deal on who bears the costs and who bears the benefits. If house prices increase for example, then existing homeowners will benefit. The benefit to the IZ residents and the wider community are complex to calculate but are positive. The costs, or at least perceived costs, are borne by landowners and/or non-IZ buyers, depending on how elastic the housing market is.

Costs falling on developers may reduce supply of housing, as some projects may become uneconomic. Similarly, supply may slow because increased house prices make them less affordable, reducing demand for new housing.

Economic theory tells us that who bears the cost will depend on the relative elasticity of demand. If home buyers are relatively inelastic, because of the unique amenities of QLDC, then home buyers will absorb the cost. If the price increase is too much and buyer demand reduces (that is the demand is elastic), then developers and landowners will exit the market, delay developments or lower prices, slowing housing supply or reducing the price of land.

Our analysis of QLDC's experience with IZ policy to date does not show any discernible impact on house prices or housing supply.

5.2. Is it really a loss?

The property rights of a landowner are the rights commensurate to current planning provisions. There is a potential value uplift in future planning changes, but there is associated risk. Those planning changes and value uplifts may not happen. Rules may change around flood plains or the imposition of the IZ clauses. This is a risk that a landowner takes when anticipating changes in future planning rules.

Unless the IZ provisions reduce the value of the land at prior use plus the cost of infrastructure provision (which would reduce land and housing supply), then no property right has been reduced. Rather, any extension of property rights would have been conferred by society to the landowner. When it includes IZ, it reduces the additional property rights and associate value uplift conferred to the landowner and subsequently to the developer and home buyer.

New planning provisions also have an impact when implemented, but the impact fades over time. So, if IZ is imposed uniformly and consistently across a broad class of land and developments, then there will be a one off reduction in the value of this class of land, but over time it will not represent additional friction in land supply.

Since our analysis shows that QLDC can supply sufficient number of homes, but that the pace of build is not always high enough and they are not affordable homes. With IZ, we do not need



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the total quantum of housing supply to increase per se, rather the housing supply to include an affordable portion.



5.3. Estimating the economic benefits

We take a conservative approach in estimating the economic impacts of IZ in QLDC.

The key source of economic benefits arises from secure and proximate housing leading to better labour market outcomes, both through improved employment prospects and reduced turnover.

We also attach modest improvements in mental health outcomes, education outcomes and reduced energy and transport costs.

We also look at a scenario of house price changes. In our high (good) case, we assume no change in house prices consistent with a large body of literature and our analysis of the impact of IZ housing in QLDC. We include a one off 1% increase scenario in house prices in our low case. International literature suggests that house price impacts

Our estimates show that there are significant potential benefits from improved housing outcomes, if they can be crystallised into reduced labour turnover, which is a considerable drain on the local economy.

If house prices increase, then the impact on future homebuyers would largely offset these economic gains.

FIGURE 16: ESTIMATED ECONOMIC BENEFITS OF QLDC IZ POLICY

Element	Volume Households	Impact		NPV (\$m; @6%)	
		Direction	Monetary value	Worst case	Best case
Economic Impact					
Labour turnover ⁽¹⁾	1,000	+	55,000-110,000	27	96
Mental health improvement ⁽²⁾	1,000	+	366	2	3
Education Outcome ⁽²⁾	1,000	+	6-20	0	0
Energy & other cost savings ⁽²⁾	1,000	+	30-200	0	2
House price effect on:					
House price change ⁽³⁾				1%	0%
Existing homeowners	19,137	+		187	0
New home buyers	17,300	-		-212	0
Total				3	101

(1) Assume that employment rate equals QLDC rate and labour turnover reduces to national rate

(2) Sourced from Treasury's Porirua Regeneration Business Case

(3) We assume no house price change in high case, and 1% increase in low case



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Our analytical scenarios reflect the following assumptions:

- Supply is spread over the next 30 years and the Net Present Value (NPV) discounted at 6%.
- Labour turnover of affected households reduces from the QLDC average to the national average. The low case assumes lower monetary value (55,000) and 1 person per household working, and the high case assumes higher monetary value (\$110,000) and 1.8 people per household in employment (based on our analysis of the current waitlist for QLCHT).
- The mental health improvement is based on the Treasury (2018) analysis of people moving from unstable to stable housing. We apply them per household.
- Education outcomes are applied to the number of children per household, based on our analysis of QLCHT waitlist and Treasury (2018) analysis.
- Energy and cost savings are applied per household, based on Treasury (2018).
- We show two house price impact scenarios.
 - In our best case, there is no impact on one off impact on house prices. Our analysis of QLDC's experience with IZ does not show any discernible impact on house prices.
 - In our worst case, we assume a 1% one off increase in all house prices (existing and future house prices)¹⁸. This gives an immediate wealth boost to existing owners but adds cost to future home buyers (which is discounted back to today).
- The net economic impact of IZ scenarios are:
 - Worst case, the costs are benefits are roughly equal (benefits outweigh costs by \$3m, discounted at 6% over 30 years).
 - Best case, using conservative assumptions and not including wider wellbeing benefits, the benefits outweigh costs by \$101m (discounted at 6%, over 30 years).

¹⁸ In large studies that compare multiple long running IZ policies, they found variable outcomes (Mock 2016). Some had no increase in house prices, others have increase in house prices of 1.0%-2.2%. High impact areas had very different requirements to those proposed in QLDC, so we chose the lower end.



6. Conclusion

QLDC is exploring IZ policy because there is a lack of affordable housing supply. Current prices of houses and rents are high relative to incomes available through many local jobs.

These costs and benefits need to be seen alongside some key questions¹⁹:

- 1) Who are the houses for?
- 2) What are the financial and political costs to the society?
- 3) To what extent to they offer a vehicle for recapture of land value increments?

International approaches take a slightly different approach to answering these questions and managing arising tensions. These are important tests for our policy development.

Experience of recent years shows that housing supply can be ramped up. But even when that happens, there is not enough supply of affordable homes. Until there is an abundant supply of homes, market provision of affordable housing is unlikely.

IZ is a planning tool to specifically generate affordable housing, the goal. On its own, it can be distortionary. When combined in the context of other policies that facilitate housing supply, these distortions can be mitigated.

Our analysis suggests that from a monetary perspective, the benefits and costs accrue to different cohorts, but that the net impact is positive.

Our analysis of QLDC IZ policy to date show that the common criticisms of IZ policy internationally has not been evident (reduced supply, reduced size, and increased price).

¹⁹ Calavita (2010)



Appendix A - Treasury's outline of potential benefits from improved housing

The benefits for IZ beneficiaries come from a range of sources²⁰:

- Subjective wellbeing
 - Subjective value gained from better mental health with better housing
 - Subjective value gained from living in a warmer home and feeling more healthy
 - Subjective value gained from better connection with neighbours
 - Subjective value gained from improved physical health from being more active
 - Subjective value gained from feeling safer
- Physical health
 - Fewer hospitalisations from infectious diseases due to overcrowding. Research from the New Zealand Healthy Homes study identified that reduced overcrowding was associated with a 61% reduction in acute and arranged hospital admissions for children.
 - Fewer incidences of respiratory illness from damp or overcrowded homes, which are estimated by Treasury to cost around \$800 per person.
 - Being more active via active transport modes (reduced reliance on long commutes) improves fitness reduces diabetes and cardiovascular disease risk
- Mental health
 - Fewer specialist visits from improved mental health. For example, research suggests reducing overcrowding can reduce the risk of diagnosed mental health disorders in children by 15%.
 - Better employment outcomes and a more productive workforce from reduced feeling of depression
 - Improved productivity from reduced feeling of depression

²⁰ Treasury (2018)



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- Education
 - Improved school attendance from better health outcomes
 - Improved performance at school with less disruption in the home environment
 - Better school attendance and progression to higher education from neighbourhood effects
 - Improved housing stability
- Cost savings
 - Reduced electricity costs from more energy efficient homes
- Jobs/training
 - Improved job and incomes prospects accessing a higher opportunity neighbourhood



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