

The impact of regulation on housing affordability



With support from:



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1. EXECUTIVE SUMMARY

The Registered Master Builders Association and the Construction Strategy Group were funded by the BRANZ Research Levy to investigate the impacts of regulation on housing affordability.

Why a new study was needed

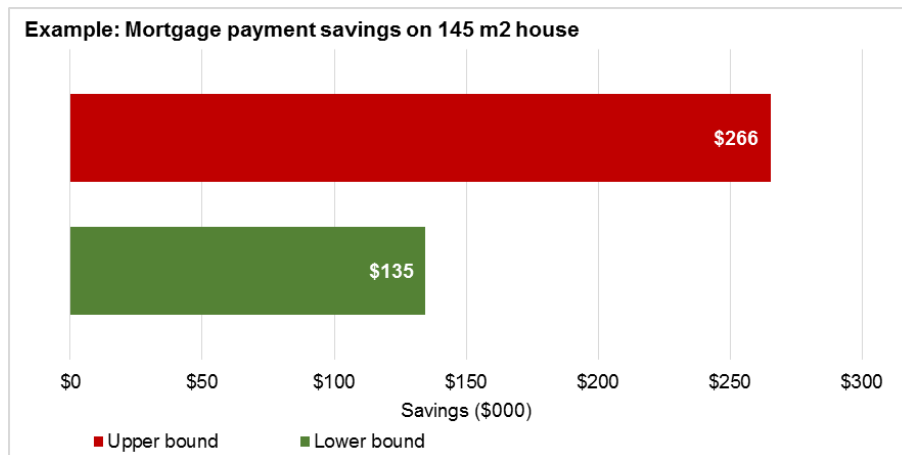
The cost of providing housing is soaring. In the last 15 years, the cost of delivering a standardised new house has risen 110%, compared with overall cost of living rises of 44%.

The Productivity Commission completed its study on housing affordability in 2011, including three chapters on the impact of regulation. Little has changed on the regulation front since the Commission made its recommendations. Further, the Commission did not investigate the barriers to actual (rather than technical) land availability, such as small numbers of large developers within a geographic region.

Nearly two dozen formal and informal interviews highlighted eight recurring regulatory challenges.

The cost of current regulatory challenges

The various regulatory challenges identified carry a number of costs. A case study approach was used to estimate the impact of these eight regulatory challenges on the cost of a typical 145 m2 stand-alone house currently costing around \$567,000 in Auckland.



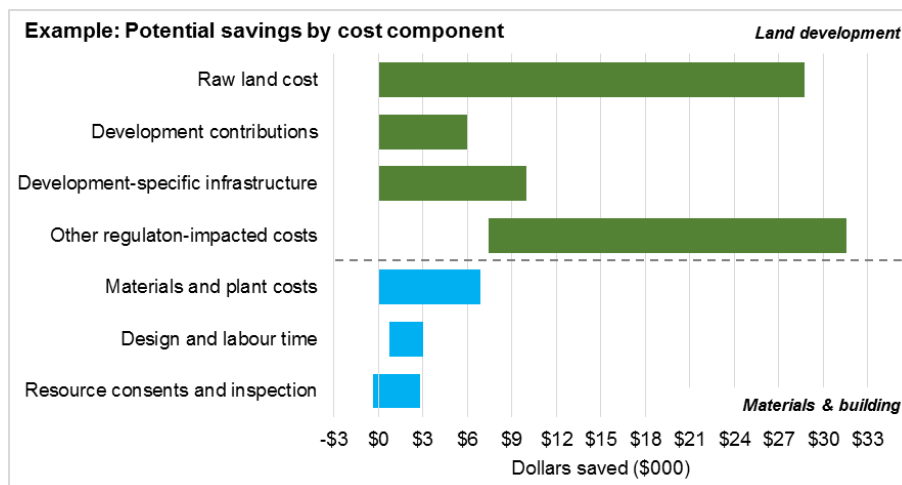
The costs of over and under-regulation as identified in this study add (at the 95% confidence level):

- \$35,000 to \$77,400 to the upfront cost of the case study house
- \$134,000 to \$266,000 in mortgage payments
- 3.5 to 6.8 years to the time it takes to pay back a home loan.

Another way to see this impact is the household income needed to service the mortgage on this house. Today, the household buying this house would need an annual household income of \$117,000, assuming they could manage a 15% deposit and could get bank funding. By adopting the regulatory reforms proposed in this report, lower household incomes of between \$101,000 and \$109,800 would be sufficient to afford this home, and with a commensurately lower deposit.

Where the potential savings lie

Around 85% of these costs are related to land availability and the sub-division, resource consent and town-planning environment. Savings are expected to lie in the ranges shown below.



The most costly challenges include subjective town-planning requirements for subdivisions, when a resource consent is required, or changes to regulation without determining whether the benefits do indeed outweigh the costs.

Another major land-related impediment is how slowly land comes to market. The Productivity Commission and others have focused on the slow pace of local council approval of subdivision plans. A bigger problem in high demand markets like Auckland is the small number of developers who control large swathes of the market. While land-owners benefit greatly through rezoning, they are not sufficiently incentivised to bring land to market faster.

Changes to the Local Government Act have tightened rules on development contributions although many Building Consent Authorities (BCAs) still lack the capability to fairly apportion benefits to existing and new households. No monitoring occurs among utilities providers such as electricity distribution monopolies, who can charge what they like for infrastructure. They often insist that developers pay the full price of infrastructure that may benefit future developments.

On the building and materials side, variations in what products are approved for use by different BCAs, and BCAs requiring homes be built to a standard above the Building Code add considerable cost.

Turning costs into benefits: what changes are needed

The costs imposed by the current regulatory environment can be interpreted another way. Fixing what is broken will result in improvements in housing affordability equal to the current costs imposed.

A number of recommendations are proposed. These include:

- Reducing over-regulation by:
 - Central Government specifying and limiting the authority of council planners and freeing up the market
 - Councils being required to explicitly include housing affordability impacts in defining the desired character of neighbourhoods, acknowledging the huge affordability impacts associated with a mind-set of every street being a “Rolls Royce”

- Designers and Builders being more diligent in complying with District Plan requirements and not using councils as their review process
- Central Government standardising conditions that trigger a resource consent requirement
- Councils bulking up large-scale earthworks and infrastructure consents
- Central Government evaluating costs and benefits before introducing regulation changes.
- Ensuring fairer prices for infrastructure development by:
 - Central Government auditing development contribution (DC) allocation of new macro-infrastructure benefits across new and existing users
 - Councils smoothing DCs by applying a rolling average cost to avoid “lumpy” changes in rates that create higher risks in land development
 - Central Government investigating and legislating to overcome barriers to utilities competition where monopolies take advantage of their monopolistic position
 - Utilities providers and Councils being required to share costs fairly for development-triggered macro-infrastructure, acknowledging that the current development should not pay for benefits that accrue to future developments.
- Reducing the liability of Building Consent Authorities (and therefore their risk aversion) by:
 - Central Government balancing BCA and builder liability better
 - Central Government promoting awareness and disclosure of home warranty products that places risk and reward where they belong – on the building industry
 - BCAs having the confidence to keep to the requirements of the Building Code based on clear expectations and responsibilities from Central Government.
- Bringing the amount of actual land (as opposed to land technically available) to market faster by:
 - Central Government and Councils instituting more explicit inclusionary zoning that specifies what is to be delivered and not just a pricepoint, and limiting BCA and developer-imposed covenants
 - Councils incentivising more rapid development of appropriately zoned land through rates targeting or other mechanisms.
- Supporting product quality and competition by:
 - Central Government actively developing or supporting the development of and auditing a national register of approved products and systems.

2. INTRODUCTION

The Registered Master Builders Association (RMBA) with support from the Construction Strategy Group (CSG), received BRANZ Research Levy funding to investigate the impacts of regulation on housing affordability.

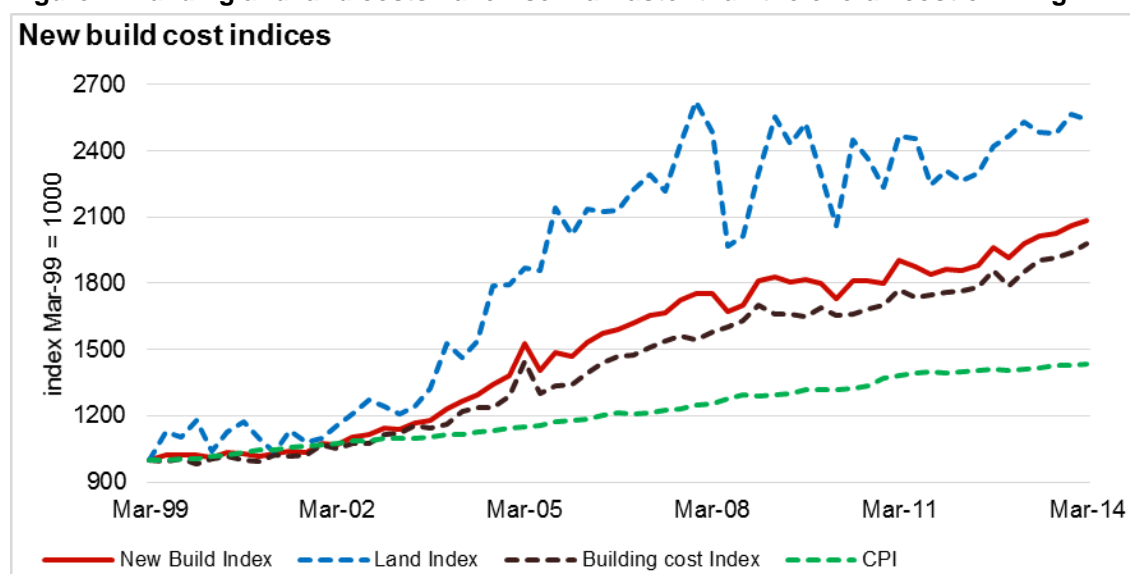
The BRANZ Building a Better New Zealand research strategy had previously identified housing affordability as a major component of its **Meeting the housing needs of all New Zealanders** priority area. In particular, BRANZ identified a need to better understand “the barriers to the delivery of new housing that caters for the bottom end of the market” as part of the external funding round for 2014. This report received funding through that research round.

2.1 The premise of the study

Recent interviews conducted by BRANZ as part of an unrelated study repeatedly indicated that the building industry believes land availability and regulation by Government play a major role in reducing affordability.

The cost of providing housing is soaring. Figure 1 shows that since March 1999, the standardised cost of a 500 m² section (the blue dotted line) has risen far faster than the overall cost of living (green dotted line).

Figure 1 Building and land costs have risen far faster than the overall cost of living

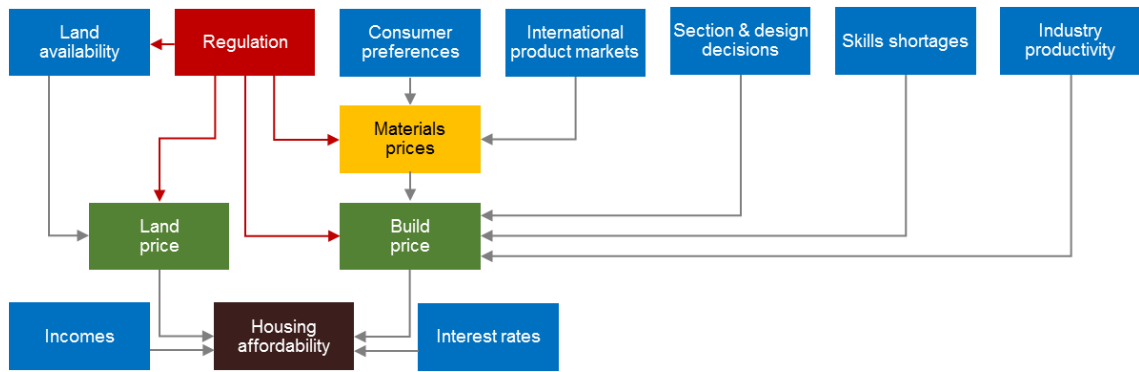


The cost of building a standardised 200 m² single level house (brown dotted line) has also risen far faster than the overall cost of living, even after stripping out quality improvements. As a result, the weighted composite New Build Index (the red line), developed by BRANZ, has increased nearly 110% over the same period that overall prices have risen just 44%.

It would be naïve to suggest that one single factor is responsible for these rapidly rising costs. However, as highlighted already, the building industry is increasingly concerned about the impact central and local government regulation plays in raising costs.

As this study shows, regulation influences the cost of delivering new housing, especially to the lower end of the new-build spectrum, in a number of ways, as highlighted by Figure 2.

Figure 2 Regulation can impact prices a number of ways



Regulation affects housing affordability through:

- directly influencing the cost of land through Council costs associated with subdividing properties
- zoning constraints and disincentives that affect actual (rather than technical) land supply and therefore price
- discouraging innovation, competition and interchangeability between building products and systems, which increases prices
- increasing compliance costs of subdivision, subdivision design, and build.

2.2 Previous work: The Productivity Commission Inquiry

Housing affordability is not a new topic. The New Zealand Productivity Commission (Productivity Commission) completed a 343-page inquiry on it in 2012.¹ Chapters 7, 8 and 9 of that report dealt with three areas of regulation that affect housing affordability, namely:

- urban planning
- infrastructure development (most notably development contributions)
- building regulations.

The current study intentionally began with a blank canvas, asking more than a dozen manufacturers, merchants, developers, builders and industry observers to identify what, if any, regulatory challenges they faced. There were a number of reasons for this approach:

- to arrive at independent views that were not influenced by those set out in the Productivity Commission's inquiry
- to avoid limiting the scope of the current study to issues that may have already been identified to identify any recommendations that may flow out of the interviews conducted in the current study that may be additional or even in contrast to Productivity Commission recommendations
- to determine whether any meaningful improvements have occurred in the two and a half years since the Productivity Commission Inquiry was completed.

Only once initial conclusions had been drawn, and initial recommendations developed, were the relevant sections of Productivity Commission Inquiry considered. It was clear from the reading of the Productivity Commission Inquiry that:

¹ New Zealand Productivity Commission. (2012). *Housing affordability inquiry*.

- many of the key regulatory issues highlighted in their inquiry were identical to those identified in the current work
- while some recommendations made by the Commission have been implemented via changes in the Local Government Act for instance, the majority have not
- little has changed with regard to the scale and frequency of these regulatory issues despite the passing of two and a half years
- some of the inquiry recommendations did not go far enough, particularly with regard to zoning not being sufficient to stimulate residential development
- the Licensed Building Practitioner (LBP) programme and inspections regime failing to reduce risk exposure for Building Consent Authorities (BCAs), and thus if anything, putting costs up without a reduction in risk.

Nevertheless, the Productivity Commission Inquiry made some excellent points. Where they are relevant to this study, those points are quoted, sometimes at length.

It is worth noting that the Productivity Partnership, a multi-agency group focused on improving productivity in the construction industry, explicitly excluded looking at regulation impacts on productivity as part of its scope. The topic of the impact of regulation on housing affordability has therefore not received a great deal of coverage outside of the Productivity Commission's work.

2.3 What this study is not

This study highlights a long-list of regulatory requirements that increase the cost of delivering new housing. It then estimates the costs associated with a number of the regulatory requirements believed to impose significant cost.

This study is not a comprehensive cost-benefit analysis (CBA). It is primarily focused on identifying the costs of various regulatory requirements. Nevertheless, where appropriate or easily accessible, the benefits of each regulatory requirement are discussed or quantified.

2.4 Study approach

The study had three stages. **Stage One** identified the range of regulatory issues ("the long-list") through a series of interviews.

Stage Two incorporated the views of regulators and developed a set of recommendations, many of which were apparent as a logical conclusion of the summary of the regulatory issues.

Stage Three estimated the expected cost saving of implementing each recommendation. Seen from another angle, Stage Three measures the reduction in housing affordability of each regulatory obstacle.

3. THE LONG-LIST OF REGULATORY OBSTACLES

A total of 13 individuals and groups were interviewed to understand the regulatory challenges to producing affordable housing. Full summaries of these interviews can be found in section 5.

It was a challenge to summarise the points made in the interviews into just the few headlines set out in this section. This required several relevant sub-points for each issue, each warranting individual consideration. Reading the full interview summaries to capture the full context of the points made is encouraged.

Figure 3 lists the eight regulatory issues as grouped in this report in order of priority (number of mentions by interviewees). The figure shows whether the issue predominantly affected the land, materials or building component of housing delivery. It also shows whether the housing affordability impact was through direct financial costs, time delays, or quality and competitiveness impacts. There is significant overlap between some of these issues.

Figure 3 The long-list of regulatory issues affecting housing affordability

Regulatory issue	Land / Building / Materials impact	Impact on affordability through:		
		Direct financial cost	Monetised time cost	Reduced quality / competitiveness
1 Development is over-regulated without regard for affordability implications	Land and building	Yes	Yes	
2 Development contributions calculations lack transparency	Land	Yes		
3 Consent conditions are inconsistent and go beyond Code and regulations	Land and building	Yes	Yes	
4 Development-specific utilities infrastructure costs are excessive	Land	Yes		Yes
5 The LBP programme has not reduced BCA inspections	Building	Yes	Yes	
6 Zoning is not enough to ensure development	Land	Yes		
7 Risk aversion and lack of product knowledge increase costs	Materials and building	Yes	Yes	Yes
8 Central government regulation lacks adequate rigour	Building	Yes		

3.1 Development is over-regulated without regard for affordability implications

The most recurrent theme across interviews was that many BCAs exhibit no understanding of, or in some cases a willingness to engage with, the affordability implications of their decisions and requirements. This was particularly notable in the **urban planning** space. Over-regulation included BCAs insisting on increasingly prescriptive and subjective urban planning requirements. These requirements are often beyond the requirements of the District Plan and vary among individuals within a BCA.

3.1.1 The RMA, the District Plan, Design Guides, and interpretation

One of the major reasons so much subjectivity appears to have crept in is the disconnection between the RMA, the District Plan, Design Guides, and individual interpretation of the Plan and Guides.

- The **RMA** mandates the development of District Plans. It also explicitly sets out a requirement in Section 32 (amended in 2013) for proposals for changes to District Plans to consider:
 - whether the provisions are the most appropriate way to achieve the objectives by identifying other reasonably practicable options for achieving the objectives; assessing

the efficiency and effectiveness of the provisions in achieving the objectives; and summarising the reasons for deciding on the provisions.

- the benefits and costs of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the provisions, including the opportunities for economic growth; employment. If practicable, the benefits and costs should be quantified and the risk of acting or not acting needs to be assessed.²
- **District Plans** set out the district's key resource management issues, and objectives, policies and rules to address these issues. The information that must be submitted with applications for resource consent is specified, and the environmental results that are anticipated from their implementation are outlined.³ Changes to District Plans are subject to the requirements of Section 32 of the RMA to determine whether the changes are the most appropriate way to achieve the objectives. The analysis must also estimate the environmental, economic, social, and cultural benefits and costs that are anticipated.

The quality of Section 32 analyses published online by different BCAs and even across different plan changes within particular BCAs varies widely.

- **Design Guides**, according to the Ministry for the Environment (MfE), are one means for pursuing the District Plan's objectives.⁴ Some BCAs go even further than that in how they view Design Guides. For instance, Wellington City Council sees the Design Guides as Volume 2 of a three-volume District Plan, rather than as something additional to it. However, in reality there appears to be a disconnection between legislative mandate and application of the District Plan through Design Guides:

- Design Guides are a construct developed by BCAs. There is no reference to Design Guides in the RMA.
- Although Section 32 mandates an environmental, economic, social, and cultural cost-benefit analysis of proposed District Plan changes, there appears to be no explicit evaluation of these impacts in

The quality of the Section 32 analysis varies widely across BCAs and is often absent from Design Guide stipulations, even when those Design Guides are included explicitly as part of the District Plan, which is covered by the RMA.

Design Guides. Instead, design Guides tend to be filled with emotive, subjective language, with no apparent empirical evidence supporting the design preferences in most cases. Some examples (with subjective language bolded), taken from the Wellington City Council Residential Design Guide, include:⁵

- Create **positive** open spaces between and around buildings: Open space on site should be planned and positive rather than **left-over**, and **function as an outdoor living room**. (G1.2)
- Avoid **monotonous** repetition of garage doors along the street frontage or within any development: Common open space associated with multi-unit development will be of **poor quality** and present a **relatively unattractive** entrance to the dwellings served if it is dominated by rows of garage doors. (G1.16)

² Parliamentary Counsel Office. *Resource Management Amendment Act 2013*.

³ Ministry for the Environment. (2006). *Your Guide to the Resource Management Act*. See pp. 22-23.

⁴ Ibid.

⁵ Wellington City Council. (2009). *Residential Design Guide*.

- Present a public face to the street with entrances and windows orientated towards the street: All development should contribute to the **visual appeal** and **quality of experience** of the street. Windows should be placed to give a good visual connection with the street. Such placement, giving a view out over the street, allows natural surveillance and projects the presence of life onto the street, making it a safer and **more attractive** place to be. (G2.3)
- **Individual interpretation:** Given the subjective nature of guidance like the examples above, different interpretation of Design Guides by individuals even within the same BCA is likely. For example, “positive open spaces”, “visual appeal” and “quality of experience” mean different things to different people. Many BCAs do not appear to justify the Design Guide or individual interpretation through appropriate Section 32 analysis. There is no evidence that BCAs consider housing affordability or wider economic implications in many interpretations of the District Plan.

“There are many reasons that can be advanced to support Smart Growth policies, urban limits or restrictions on building. These include limiting environmental effects such as pollutants, protecting farmland, or loss of amenity from the loss of open countryside, and maintaining the character of existing neighbourhoods.

“However these wider ‘environmental impacts’ need to be set against the stark reality that these policies result in people paying more for housing than they otherwise would have, with the additional costs and consequences quite possibly outweighing the potential benefits of more restricted urban form...

“It is concerning that councils may be unaware of the impact of policies that constrain or limit the supply of land for housing; dispute the ‘disproportionate weight given to the effect of local government policies’; or claim that ‘other factors will play a significant and more immediate role in improving housing affordability’.”

Productivity Commission Inquiry, pp. 124-125.

3.1.2 Implications for housing affordability

These subjective requirements often have large direct financial and time delay cost implications. Some key points made by interviewees include:

- **Developers continue to pay council rates on idle land** that has few if any services provided to it by the BCA, and which is unoccupied and cannot be built on while the lengthy urban planning process occurs.
- One developer was told that “**affordability is not the mandate**” of the urban planner. It raises the question of whose concern it is in Local Government.
- District Plans appear often to be **aspirational rather than achievable**, with little or no work done on the cost implications of achieving the outcome called for by the District Plan.
- Some BCAs appear to have taken an **ownership and/or policing mind-set** toward subdivisions and urban planning rather than a custodian and/or enabling mind-set.
- **Some BCAs act like the client**, rather than an agency looking to support affordable or sensible development. Rather than suggesting what the development needed to progress, they would wait for the developer to present an approach, and then say why it would not get approval.
- **BCAs vary dramatically in how, and how often, they communicate** with builders and developers. Some BCAs were good at communicating by email. Others made no contact

requesting more information until Day 19 or 20 of the 20 working day period. Some BCAs still communicate by regular mail, adding another two days' delay before the builder actually received the communication.

Some examples of the direct financial and time costs of decisions BCAs make (or fail to make) include:

- A BCA that insisted that garages in a terraced housing development be serviced by a separate garage access laneway. This reduced the net space devoted to housing within the subdivision, and required larger individual section sizes. The implication was \$100,000 added to the cost of each individual house.
- A BCA delayed consent on a 12 townhouse development (on land worth approximately \$1.5 million) for 18 months. The holding costs and rates on idle land led to an increase of \$15,000 to \$20,000 in the cost of each unit.⁶
- Urban designers at one BCA selecting the colour for houses, location of windows, and even sketching preferred layouts for house plans.

The impact of increasing the cost of a terraced house from \$400,000 to \$420,000 by delaying consents by 18 months would be to add \$102,900 and four years to the cost of repaying a mortgage.¹

In many cases, as the second and third bullet points highlight, the cost may be less direct financial and more in time delays. The cost of holding land and paying rates on idle land, sometimes for several years while BCAs evaluate applications, can cost tens of thousands of dollars per section. The impact on a mortgage is several times that impact.

3.2 Development contributions calculations lack transparency

Both land developers and builders mentioned development contributions (DCs) as a major cost that seemed unjustified. In most cases, DCs added a direct financial cost of \$25,000 to \$40,000 to the cost of a section.

DCs were introduced to help BCAs meet the cost of growth. Theoretically, DCs are charged based on the estimated capex of delivering a number of **macro-infrastructure** (i.e. infrastructure that serves more than just the new subdivision) growth and upgrade projects in a District. DCs are seen by many as fair that macro-infrastructure that is required because new households are added to a District be paid for entirely by those new households.

Interviewees saw the current DC approach as unfair for a number of reasons:

- There are a **number of benefits to existing households** from new infrastructure, which means new household units should not bear all the costs of this new macro-infrastructure:
 - New infrastructure can provide greater certainty of supply for existing households.

⁶ The boxed text example assumes a household income of \$80,000, an \$80,000 deposit (20% of the cost of the \$400,000 home), and an interest rate of 6.5%. It further assumes that the household is able to use one-third of its income for mortgage repayments. For the \$400,000 terraced house, repayments would total \$622,000 over 23.3 years. For the 420,000 terraced house, repayments would total \$724,900 over 27.2 years.

- Infrastructure upgrades required to serve a growing number of households often take the form of earlier asset renewals, leading to lower maintenance costs for assets that serve many people beyond the new subdivision.
- In some cases, the new infrastructure paid for by the new subdivision improves levels of service above that which households beyond the subdivision previously enjoyed.

Developers believe DC calculations lack transparency, science, or a fair estimate of the value of new infrastructure to existing households.

- There is a **lack of transparency** as to what DCs pay for. In reality, it may be hard to clarify what is covered by DCs on an individual property. This is especially true in the case of a large Council like Auckland, where hundreds of projects may be planned or in progress and are to be covered by DCs. Auckland Council does have a DC estimation calculator to help developers understand what costs are likely for developing a particular piece of land. Yet there is still a lot of confusion as to what DCs cover and what they don't. For instance, many builders and developers we spoke to mistook Watercare's Infrastructure Growth Charge for a \$12,000 connection fee. In fact, it is in effect another form of DC covering capex projects.
- There is an **apparent lack of financial analysis** behind some DC calculations. Linked to the previous point, there is no policing as to the financial soundness of DCs. The current legislation places restrictions on how BCAs estimate DCs, but this is not effectively monitored. So for instance, some developers have seen DCs in a certain area rise from \$6,000 to \$28,000 over the last eight or 10 years. To them, this appears a clear case of revenue-generation by BCAs. With little transparency on how DCs are estimated, and a quadrupling in costs over a decade, this view is unsurprising. Yet in many cases, the surge in DCs may have come as BCAs improved their understanding of the true capex requirements of serving their growing number of households.
- DCs **allow BCAs** to lump infrastructure costs on new-build owners, **artificially keeping rates rises down**. Given the lack of transparency and evident science behind DC calculation, some interviewees believed that DCs were a way of passing the cost of asset renewals or upgrades onto a small minority (new house owners). The LGA does not allow this, but without policing it is quite possible this is done to keep rates rises for the larger voting majority low.

The Productivity Commission adds that the DCs regime "may encourage councils to design projects that have higher initial capital expenditure, to limit the risk of future capacity shortfall, rather than later when development contributions cannot be charged. Councils may also be induced to favour a more capital-intensive investment option with lower operating costs, which are generally funded from rates." (Productivity Commission Inquiry, pp.137-138). It may also encourage gold-plating of projects (Productivity Commission Inquiry, pp.146-147).

3.2.1 *Implications of changes to the Local Government Act*

The Local Government Act 2002 Amendment Act 2014 became law on 8 August 2014. A number of its provisions affect DCs. Specifically, the amendments:

- change what development contributions can be used for, specifically limiting what community infrastructure DCs can be collected for
- allow for objections to development contributions charges
- explicitly allow for BCAs and developers to negotiate an appropriate mix of DCs and macro-infrastructure provision through development agreements.

These changes introduce greater clarity and in some cases, more flexibility. Development agreements in particular may offer a more reasonable way for developers and BCAs to work together to cost-share on macro-infrastructure. One BCA interviewed said developers they dealt with already tended to come into the initial discussion on a proposed development with some ideas as to how macro-infrastructure costs could be shared.

However, the amendments allowing for development agreements are likely to have greater impact on how the larger developers work with BCAs to develop an area. Smaller developer-builders seeking to develop a small infill or brownfields site may lack the LGA experience to lodge an objection or work with BCAs to fairly share costs.

At the same time, the overriding concern over the financial rigor and transparency of DC calculations remains. Even large developers will need to put a lot of work into understanding how DCs on their development have been estimated and whether or not they are fair.

3.3 Consent conditions are inconsistent and go beyond Code and regulations

Several interviewees commented on inconsistency in application of the Building Code and RMA across BCAs and by individuals within BCAs. This inconsistency often leads to needless direct financial costs as well as time delays, often because individuals at BCAs give contradictory requirements to the developer or builder.

One useful example from a builder who works across multiple BCAs was of the rules different BCAs had imposed to determine whether a **resource consent** was required for earthworks. These rules varied between:

- Moving more than 80 m³ of earth
- Moving more than 40 m³ of earth
- Cutting to a depth of more than 500 mm of earth
- Any impermeable surface of more than 25 m² (which includes almost all driveways).

There is no formal, time-effective process for challenging the apparently arbitrary interpretation of the Code or District Plan by BCAs.

There are similar inconsistent applications of the Building Code. Often, failed inspections on **individual interpretations of the Building Code**, or requirements beyond what the Code called for, meant a build could be delayed. This often included varying views on the appropriateness of acceptable solutions for use on a specific project. Further, there is no formal, time-effective process for challenging the apparently arbitrary interpretation of the Code or District Plan by BCAs.

Interviewees also mentioned the additional challenge of **Regional Councils** becoming increasingly involved with development approvals. This meant the developer or builder had **no single point of contact on regulatory issues**, and often acted as a referee between competing District and Regional Council demands. One interviewee pointed out that this was far less of a challenge working with the Marlborough unitary authority.

Inconsistency also posed challenges when **some BCAs approved use of a certain product** while others did not, which made it more difficult for builders working across multiple BCAs.

A further challenge had come about as the time taken to get subdivision projects approved had grown. **BCAs often had key staff members leave part way through** a subdivision process. The new person assigned to the project would have dramatically different interpretations of the Building Code, District Plan, or the subjective question of what good urban design looked like.

This often led to BCA staff requiring developers to change their plan far into the project, adding financial and time costs.

3.4 Development-specific utilities infrastructure costs are excessive

Developers and builders believe they (and ultimately new-build owners) are charged untransparent, inflated prices for connecting **micro-infrastructure** that benefits the utilities provider. The developer immediately transfers ownership of these assets to the utility. The utility then charges the new-build owner lines charges to use the infrastructure the new-build owner has paid for in its entirety. There are several components to this issue:

- **Inflated charges by** (often privatised) **monopolies or their sub-contractors** to connect utilities, typically power and telecommunications, (and sometimes water): Because of a lack of competition, these monopolies and sub-contractors charge as they see fit for connecting each individual section to the system. There is no transparency as to the link between that connection cost and the **true cost** of providing that connection. Rates at which monopoly sub-contractors connect services are often double or even triple the rates at which the private sector has historically connected these services.
- **Developers forced to build and pay for macro-infrastructure that services households beyond the subdivision:** In direct contradiction to what the DCs regime aims to achieve, developers often have to pay for infrastructure that serves other households or new subdivisions around them. Examples include electricity transformers, highway on-ramps, water tanks and pipes. Network monopolies that are not run by BCAs get away with this because their individual pricing and infrastructure requirements are unregulated, and are not subject to the LGA. In other words, the developer subsidises future development by paying upfront for macro-infrastructure that will benefit other developments or existing households.

As the Productivity Commission points out, a related issue is when larger developments “are required to fund works deemed internal to their subdivision, but which would have been considered external if the subdivision had been owned by several parties. This is particularly the case for projects related to roads and reserves”. (Productivity Commission Inquiry, p.128).

- **Ownership of infrastructure paid for by the developer is passed to the utilities monopoly:** Having paid for macro-infrastructure like transformers or water reservoirs, ownership of that infrastructure is transferred to the utilities provider. In other words, the capex cost of their new infrastructure is paid in full upfront by the new-build owner (via the developer), who then pays line charges to use the infrastructure.

It could be argued that this problem is a case of **under-regulation**. For instance, the Ministry for Energy, the Commerce Commission, and the Electricity and Gas Complaints Commission all say it is not within their mandate to examine the prices charged by monopolies or their sub-contractors for these connections. Further, no one has the authority to adjudicate whether it is reasonable that the developer pay the full upfront cost of infrastructure that will benefit others beyond the development.

In addition to individual site connections, developers often pay the full cost of macro-infrastructure that benefits households beyond the development, in direct contradiction to the user pays principle underpinning DCs.

3.5 The LBP programme has not reduced risk or BCA inspections

Several builders were frustrated at the number of inspections of each dwelling required by BCAs. One of the premises of the LBP programme was that through requiring several individuals to sign off their workmanship, it would create greater accountability among workers.

Yet, as many interviewees acknowledged, BCAs have understandably become highly risk averse since being held liable for billions of dollars of leaky building remediation costs. BCAs do not appear to trust that if something goes wrong with a particular build, they will not be left as the “last man standing” when house owners seek compensation. The small scale and high turnover of businesses in the building industry does not give BCAs the confidence that the builder will be around to remediate if the need arises.

As a result, BCAs undertake more inspections than ever. The Productivity Commission Inquiry quotes the former Department of Building and Housing as estimating the average number of inspections rose from seven per house to 11 between 2000/1 and 2006/7.⁷ Interviewees believed there were several implications of this:

- **Inspections were more likely to fail** than before: Because of the large number of inspections and limited BCA personnel, inspections often have to be booked a week or more in advance. In the past, they could be booked just a day or two in advance. This longer timeframe created more risk that the work that needed to be done for that inspection might not be fully complete in time. For instance, if there was a delay in materials arriving on-site, the builder may not be ready for inspection. Further, because BCAs did not feel empowered to rely on the LBPs, they were now more likely to fail an inspection on a technicality.
- **More direct financial costs:** BCA charges for inspections had risen due to the larger number of inspections required, and a higher proportion of re-inspections meant more by-the-hour inspection charges.
- **More time delays:** Both due to the number of inspections (some of which had to be done before work could continue, such as the pre-lining inspection) and to re-inspections.

The LBP programme, rather than reducing the need for BCA inspections, has been accompanied by more inspections than before, increasing costs and time delays.

Further evidence of the failure of the LBP to reduce BCA concern over being held liable is provided by recent changes to Section 45 of the Building Act (through the Building Amendment Act 2013). The Ministry of Business, Innovation and Employment points out that “Section 45 of the Act has been amended to make it clear that providing a Certificate of Work does not create new or additional liability for a design LBP, over and above the liabilities that already exist for negligent or incompetent work or breach of contract”.⁸ In other words, the Act explains that **the builder was just as liable prior to the implementation of the LBP programme a few years ago as they are now**. BCAs understandably believe that if the LBP leaves the industry or claims bankruptcy, the BCA will be once again be the “last man standing” under the current joint and several liability regime.

⁷ New Zealand Productivity Commission. (2012). *Housing affordability inquiry*. See p.160.

⁸ Ministry of Business, Innovation and Employment. (2013). *Building Amendment Act 2013: Changes that come into effect immediately*.

3.6 Zoning is not enough to ensure development

Interviewees pointed out that there is a common misconception that simply zoning land for residential development will lead to the market developing it, and specifically to provide affordable housing. Reasons cited for why zoning is not sufficient include:

- **Uncertain time and financial costs of the development process limit number of potential developers:** With larger subdivisions taking three to 10 years to be approved, there are large direct financial and time costs (holding costs) associated with development. Uncertainty over the length and ultimate cost of the process makes development less attractive and commercially viable. In many cases only large, cash-funded developers are able to take on the risk of dealing with the uncertainty.
- **Land owner expectations of price were often unrealistic:** When zoning was changed, many land owners assumed this led to an immediate increase in land price. They often set unrealistic prices for the sale of their land. This led to long delays in sale of the land while their expectations were moderated and while potential developers did due diligence on the potential profitability of developing the land.
- **Lack of incentive for building affordable housing:** There is little incentive, at least in an environment of strongly growing house prices and pent-up demand, for developers and builders to produce cheaper housing.⁹ In high demand environments, developers can create a higher value product that can be sold for significantly more than “affordable housing” without too much additional expenditure.
- **Lack of incentive by larger developers to bring land to market:** It is easy to constrain the flow of land to the market. This constraint is possible because many local development markets are dominated by a few larger players due to the huge costs and uncertainty associated with development. There is little pressure on developers to bring land to market quickly (other than to cash up), meaning supply can be intentionally constrained. In a simple case of supply and demand, this keeps prices higher in high-growth markets like Auckland.

Without certainty from BCAs on the development process and specific requirements for affordable housing, there is little incentive to develop more affordable housing, especially in times of growth.

This lack of competition and resultant slow-release of supply mean it is important to distinguish between **technical** and **actual** land supply. Technical land supply is a sum of all land appropriately zoned for development. In reality the actual land supply (the amount of land currently being developed or with the BCA for development approval) may be far smaller.

The Productivity Commission Inquiry did not go far enough in recommending ways to encourage developers to bring land to market more quickly. Its argument was primarily that not enough land is technically available (although it did not use that term). The recent declaration of Special Housing Areas has increased the technical supply of land, but slow uptake suggests the actual supply of land has not increased nearly as much.

⁹ We note that the exception is Special Housing Areas, which have some requirements for affordable housing (inclusionary zoning).

3.7 Risk aversion and lack of product knowledge increase costs

Interviewees were concerned that BCAs and other regulators did not have adequate understanding of the equivalence or otherwise of building materials and systems. This had a number of impacts:

- **Inconsistency in the approval of use of different building materials / systems:** Some BCAs approved certain products while others did not. Some BCAs required BRANZ or other appraisals (often at significant cost and time delays) before work could continue, while others did not. Some BCAs had lists of historically approved products (whether appraised or not) but were now debating continued use of these lists. Not using these lists would further delay the building consent process and lead to reduced choice of materials for builders.
- **Over-specification:** BCAs also tended to over-specify materials, or in some cases, even how documentation for new products needed to be presented, adding considerable financial costs and time delays for manufacturers and for builders.
- **Inability to interchange similar products:** Builders were often unable to interchange use of products that had been tested to the same standards without submitting a building consent revision, at considerable cost and time delays. This also reduced flexibility in responding to changes in product prices in the market.
- **Product and building system innovation is discouraged:** Because of the difficulty in getting different materials and systems approved by different BCAs, builders are forced to stick with what they know. This discourages use of new products or systems that may be cheaper and deliver the same or even improved quality outcomes.
- **BCAs could not monitor quality of all house components:** In some cases, sub-standard building materials or systems could be easily incorporated into a build without the BCA having any idea. An example was window joinery. Some had been salvaged from Canterbury demolitions, or could be a **sub-standard import**, without BCAs being any the wiser that these were being used in the build. The building consent and inspection regime were an attempt to ensure quality materials were being used, and assembled correctly. However, there were components where BCAs could not know with certainty that the right components and systems were being used. Increasing monitoring (through more inspections) was unlikely to reduce this risk.

The approvals of products by BCAs is inconsistent, reduces innovation, and only partially reduces the risk of sub-standard materials and systems being used.

3.8 Central government regulation lacks adequate rigour

Some interviewees felt that some requirements of the Building Code and other government regulations such as health and safety were inappropriate for New Zealand conditions or lacked adequate cost-benefit analysis. This meant that direct financial costs were being pushed up unnecessarily. Notable points included:

- **Regulatory changes were introduced without apparent consideration of the economic costs and benefits** associated with the changes: Interviewees felt costs were imposed without an adequate understanding by government of what these costs were. For instance, some believed many health and safety regulations were introduced without government quantifying or articulating to industry the benefits in terms of reduced injuries and deaths.
- **Health and safety regulation guidance was inadequate leading to compliance focus:** Builders were uncertain of exactly what they needed to do to ensure they met WorkSafe NZ

requirements, despite guidelines on initiatives such as the Working at Heights programme being issued. This encouraged builders to take a compliance approach that possibly imposed greater financial costs and time delays than necessary to avoid being fined or having a site shut down.

- The **Building Code specifies certain systems without always considering the appropriateness** for New Zealand's varied conditions, what is done internationally, or the cost implications:
 - Adopting international standards without considering applicability to New Zealand, or conversely, not considering international best practice, would be a wrong approach.
 - Not allowing sufficient conditions-based variation across New Zealand could also lead to over-specification, with considerable costs attached
 - Acceptable solutions tended to take a particularly conservative approach, without considering the costs (or risks) and benefits of less conservative approaches.

Central government regulation needs to show greater consideration of costs and benefits, and consideration of appropriateness for the New Zealand context.

4. RECOMMENDATIONS

This section sets out 16 recommendations that have arisen from the discussion of regulatory challenges affecting housing affordability. Figure 4 overleaf summarises the 16 recommendations, indicates who needs to lead the action, and shows which regulatory challenges each recommendation aims to overcome. Recommendations are covered under five main areas, but are also mapped to the eight regulatory challenges:

- Reduce over-regulation
- Ensure fair prices for development infrastructure
- Reduce liability of BCAs
- Bring land to market faster
- Support product quality and competition.

The recommendations should be seen as a system. They often overlap or provide assistance in achieving the goals of other recommendations. For instance, recommendations 4.11, 4.12 and 4.13 all have the benefit of reducing BCA liability.

4.1 Define explicitly the expected character of neighbourhoods

Who: Local government via District Plan

Many developers were concerned about the uncertainty created by current District Plans and the range of interpretations of those Plans. Several pointed to the greater certainty created by plans in Australia, where local councils use Neighbourhood and Precinct Plans to explicitly describe the sense of place they are attempting to create or sustain.

As long as proposed developments **comply with the specific requirements** of the Neighbourhood or Precinct plans, developers have **freedom to build what the market wants** without further regulatory intervention.¹⁰ Less room is left for subjective interpretations by different individuals within the BCA, meaning far more certainty for developers and builders.



















Impact

- Fewer time costs for development as initial subdivision plans submitted by developers are more likely to meet requirements that are explicitly stated upfront.
- Lower financial cost for time charged by the hour by BCA planners to review, monitor and comment on subdivision plans and resource consent applications.
- Lower financial cost from fewer subjective requirements imposed by individual planners without considering the implications on housing affordability.
- More land actively developed as zoned land that would otherwise be marginally profitable to the developer becomes more attractive for development due to reduced risk premiums required to be built into developer pricing.

Beyond explicit stipulations of a neighbourhood plan, developers and builders need the freedom and certainty to deliver housing the market wants.

¹⁰ In New Zealand, these neighbourhood plans could simply be a sub-section of the District Plan. Some BCAs do already produce more detailed planning for specific neighbourhoods, but a lack of specificity can leave too much room for interpretation by planners.

Figure 4 Summary of recommendations

Recommendation	Who needs to act?	Issues identified in interviews							
		Development is over-regulated without regard for affordability implications	Development contributions calculations lack transparency	Consent conditions are inconsistent and go beyond Code and regulations	Development-specific utilities infrastructure costs are excessive	The LBP programme has not reduced BCA inspections	Zoning is not enough to ensure development	Risk aversion and lack of product knowledge increase costs	Central government regulation lacks adequate rigour
Recommendation Area One: Reduce over-regulation									
1 Define explicitly the expected character of neighbourhoods	Local Govt								
2 Specify and limit authority of planners and free up market	Central Govt								
3 Be more diligent in complying with District Plan requirements	Designers, Developers & Builders								
4 Standardise conditions that trigger a resource consent requirement	Central Govt								
5 Bulk up large-scale earthworks and infrastructure consents	Local Govt								
6 Conduct rigorous analysis before implementing regulatory changes	Central Govt								
Recommendation Area Two: Ensure fair prices for development infrastructure									
7 Improve and audit DC allocation of new macro-infrastructure benefits	Central & Local Govt								
8 Smooth DCs by applying a rolling average cost	Local Govt								
9 Investigate and legislate to overcome barriers to utilities competition	Central Govt								
10 Share costs for development-triggered macro-infrastructure appropriately	Central Govt & Utilities Providers								
Recommendation Area Three: Reduce liability of BCAs									
11 Balance BCA and builder liability	Central Govt								
12 Institute a more comprehensive home warranty programme	Central Govt								
13 Give BCAs confidence to keep to requirements of the Building Code	Central & Local Govt								
Recommendation Area Four: Bring land to market faster									
14 Institute more inclusionary zoning and limit BCA and restrictive covenants	Local Govt & Developers								
15 Incentivise more rapid development of appropriately zoned land	Central & Local Govt								
Recommendation Area Five: Support product quality and competition									
16 Develop and audit a national register of approved products and systems	Central & Local Govt								

4.2 Specify and limit authority of planners and free up market

Who: Central Government via legislation

Interviewees suggested that although explicit neighbourhood and precinct plans would create greater certainty, there would always be the risk of subjective interpretation by BCAs or individuals at those BCAs. Interviewees felt there needed to be explicit limitations on the authority of planners. At very least, a legislated requirement for planners to consider and address the direct financial and time costs of imposing certain approval conditions was required.

Several developers commented that any private development undertaken carries huge financial risk for the developer. This creates a strong incentive for them to deliver the housing typology that the market wants. In markets where demand is high, this may skew development toward the high-end without inclusionary zoning requirements (see section 4.14).¹¹ But in areas where overall demand is more modest, developers will be incentivised to deliver affordable housing, but this is often curtailed by over-specifying by planners. Once again, clearly defining the extent of planner authority will free up development to deliver across the affordability spectrum.

All housing development, including affordable housing, must be done well. However, with a **requirement to consider the financial implications** of design and planning, planners will be able to help the development of a range of developments at different price points. Conversely, planners will need to acknowledge and take responsibility for imposing aspirational design requirements on a development that reduces its affordability.

Impact

- Fewer time costs for development as delays are reduced by eliminating subjective interpretations.
- Fewer time cost delays if BCA staff members leave or are replaced because individual subjective interpretations will be reduced.
- Lower financial cost due to developers being freed up to deliver affordable housing.

4.3 Be more diligent in complying with District Plan requirements

Who: Designers, developers and builders

All three regulators we spoke to said that subdivision and building consent applications often lacked the attention to detail required to be passed first time round. Designers in particular were singled out by two BCAs as using the BCA as their “peer review”. Certain basic requirements such as height restrictions or site coverage were often not met. The party seeking consent would complain that the BCA was being “picky” in approving the consent.

It is up to the designer and consent applicant to ensure that the proposed plan complies with all aspects of the District Plan. Designers based in other Districts or Cities needed to familiarise themselves with the District requirements of the area in which the development or building work would occur.

Designers in particular were singled out by two BCAs as using the BCA as their “peer review”.

¹¹ Inclusionary zoning occurs where central or local governments mandate that a certain proportion of housing within a development should consist of affordable (lower-cost) housing. Definitions of affordable housing vary, as do expectations of what should be delivered for a particular “affordable” price-point.

Some BCAs have gone so far as to offer training for builders and designers to ensure that they understand the requirements for submitting plans to that particular BCA. Some BCAs would argue that as their requirements from applicants are set out in the Building Code and District Plan, they should not need to educate designers and builders further.

Impact

- Faster turn-around time for consents as less re-work will be required.

4.4 Standardise conditions that trigger a resource consent requirement

Who: Central Government via legislation or regulation

The wide range of inconsistent (and changing) conditions that trigger resource consent requirements across BCAs point to a large amount of subjective interpretation of the Resource Management Act. The example given of different BCAs requiring resource consents for different amounts of earth moved, different depths of cut, and different impermeable surface areas, is one evidence of an inconsistent system. This inconsistency creates uncertainty and time delays through increasingly strict and arbitrary triggers.

The RMA or supplementary legislation or regulation needs to **create consistency across BCAs** by explicitly stating when a resource consent is required. This would prevent extreme rulings like a recent decision by a BCA that a resource consent is required for any impermeable surface (e.g. driveway) of more than 25 m². On the other hand, it would need to take into account features that vary across BCA jurisdictions, such as geological typology. One BCA interviewee commented that Central Government is looking at the possibility of creating some standardisation in resource consent triggers. This process should be encouraged and advanced.

Central Government is looking at the possibility of creating some standardisation in resource consent triggers. This process should be encouraged and advanced.

Further, in developing appropriate legislation or regulation that sets trigger points, government needs to **show that empirical evidence** supporting the financial, economic and environmental implications of those trigger points exists (see also section 4.6).

Impact

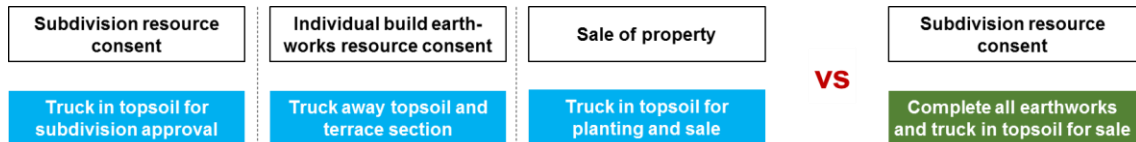
- Fewer time costs for development as delays are reduced by eliminating subjective interpretations as to whether a resource consent is required, and as there will be greater consistency in consent triggers across BCAs.
- Lower financial costs passed on to new-build purchaser as fewer resource consents are triggered.

4.5 Bulk up large-scale earthworks and infrastructure consents

Who: Local Government via resource consent process

BCAs need to consider the affordability and environmental implications of not performing upfront bulk earthworks and infrastructure development across an entire development. As one interviewee explained, some BCAs adopt the approach set out on the left of Figure 5.

Figure 5 An improved approach to managing development earthworks



Some BCAs do not allow earthworks to terrace sections for easier development at the bulk subdivision level. Instead, to issue a subdivision consent, a certain amount of topsoil must be in place across each section within the subdivision. Each section therefore requires individual earthworks at the time the build begins, often requiring an individual resource consent.

Top soil has to be removed as part of the earthworks process to provide a flat building platform on each section. After earthworks have been completed, a layer of topsoil has to be re-laid to allow for planting and sale.

This approach requires topsoil to be transported to or from site three times rather than once. Further, there are likely to be greater environmental impacts and amenity dis-benefits on existing residents who have to deal with more noise and the repeated tracking of dirt down the street. Finally, the cost implications are large; developers are also forced to use smaller earthmoving equipment in several stages. This can increase the cost of earthworks from \$3,000 to \$20,000 per section.

Impact

- Time cost savings through reduced resource consent processes and project management to require individual earthworks projects.
- Direct financial savings through bulking up earthworks and through fewer resource consent applications.
- Improved environmental impacts.
- Reduced ongoing disruption for existing neighbours.

4.6 Conduct rigorous analysis before implementing regulatory changes

Who: Central Government

All **changes in regulation** that impose any significant cost on a building project **should be tested for economic sense** before being implemented.

Several interviewees were concerned at the apparent lack of rigorous analysis of the costs and benefits of proposed regulations before they are introduced. No regulations should be introduced without the societal benefits being identified, calculated over an appropriate period of analysis and these benefits clearly articulated to the industry.

Changes in regulations in recent years had added upwards of \$10,000 in costs per build project. But builders did not see the benefits of these increased costs as they had either not been estimated or communicated by the relevant government agencies.

No regulations should be introduced without expected societal benefits being calculated over an appropriate period of analysis and these benefits clearly articulated to the industry.

The evidence for expected benefits of individual regulatory changes need to be quantified, to determine if scarce economic resources (money) are being optimally allocated.

A recent example is the suggestion that insulation should be required around concrete slabs for residential housing to improve energy efficiency of the building. The actual reduction in energy costs for a household from an insulated slab needs to be rigorously tested against the expected cost of that additional insulation. This will determine whether the savings over the life of the building justify the upfront expense.

A further example could be additional sustainability measures that some BCAs may seek to implement, where advice is provided to them solely from the perspective of minimising environmental impact. Instead, advice should be from the perspective of optimising use of limited resources, both financial and environmental.

The Productivity Commission Inquiry reached a similar conclusion with regard to the need for more robust assessments of changes to the Building Code:

“The Commission considers that the Treasury, as the overall monitor of regulatory quality and processes, and the Department of Building and Housing, as the regulator responsible for the performance of its regulatory functions, should review the quality and robustness of RIS [Regulatory Impact Statements] work for changes to the Building Code. Such a review would focus on ensuring that the process undertaken to identify the costs, risks and benefits of adopting changes to the Building Code are consistent with best practice.”

Productivity Commission Inquiry, p. 157.

Impact

- Better decision-making on allocating economic resources, leading to better economy-wide outcomes.
- Reduced cost to build if existing regulations are shown to have benefits that do not justify significantly increasing building costs.

4.7 Improve and audit DC allocation of new macro-infrastructure benefits

Who: Local Government and Central Government via regulation

The recent amendments to the Local Government Act have been a step in the right direction in making the DC estimation process more transparent and contestable by the developer.

However, there is a lot more work to be done in improving the rigour with which Local Governments apportion benefits across new and existing households:

- **Acknowledging the benefits that accrue to the existing households** in the community from earlier renewal, upgrade or addition of macro-infrastructure (triggered by new development) has often not occurred. BCAs need to more explicitly consider who benefits from new, upgraded or renewed assets triggered by new development, and to what extent, as part of their DC calculation process.

The Productivity Commission takes this further, suggesting that “assets that provide comparable benefits to users in long-established areas (such as major sewage treatment plants) may be better recovered through rates”. (Productivity Commission Inquiry, p.140). Even further, the Commission suggests DCs are best suited to “major economic infrastructure assets, such as trunk water, sewerage and drainage, and major roads” (p.141). The Productivity Commission approach reduces the number of projects that should be included in DC calculations by:

- excluding community-wide infrastructure like sewage treatment plant renewals, upgrades or expansions
- excluding small local infrastructure projects for which estimating and implementing a DC is not worthwhile.
- BCAs also need to **work harder to ensure better institutional memory**, so that as time passes, there is clarity as to what projects are covered under the DCs at each point in history.
- BCAs need to more clearly **differentiate the costs of infrastructure in different parts of the District** to accurately reflect the far lower cost of delivering infrastructure in areas already well-served by infrastructure and where capacity remains. In contrast, more distant greenfield developments should attract higher DCs, all else held equal. This will have the added effect of encouraging development in brownfields and infill areas.
- Similarly, **DCs** when accurately calculated, **should be far lower for medium- and high-density development** as providing trunk and distributor infrastructure is cheaper for these household types. This would have the added incentive of encouraging uptake of this type of development where it is needed in more central locations, where higher densities are sought.
- Central Government needs to **provide independent audit of DC estimation processes** to ensure they are transparent, follow best practice, and fairly apportion benefits across new and existing households. This will prevent BCAs, under political pressure to keep rates rises down, from assigning infrastructure renewal or upgrade costs that benefit existing households to DCs.

*“Infrastructure charges should not unnecessarily inhibit allocative, administrative or transactional efficiency, so as to facilitate development.”
Productivity Commission Inquiry p.142.*

Impact

- Direct financial reduction in cost to develop as benefits to existing households are explicitly and transparently included, and BCAs are audited for rigour of analysis.

4.8 Smooth DCs by applying a rolling average cost

Who: Local Government via regulation

A rolling average of infrastructure costs per Household Unit Equivalent (HUE) over a set period such as 15-years starting five years in the past, should be estimated. This would allow smoothing of DCs over a longer period.¹² This would provide greater certainty to developers as to the likely DCs per HUE in their development, and would limit large fluctuations in DCs over time.

This recommendation could be seen as part of the previous recommendation, but is separated out as a recommended approach for smoothing DCs.

Impact

- Greater certainty of cost for developers, and a more evident tie between projects recently completed and currently underway on the one hand, and the DCs charged on the other.

¹² The HUE unit allows BCAs to compare the DC burden for different types of development, including residential, commercial and industrial.

4.9 Investigate and legislate to overcome barriers to utilities competition

Who: Central Government via legislation

The prices many utilities monopolies (such as lines companies and telecommunications firms) **charge for connecting individual sections or subdivisions is unregulated**. As a result, many interviewees are convinced new-build customers are paying far more than market rates for utilities connections.

Yet at present, no agency in New Zealand interprets legislation as giving it the mandate to investigate the prices charged for utilities connections.

Sometimes a sub-contractor regime is used, but questions arise as to the level of genuine competition and resultant pricing implications when there is a small pool of approved sub-contractors. At least three factors point to a **non-competitive market**:

- There is a **limited number of sub-contractors approved** by the monopoly to connect households, which creates a high risk of cartels being formed.
- In many cases, the **monopolistic utilities provider picks** which of one or more bids by sub-contractors will be used to undertake the work. This approach creates a disconnection between the builder, developer and new-build purchaser who are seeking a fair market price.
- The monopolistic utilities provider often **adds a project management fee** as a percentage of the sub-contractors' quoted price. This reduces the incentive for them to select the cheapest sub-contractor to undertake the work.

No agency in New Zealand interprets legislation as giving it the mandate to investigate the prices charged for utilities connections.

Potential agencies that should have an oversight role, and all of which now claim no such mandate, include the Commerce Commission, Ministry for Energy, and Electricity and Gas Complaints Authority. Central government needs to:

- Investigate the **appropriateness of the current utilities monopoly regime** in providing fair market prices for the installation of site-specific (micro) infrastructure.
- Institute **appropriate oversight** within an existing agency to ensure utilities cannot over-charge on connections.
- **Investigate barriers to entry** of a larger pool of sub-contractors, particularly in less urbanised parts of the country, and legislate where required to ensure monopolies actively seek to appoint multiple sub-contractors.
- Mandate a system whereby **the builder, developer and/or the new-build client selects** which of **the approved sub-contractors** to commission to undertake the work. By removing the decision-making from the monopoly, greater competition will be encouraged.

Impact

- Reduced financial costs of connecting individual sections through improved competition
- Better service times provided as competition increases, reducing time delays.

4.10 Share costs for development-triggered macro-infrastructure appropriately

Who: Central Government via legislation; Utilities providers (whether private or publicly owned)

The extent to which BCAs can charge for infrastructure development is regulated by the LGA. In contrast, many private, non-BCA network providers, and even some Council-Controlled Organisations (CCOs) operate from a monopolistic position which creates an inequitable bargaining position.

These network providers can insist that developers install macro-infrastructure (such as transformers, roading, or telecommunications infrastructure) to service their specific development even if there may be benefits beyond the local development. Although the macro-infrastructure may be used to service new neighbouring developments, they are fully funded by the first-mover developer.

This approach is **in stark contrast to the DCs regime and principles**, whereby **each new development is required to pay its fair share**. These other private and public network providers should be required to consider total demand growth and infrastructure required just as BCAs do in estimating DCs. This would ensure that the current developer pays only their fair share of the cost of the new infrastructure, meaning an immediate improvement in housing affordability on the current development.

Requiring developers to pay the full upfront cost of macro-infrastructure that benefits other developments is in stark contrast to the DCs regime and principles.

The simplest way to achieve this is through a formal requirement for **cost-sharing between the developer and the network provider**. Some BCAs, where developers have the scale and legal support to ensure a fair deal, already work with developers to share these costs.

Privately-owned monopolies appear far less willing to negotiate, leaving developers with no recourse but to pay the full cost upfront or not have the infrastructure built. This potential abuse of a monopolistic position would be prevented through government requiring the monopoly to transparently:

- show how the current development triggers demand for the macro-infrastructure
- determine the scale and form of the macro-infrastructure (to prevent gold-plating or a skewing toward high-capex, low-opex macro-infrastructure that burdens the developer unfairly)
- forecast future development and how the proposed macro-infrastructure may or may not benefit development outside the first-mover's development
- estimate an appropriate share of upfront costs to be paid by the first-mover
- determine the fair share each subsequent development will need to pay to contribute toward the macro-infrastructure.

This corrective action would ensure the provision of monopolistic services not covered by the LGA are estimated along the intended lines of DCs. This would be a dramatic improvement on the current approach, which is open to abuse, unfairly shares costs, and reduces affordability of development occurring now.

Some argue that if the first-mover developer does not pay the full cost of infrastructure, it simply shifts the cost of that infrastructure to future developments, with a net impact on affordability of zero. In high-demand areas like Auckland, this is unlikely to be the case.

For example, assume a first-mover development pays the full price of upfront infrastructure (say a highway exit) at a cost of \$8,000 per housing unit. Assume the first-mover development sells those units for \$500,000. The second development, which benefits from the “free” highway on-ramp provided by the first-mover developer, has no incentive to deliver similar housing for \$492,000. In a high-demand market, a price of \$500,000 has already been set, meaning a likely windfall gain to the second developer of \$8,000, and a higher price for the potential new-build purchaser.

Impact

- Lower long-term financial costs for first-mover developers, encouraging development of appropriately zoned land.
- Faster development of residential land without the disincentive of having to bear the full cost of upfront macro-infrastructure.

4.11 Balance BCA and builder liability

Who: Central Government via legislation

The liability of BCAs in terms of claims for building failure needs to be explicitly limited. The BCA should be responsible for ensuring a planned build meets District Plan and Building Code requirements. However, it should not be held responsible for ensuring the builder builds in line with the building consent stipulations insofar as the new-build does not affect neighbouring households or the District Plan.

In other words, the BCA should ensure the house sits within the building envelope and other District Plan requirements. However, there is an opportunity to review the whole concept of inspections based on self-certification, the confidence levels that the BCA has in the builder/designer/architect, the degree of assurance a building company has in place and the presence of a warranty scheme.

Instead, ensuring a house meets the requirements should be the responsibility of those doing the work (perhaps within the LBP framework), backed by appropriate warranties as discussed in recommendation 4.12.

Impact

- Combined with the recommendation on home warranties, this would likely reduce the number of BCA inspections required, directly reducing financial costs
- Reduce time costs of delays due to inspection scheduling and re-inspections.

4.12 Institute a more comprehensive home warranty programme

Who: Central Government via legislation and promotion; home warranty programmes such as Master Builders

As highlighted by many interviewees, the current LBP programme has not led to a reduction in BCA inspections. A major reason is that BCAs believe they will still be liable for a building failure if the builder or sub-contractor is no longer able to meet the cost of remediation. In other words, the current system **does not apportion risk appropriately**, to where responsibility for building failure lies. However, there appears to be little opportunity or desire to review the current legal framework of joint and several liability.

Current changes in legislation are aimed at making clear what guarantees and warranties the building contractor offers. However, this is insufficient to ensure remedial work is undertaken if the contractor's warranties are not backed by a more comprehensive warranty system that is monitored for financial viability and integrity.

A better approach, and one that follows directly from the recommendation in section 4.11, is to either **mandate home warranties on all new-builds**, or to **require new-build purchasers to opt out** of a warranty scheme. Either way, it is crucial to ensure these warranties are offered by an organisation with strong financial hygiene. Approval of a building consent and the ongoing role of the BCA in monitoring the build would be linked to the head contractor having:

- relevant quality systems, qualifications
- design specification
- warranties that would cover the build for an appropriate period (typically 10 years for a new-build).

There are several models overseas and domestically from which to draw in establishing this system. Some of these are discussed briefly in Appendix A.

4.12.1 Application to New Zealand

Introducing a requirement for appropriate warranties before building work is undertaken **does not necessitate a single national or state-wide home warranty insurer as used in the UK or Australia**. Existing programmes such as the Master Build 10-year guarantee and similar programmes could remain in place. Government would be responsible for ensuring all schemes adopt appropriate financial measures, actuarial reporting and safeguards to ensure insurers can pay out in the event of a series of major building failures.

A system of Assurers (or warranty providers) monitored by the government should be introduced along with legislation that explicitly limits the BCA's legal responsibility (see section 4.11). The head contractor would be responsible for fixing defects covered under the warranty period, but in the event a head contractor is unable to undertake remedial work, the new-build customer will have recourse via the warranty provider to get the remedial work done.

Based on the views expressed through interviews and follow-up discussions, the two options that reduce BCA liability while protecting the consumer are:

- Government mandating that **all new-builds be covered by a warranty system**. Building consents would only be issued when an appropriately licensed builder who has secured warranty coverage for the new-build from an approved warranty provider that meets the required financial and actuarial standards.
- Government mandating that all **new-build purchasers would need to opt out** of a warranty scheme as part of their contract process (which would also explicitly state they have no claim on the BCA). The lack of a warranty on the new-build would then be recorded on the property title (as new-build warranties would need to be transferable as in the current Master Builders programme).

The advantage of the mandatory cover approach is that it would provide a high level of certainty to home owners, and to the second and subsequent owner of a new-build. These people often do not have the technical knowledge of the build process to understand the risks associated with building or with not having warranty cover.

A compulsory or opt-out warranty system would increase the proportion of new-builds covered by warranties, leading to less risk aversion by BCAs.

The advantage of the opt-out approach is that it preserves a greater level of free market choice. This approach may be functionally the same as the mandatory cover approach. This is because the lack of a home warranty will be recorded on the title, and because many banks already require evidence of a home warranty for new-build lending.

Either way, this warranty system would increase the proportion of new-builds covered by warranties, which would lead to less risk aversion by BCAs. Further, assurers would be incentivised to play a greater role monitoring builders for performance.

A more comprehensive warranty system would be an important way to re-balance risks and responsibilities across:

- home owners, who ultimately pay for warranty cover
- builders, who undertake the work
- BCAs, whose reduced liability is likely to result in less risk aversion.

As a result, a builder with a history of poor quality work or a failure to fix defects would be unlikely to get coverage, and would be less likely to build new houses.

Impact

A comprehensive home warranty programme is to have all or some of the following impacts:

- Create greater certainty for home-owner and BCAs as to coverage being available if needed.
- Improve the quality of building work by reducing the number of repeat offenders who deliver poor quality housing as they will be unable to get insurance and therefore to undertake building work, while good builders will be rewarded by continued insurance and possibly lower premiums.
- Reduce time costs of delays due to inspection scheduling and re-inspections.
- Lead to improved attention to design quality and construction through both the presence of building guarantees and limiting BCA liability.

4.13 Give BCAs confidence to keep to requirements of the Building Code

Who: Central Government via legislation; Local Government via streamlined inspections regime

Often, inspections fail on individual interpretations of the Building Code, or requirements that builders believe to be beyond what the Code calls for. This creates time delays and additional costs for the builder, which have to be passed on to the new-build customer. Further, there is no formal, time-effective process for challenging the sometimes arbitrary interpretation of the Code by BCAs.

At the same time, builders mentioned that poor product or building systems knowledge resulted in BCAs requiring overly-onerous approvals processes or sometimes refusing use of a product or system. Often BCAs request appraisals or other certification on products that are widely used across other BCAs.

In many cases, BCAs are simply acting in a rational manner given their high level of risk-aversion because of the huge liability they were exposed to through the leaky buildings experience. A number of actions need to be taken to provide greater certainty for BCAs and builders:

Limit the liability of BCAs with regard to housing failures, reducing risk aversion so they are empowered to keep to the Building Code.

- Explicitly **limit the liability of BCAs** with regard to housing failures (dealt with further in recommendations 4.11 and 4.12), reducing risk aversion so they are empowered to keep to the Building Code.
- Introduce a formal, **time-effective process** that allows builders to **challenge** the interpretation of the Code by BCAs.
- **Audit BCAs** to ensure they meet both time and quality requirements in terms of both meeting and not exceeding Building Code standards.

Impact

- Direct financial cost savings through fewer failed inspections
- Time savings through fewer failed building consent applications, and through fewer failed inspections.
- Less risk-aversion by BCAs, leading to design solutions that appropriately weigh cost and risk.
- Improved competition in the materials market as a wider range of products and systems will be accepted by more BCAs.

4.14 Institute more inclusionary zoning and limit BCA and restrictive covenants

Who: Local Government via District Plans; Developers via covenants

Zoning land for residential development has not proven sufficient to encourage the development of housing in general, and housing at the lower end of the affordability spectrum in particular. Yet even in areas where demand for new housing is not that strong, like Wellington, most housing continues to be delivered at the upper end of the price spectrum. To combat this, several steps should be taken:

- BCA planners must **acknowledge that not every street in every suburb can offer maximum amenity as well as be affordable**. As already mentioned, there needs to be greater consideration given by BCAs to the financial and time cost implications of subjective urban design conditions imposed on developments. An appreciation of costs and a desire to deliver warm, dry, energy-efficient housing to the community should underpin decisions on how far individual streets and neighbourhoods should go in delivering amenity. New Zealand's least affordable neighbourhoods are so precisely because they offer maximum amenity.
- BCAs must **make greater use of inclusionary zoning, defining what affordable housing in inclusionary zoning areas consists of** in terms of price, size and other relevant factors. One concern is that the current inclusionary zoning regime is at risk of supporting "**super-profits**" through the delivery of far smaller homes at a disproportionately small price reduction. An example is recently-built small homes, put forth as exemplars, where the sales price was over \$3,800 per square metre (excluding land costs), compared to an industry average of under \$2,500.
- In developing inclusionary zoning requirements, BCAs should work with developers to **set limits on restrictive covenants**. Restrictive covenants are set by private developers to give property purchasers confidence that the amenity of the neighbourhood is maintained. However, as BCAs have pointed out, covenants have the same impact on the delivery of affordable housing as overly onerous BCA planning and subdivision requirements. They push up the cost of compliance and building, reducing affordability.

New Zealand's least affordable neighbourhoods are so precisely because they offer maximum amenity.

It is worth noting that opponents of inclusionary zoning have argued that it provides a windfall gain to the first owner of an “affordable home” built as part of a more expensive development. However, this argument does not appear to stand up to interrogation. If a 200 m² house on a 300 m² section is selling in a subdivision for \$660,000, there is no reason why a 130 m² townhouse on the next street on a 220 m² section could not sell for \$450,000. No subsidy would be required.

Impact

- Allows for the more rapid development of appropriate homes at the affordable end of the spectrum, beyond current requirements of Special Housing Areas (SHAs).

4.15 Incentivise more rapid development of appropriately zoned land

Who: Central Government via legislation if required; Local Government via regulation

Several developers commented that land owners often held onto land for several years even after it was rezoned residential, in the hopes of gaining a large windfall profit as demand built. Developers can also hold onto land when demand is high, hoping that prices will rise faster than the holding costs of the land.

“When supply is over-regulated...land banking becomes a rational commercial response, further undermining the calculation of future capacity and promoting high land and housing prices.

“Sufficient competition in the supply of land for development will assist in placing downward pressure on land prices. Therefore, developers are competing with each other with respect to the sale of construction-ready sections, thereby helping ensure that land is offered at affordable prices. Where competition amongst developers is limited by land availability constraints, this can lead to high land and house prices.”

Productivity Commission Inquiry Draft Report, 2011.

This land-banking **dramatically reduces the effectiveness of simply zoning land** for residential development. Several mechanisms to overcome this sluggishness in delivering residential development have been suggested. These mechanisms vary in the extent to which they intervene in the market, and are listed here in increasing scale of intervention.

- **Reduce over-regulation of supply.** This over-regulation increases the cost of land provision, pricing out debt-funded developers, and reducing competition.
- **Allow planning permissions to lapse** if development does not begin in the stipulated time. Most consent approvals allow an extension period. BCAs could eliminate the option of an extension in times of high demand for land.
- **Pre-emptively install infrastructure** to lead development.
- **Reduce or eliminate zoning restrictions and metropolitan urban limits.** This will remove incentives to land bank, which only occurs when a small number of providers dominate supply. This approach is criticised because of a fear that it will encourage urban sprawl (e.g. development outside the metropolitan urban limits). This can be mitigated by accurately charging DCs based on the true cost of delivering services to outlying areas. As a result, people may be incentivised

Over-regulation and the resultant dominance by a small number of asset-funded developers leads to less than optimal land development timeframes.

to build more centrally, where costs per dwelling of site-specific infrastructure may be lower. This would need to be offset against potential capacity constraints in services to the site.

- **Increase BCA rates charges in line with expected use** to encourage the most productive use of the land. Most BCAs already revalue land at rezoning it residential (by, for instance, 50% in the case of one BCA we spoke to). However, in many cases the revaluation may not be sufficient to encourage quicker development of the land. In BCAs where zoned land is not being developed in a timely manner, BCAs could begin to **rate that land in accordance with its expected end use**. For instance, areas zoned for medium density could be rated at several times the rate for working rural land.

BCAs would need to be flexible in raising rates charges on newly zoned areas. They could strongly incentivise development in times of high demand, but also reduce pressure on the developer or land owner to develop during downturns via rates. Failing to moderate rates charges in downturns could create financial difficulties for the developer and undermine the goal of delivering housing in a timely, economically-efficient manner.

- **Capture a proportion of the windfall gain** in land value due to a zoning change. Some BCAs (including Auckland) have proposed this approach, which has been used in Australia, Canada, and the United Kingdom. Its critics suggest that this approach is a form of capital gains tax. Because it is only realised when the land is sold, it is likely to **dis-incentivise** sale of land to developers, and therefore to slow development. Further, implementing this approach would require a change in the LGA. It “could also bias council decision-making between outer urban fringe development and inner brownfields development” (Abelson, cited by Productivity Commission).¹³
- **Compulsorily purchase land zoned for development** that is not being developed, and sell it to a developer who does have a plan to develop in the short-term.

Impact

- Increase competition in land supply, reducing raw land prices, and increasing the speed with which land is developed.

4.16 Develop and audit a national register of approved products and systems

Who: Central and Local Government via regulation

Some BCAs have developed their own lists of approved products, or have borrowed from lists assembled by other BCAs. Other BCAs evaluate products or systems on an ad-hoc basis, relying on the capability of their own building consent teams (which may or may not be sufficient). Still others require an appraisal from a suitable New Zealand accreditor an equivalent overseas certification before a product or system can be used.

The uncertainty and variation in approach by individual BCAs works against the successful introduction of innovative materials and products onto the market, limiting competition. However, at the same time BCA staff processing building consents, and the home-buying public, need to be protected against sub-standard local or imported products being used.

Several interviewees mentioned that Auckland Council is one BCA that has in the past had its own list of approved products, based on appraisals and/or years of low-failure product use. This

¹³ Productivity Commission. (2012). *Housing affordability inquiry*. See p.119.

list may provide a good starting point for **developing a comprehensive register** of approved products and systems that all BCAs can contribute to and access.

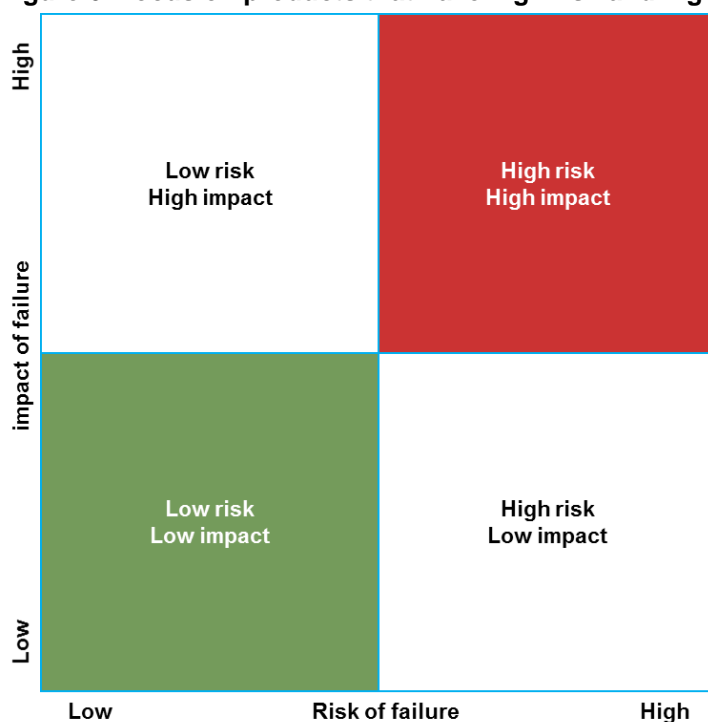
Whether products would need to receive testing certification to make the list could be a function of risk of product failure and materiality of impact of failure. This relationship is highlighted in Figure 6.

Products or systems in the red quadrant would be subject to the most stringent testing under this approach. Those in the green quadrant would be subject to the least testing, or may be well-established as appropriate for use in New Zealand conditions.

Interchangeability of products would drive innovation and affordability, but would only work for products that were like for like.

A national register may also significantly simplify the process of **interchanging similar products**, as the register could show whether products were like for like. This would streamline or eliminate many building consent variation applications when builders want to switch different brands of the same product type, for instance. It would only work for products that were **like for like**. This would encourage price competitiveness on materials, leading to an overall increase in housing affordability in a competitive market.

Figure 6 Focus on products that have high risk and high impact of failure



One caveat to this approach would need to be clarity on liability if a builder switches a product from that specified by the designer or specifier. As the law currently stands, this liability appears to be transferred to the builder. A national register would need a robust mechanism to allow comparison between products that took account of bracing, R-values, durability or other factors that may vary between otherwise similar products.

To ensure the soundness of the list, auditing of high risk products should be covered by a certification or appraisal system which will automatically maintain currency through **regular validation testing**.

Low risk, low impact and some low risk, high impact and high risk, low impact products would be subject to **random periodic testing**. This would be especially true for imported products where information on production techniques is limited, or where products have been approved for the national register based on overseas certification.

Impact

- Increased certainty as to likelihood of BCAs approving products for use, leading to less rework of consent applications, saving time.
- Greater flexibility in use of products, giving builders the opportunity to drive price competition.
- Verification is done once, not multiple times at various BCAs, leading to less spending on BCA approval that a product is fit-for-purpose and ultimately cheaper products.
- Greater confidence that domestic manufacturers are competing on a level playing field with imported products, whose certifications and suitability are not always independently verified
- Cost savings on the building consent process as BCAs will issue fewer requests for information on building products.

5. QUANTIFYING THE BENEFITS OF BETTER REGULATION

This section uses a case study approach to summarise and compare the impacts of a range of regulations on housing affordability. It sets out both the individual and collective impact of the different recommendations made in this study.

5.1 The representative case study home

The case study is for the delivery of a **representative** 145 m² house on a 400 m² section, assumed to be part of a development of 10 to 12 similar houses in Auckland. A house of this size is likely to include three bedrooms plus a study, a single garage, two bathrooms, and open-plan kitchen, dining and living.

The assumption is that the house is stand-alone, but most of the costs are likely to be similar regardless of whether the house is stand-alone or terraced

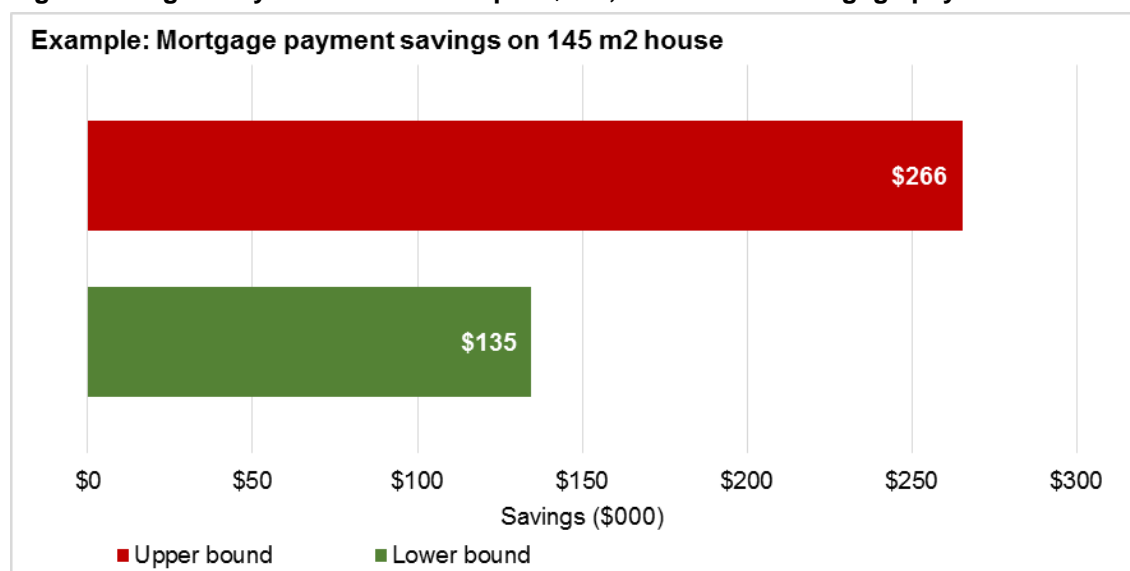
It is estimated that the cost of delivering this house as part of a development would be around **\$567,000** today.

5.2 Headline results

At the current cost of \$567,000, assuming a 15% deposit on the house (\$85,000), a household income of \$117,000 would be required to secure a 25-year loan.¹⁴ Implementing the regulatory reforms proposed in this report is expected to have the following impacts:

- For the household with an annual income of \$117,000:
 - cutting the repayment period on issuing of the loan by between 3.5 and 6.8 years
 - cutting total mortgage payments by between \$135,000 and \$266,000.

Figure 7 Regulatory reform is worth up to \$266,000 in saved mortgage payments



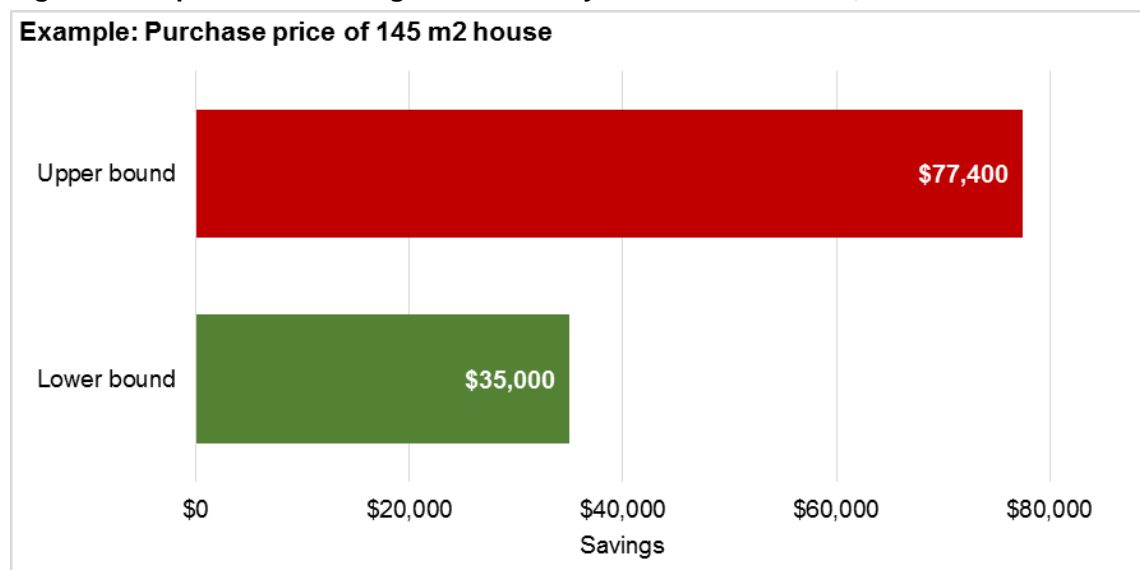
¹⁴ A 15% deposit is assumed for two reasons. First, new-build purchases are exempt from the requirement for a 20% deposit currently imposed on the purchase of other residential properties. Second, it is unlikely that purchasers of homes in the affordable segment will have more than \$110,000 saved (20% of the assumed purchase price of \$567,000). The assumption is that one-third of household income is spent on the mortgage. This analysis further assumes fortnightly repayments at an interest rate of 6.5%.

- Improving affordability by making it possible for lower income households (\$101,000 to \$109,800) to access a 25-year loan on the case study house.

It is important to emphasise that proportionate savings would be likely across both smaller and larger homes in multi-dwelling subdivisions across the country.

The direct impact on house pricing to deliver the 145 m² case study home is between \$35,000 and \$77,400, as highlighted by Figure 8. But looking at the upfront reduction in house prices under-emphasises the impact these savings would have on a typical mortgage. The compounding impact of a reduced mortgage repayment period generates the huge savings of \$135,000 to \$265,000 set out above.

Figure 8 The price of delivering the case study home could fall \$77,400

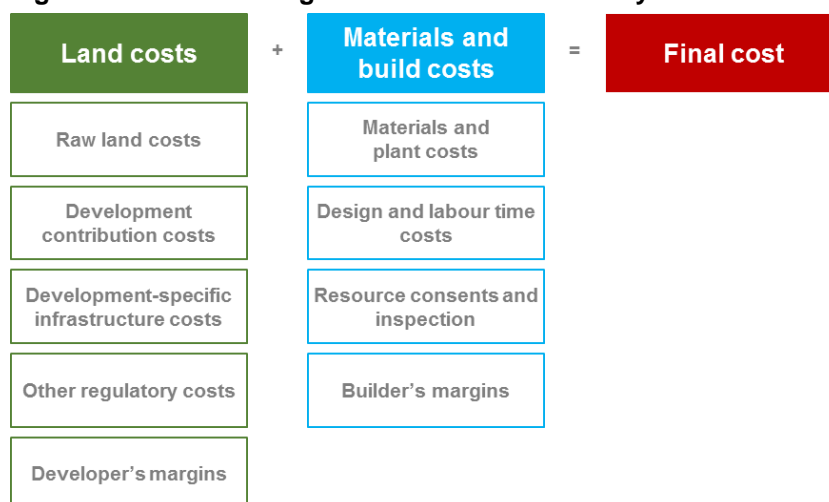


The overall price of delivering the case study home in Auckland would likely fall to between \$489,000 and \$532,000.

5.3 Approach and current state analysis

The price of delivering housing is analysed using the structure set out in Figure 9.

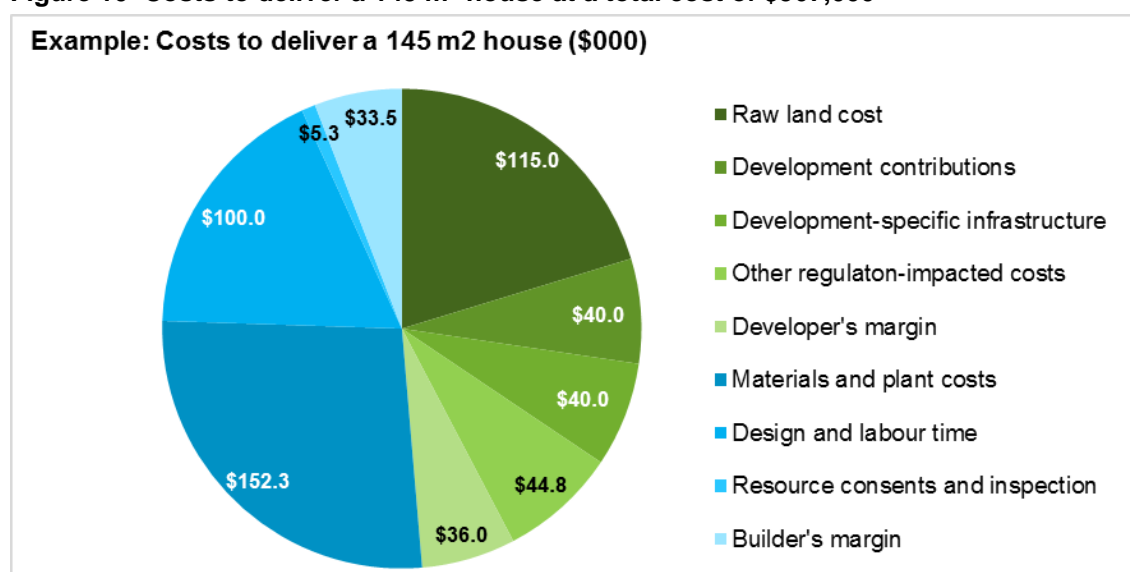
Figure 9 The cost categories covered in this analysis



The analysis is divided up into factors that affect the cost of developed land, and the cost of materials and the build process.

The costs for delivering the case study home are disaggregated in Figure 10. Materials and build costs are in blue, while land costs are in green.

Figure 10 Costs to deliver a 145 m² house at a total cost of \$567,000



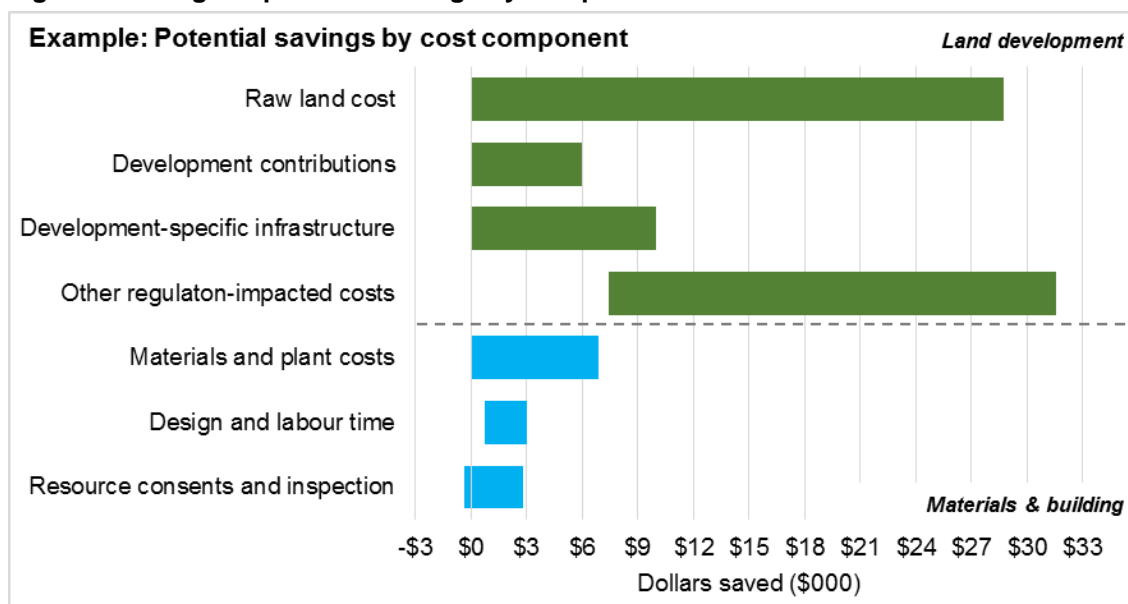
Monte Carlo analysis (50,000 iterations) was used to model a range of potential values for costs and benefits associated with implementing the recommendations in this report.¹⁵

¹⁵ Monte Carlo analysis is a statistical method that generates a wide range of possible outcomes for each independent variable (e.g. savings from bulking up earthworks). The range of possible outcomes for each independent variable determines the range within which the dependent variable (e.g. total cost savings on delivery of housing) is likely to fall.

Upper and lower bounds (i.e. the range) of variation in outcome of each recommendation were chosen. The assumption was that the likely actual cost or benefit associated with the proposed change was 95% likely to fall between the upper and lower bound chosen for each variable.

Figure 11 shows the range of potential savings (within the 95% confidence range) by component of the process of delivering housing.

Figure 11 Range of potential savings by component



The analysis suggests that the bulk of the savings are on the land development side, but there may be savings of up to \$10,000 across materials and build components.

In the following analysis of the individual impact on housing affordability of recommendations to tackle each component of the housing price, the lower and upper bound values and rationale are given.

5.4 Land costs

This section sets out how implementing the recommendations in chapter 4 may assist in reducing the cost of land.

5.4.1 Raw land costs

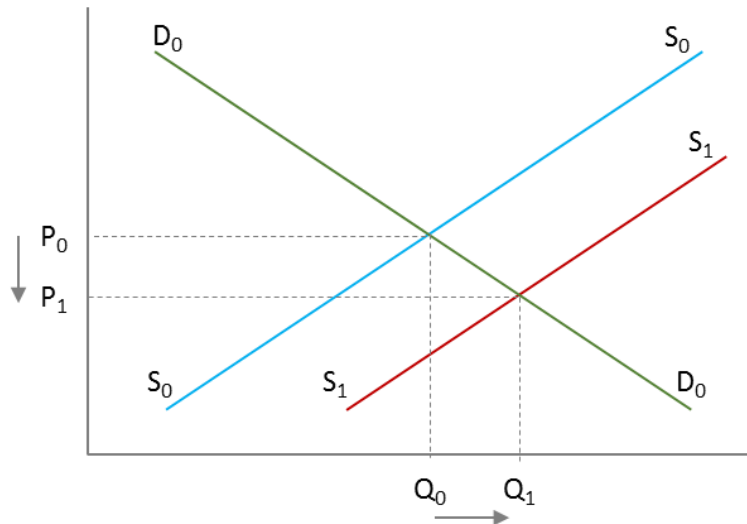
Discussions with developers suggested a split between the raw cost of land on one hand, and development contributions, project-specific infrastructure and other regulation on the other was around 1:2. In our base case, a raw land cost of \$115,000 (of a total pre-margin cost of \$240,000) is assumed.

Several interviewees commented on how land is often controlled by a few developers, who are not incentivised to bring land to market quickly. **Recommendations 4.14 and 4.15** target the quicker delivery of land to market through:

- more inclusionary zoning (including greater definition of what should be delivered in inclusionary zoning) and limits on BCA and restrictive covenants.
- establishing mechanisms to incentivise more timely development.

As Figure 12 points out, the impact of increasing **actual** supply of land (rather than technical supply) is to bring prices down, all else held equal.

Figure 12 The impact of bringing land to market more quickly is lower prices



At an original supply (S_0) and demand (D_0), Q_0 sections are delivered at price P_0 . Increasing the actual quantity of land available to Q_1 by incentivising quicker development, and limiting covenants and the BCA process, reduces prices to P_1 (all else held equal).

The extent to which incentives to bring land to market more quickly will increase actual supply of land depends on a number of factors. These include:

- the size of the incentive
- how specific the inclusionary zoning requirements are.

The assumption is therefore that there is a 95% chance that the actual benefit of bringing more land to market is likely to be a 0% to 25% decline in raw land cost. This is relatively conservative, suggesting that all else held equal, the recommendations would result in an increase in the land supplied to market of up to 33%, yielding a price reduction of up to 25%.

5.4.2 Development contribution costs

Discussions with developers suggested that DCs and infrastructure growth charges together total around \$40,000 in many parts of the country. Recent tightening of the limits on when DCs can be used (via the LGA) and a process for contesting DCs may assist in increasing transparency and accuracy of DC estimation.

However, discussions with industry and industry observers suggest there is still significant room for improvement, in particular with regard to benefits of infrastructure upgrades and renewals on existing households. The Monte Carlo analysis therefore assumes a saving of between 0% and 15% on DCs through:

- Improving allocation of benefits of infrastructure upgrades and renewals across new and existing residents of a district (**Recommendation 4.7**)
- Auditing the transparency and accuracy of DC estimation (**Recommendation 4.7**)
- Smoothing DCs over time, removing the need for a risk premium by developers (**Recommendation 4.8**).

5.4.3 Development-specific infrastructure

Discussions with builders suggest that some charges for infrastructure connection are double or even triple the market rate to undertake the work. In part this is due to the monopolistic

nature of some infrastructure providers, and/or a failure by monopolies to monitor their sub-contractors and ensure fair market prices for connections. In other cases, the builder or developer may use their own sub-contractors to undertake work.

Further, developers are charged the full price to build infrastructure like on-ramps or electricity transformers that may have benefits to developments beyond their own. Often infrastructure monopolies insist on infrastructure that is “gold-plated” to minimise opex costs, often at a far higher capex cost.

The model assumes that the cost of roading (which is shared across all sections in a development), three waters, electricity, and telecommunications connections on-site total around \$40,000, in line with discussions with developers.

It is assumed that relative savings are made as follows:

- better competition and monitoring of the prices monopolies charge for infrastructure decreases costs modestly by between 0% and 15% (**Recommendation 4.9**). Not all contract work is undertaken by monopolies or their sub-contractors.
- more appropriate cost-sharing and choice of infrastructure solution decreases upfront costs by between 0% and 10% (**Recommendation 4.10**).

In other words, the assumption is that there is a 95% chance the maximum saving on costs of development-specific infrastructure lies between 0% and 25% of the current cost.

5.4.4 Other regulatory costs

Other regulatory costs are assumed to be reduced by the implementation of four recommendations. The four recommendations affect the cost of delivering housing by both reducing direct financial costs upfront and by reducing time wastage.

5.4.4.1 Time cost savings

The length of time taken to approve subdivision plans is typically years for a large scale development. The model assumes a period of two years as the base case.

Recommendations 4.1 and 4.2 require advance clarity of exactly what is needed for a development to be approved in a certain neighbourhood, and limit opportunities for subjective additional requirements by planners. The model assumes there is a 95% likelihood this will reduce time to progress subdivision and development by between six and 18 months.

The cost of the two years taken to deliver the housing is estimated at \$17,250, which includes:

- a 7% per year holding cost for the raw land
- council rates assumed to be 0.5% per year of the raw land value of \$115,000.

Reducing the time taken for subdivision and development to proceed (all else held constant) reduces this cost by between \$4,313 and \$12,938 per housing unit. However, the Monte Carlo model allows for the fact that implementing the full range of recommendations is also likely to reduce the raw cost of land. This means the actual impact of reducing time taken to complete subdivision is expected to lie between \$4,313 and \$9,704.

5.4.4.2 Direct financial costs

Interviewees provided examples of how additional requirements by planners could add up to \$100,000 to the cost of a housing unit through additional roading and larger section sizes for instance. Adjusting plan layouts, changing materials used in the development, or requiring additional street furniture and planting can add several thousand extra.

The Monte Carlo model assumes that the cost reduction from implementing **Recommendations 4.1 and 4.2** are 95% likely to save between \$0 and \$15,000 per housing unit. This is well below the \$100,000 added to the set of townhouses one interviewee mentioned, but it is acknowledged that is likely to be an extreme case.

Recommendation 4.4 aims to reduce the number of cases where resource consent is required through standardising conditions that trigger them, and tightening up on when they can be used based on interpretation. Resource consent processes can run into tens or hundreds of thousands of dollars on large developments. The assumption for the Monte Carlo model is that the average cost per housing unit is \$2,500 (i.e. \$25,000 for a 10-unit development as per the case study). Sensibly standardising when resource consents are needed is assumed to be 95% likely to reduce the requirements for resource consents by between 25% and 75%.

Recommendation 4.5 aims to reduce the number of occasions where developers are required to undertake earthworks on each separate section rather than as part of a bulk earthworks programme. The aim is to reduce the number of times earth is moved and removed, to reduce the number of times trucks have to use residential roads during years of construction, and to undertake work far more cheaply.

Interviewees indicated that undertaking earthworks separately for each section could cost \$20,000 versus \$2,000 to \$3,000 per section for bulk earthworks. Other interviewees acknowledged that some BCAs do allow bulk earthworks more than others. The Monte Carlo model assumes the average cost per section is therefore \$10,000 (i.e. it assumes that in half of all cases, bulk earthworks are already allowed). Particularly conservatively, the model assumes that savings are likely to be between 25% and 50% of this cost, if bulk earthworks are allowed. In other words, the saving is assumed to reduce earthworks costs to between \$2,500 and \$5,000 per section.

5.4.5 *Developer's margin*

The developer's gross margin is assumed to be 15% of the sum of all costs to bring land to market. In the case of the 145 m² house, this is around \$36,000. A reduction in the costs of bringing land to market through implementing the recommendations would be expected to result in a commensurate reduction in developer profits, assuming sufficient competition.

5.5 Materials and build costs

This section sets out how implementing the recommendations in chapter 4 may assist in reducing the cost of materials and the build process.

5.5.1 *Materials and plant costs*

Three recommendations are expected to affect the cost of materials and plant:

- a requirement for central and local government to conduct rigorous CBA before introducing H&S or Building Code changes (**Recommendation 4.6**)
- explicit limitations on BCA liability and a requirement to keep to the Building Code (**Recommendation 4.13**)
- the development and audit of a national register of approved products and systems (**Recommendation 4.16**).

These three recommendations will operate together to increase the interchangeability of like-for-like products, to eliminate the need for extra safety and other equipment when there is not a

strong economic case for that equipment, and limit the subjective requirement for materials and systems that exceed the Building Code.

Builders have estimated that additional health and safety requirements alone add \$10,000 to the cost of a typical build (i.e. around 3% across both materials and build costs). The government has estimated that the introduction of better competition through lower import tariffs will reduce the cost of a typical build by \$3,500.¹⁶ These two figures provide some sense of the potential scale for gains from increased product competition and the elimination of regulations that have not been subjected to rigorous cost-benefit analysis.

The Monte Carlo analysis estimates that each of the three recommendations are 95% likely to reduce the cost of materials and plant by between 0% and 1.5%. This indicates there is a 95% likelihood the true saving lies between \$0 and \$6,851.

5.5.2 *Design and labour time*

Introducing a requirement for more rigorous cost-benefit analysis on proposed regulation changes (**Recommendation 4.6**) would likely have similar impacts on labour and design costs as they do on materials and plant, as set out in section 5.5.1. The Monte Carlo analysis conservatively estimates that the true cost reduction is likely to fall between 0% and 1.5% of the design and labour cost.

Legislating to limit BCA liability (**Recommendation 4.11**) is expected to result in fewer BCA inspections, fewer inspection fails on technicalities and therefore less downtime waiting for a re-inspection. It is assumed that there is a 95% chance the true reduction in costs will be:

- One to two fewer re-inspections at a cost of \$150 each
- Half to one day of downtime saved at a cost of \$1,200 per day (\$600 for a half day).

5.5.3 *Resource consents and inspection*

Three recommendations affect the total additional cost of consents and inspections.

By standardising conditions that trigger a resource consent requirement (**Recommendation 4.4**), as in the land development component of the build, it is assumed that resource consent costs of \$2,000 could be cut by between 25% and 75%. This percentage decline represents a reduction in the likelihood of these houses needing a resource consent.¹⁷

By legislating a limit to BCA liability the number of BCA inspections could be reduced by 50% to 75% (**Recommendation 4.11**). i.e. a decline in inspections of 50% to 75% is assumed.¹⁸

Legislating home warranties or a requirement to opt out (**Recommendation 4.12**) may, on its own, actually increase the cost of delivering housing as “riskier” builders may need to be covered by a warranty system. However, it is a necessary pre-condition for the liability of BCAs to be reduced and consumer protections to remain in place. In other words, it is required if Recommendations 4.11 and 4.13 are to be introduced.

¹⁶ Fairfax Media. (2014). Building material import tax held. Retrieved from: <http://www.stuff.co.nz/business/budget-2014/10048621/Building-material-import-tax-held>

¹⁷ It is worth noting that by allowing bulk earthworks (see Recommendation 4.5 and section 5.4.4.2), the likelihood of additional resource consents during the build process is also reduced. This is because many resource consents for individual sections are issued for earthworks.

¹⁸ Note that the reduction in inspections is captured here. The reduction in re-inspections and resultant time savings are captured in section 5.5.2.

The Monte Carlo analysis assumes that 50% of new-builds today are covered by warranties. It further assumes that all new-builds are covered by warranties under the new regime and that the warranty would cost 0.5% to 1.0% to the build price.¹⁹ This compares with a figure of approximately 0.55% of the new-build price for the current premium Master Builder's warranty programme and around 0.5% in the Queensland Building and Construction Commission. The analysis allows for the possibility that by growing the number of builders who are members of warranty schemes, the cost to warrant a build may double (to 1.0%).

5.5.4 Builder's margin

The builder's gross margin is assumed to be 13% of the sum of material and build costs. In the case of the 145 m² house, this is around \$33,500. A reduction in the costs of building through implementing the recommendations would be expected to result in a commensurate reduction in builder profits, assuming sufficient competition.

5.6 Summary of assumptions

Figure 13 Summary of Monte Carlo analysis assumptions²⁰

Cost component	95% range		Savings	
	Upper	Lower	Upper	Lower
Land costs				
Raw land cost				
Rec 4.14 Institute more inclusionary zoning and limit BCA and restrictive covenants	25.00%	0.00%	\$28,750	\$0
Rec 4.15 Increase timely supply of land to market				
Development contributions				
Rec 4.7 Improve and audit DC allocation of new macro-infrastructure benefits	15.00%	0.00%	\$6,000	\$0
Rec 4.8 Smooth DCs by applying a rolling average cost				
Development-specific infrastructure				
Rec 4.9 Investigate and legislate to overcome barriers to utilities competition	15.00%	0.00%	\$6,000	\$0
Rec 4.10 Share costs for development-triggered macro-infrastructure appropriately	10.00%	0.00%		
Other regulation-impacted costs				
Rec 4.1 & Rec 4.2 Direct financial cost	\$15,000	\$0	\$15,000	\$0
Rec 4.1 & Rec 4.2 Time cost	75.00%	25.00%	\$9,703	\$4,313
Rec 4.4 Standardise conditions that trigger a resource consent requirement	75.00%	25.00%	\$1,875	\$625
Rec 4.5 Bulk up large-scale earthworks and infrastructure consents	50.00%	25.00%	\$5,000	\$2,500
Materials and building costs				
Materials and plant costs				
Rec 4.6 Conduct rigorous CBA before introducing H&S or Building Code changes	1.50%	0.00%	\$2,284	\$0
Rec 4.13 Give BCAs confidence to keep to requirements of the Building Code	1.50%	0.00%	\$2,284	\$0
Rec 4.16 Develop and audit a national register of approved products and systems	1.50%	0.00%	\$2,284	\$0
Design and labour time				
Rec 4.6 Conduct rigorous CBA before introducing H&S or Building Code changes	1.50%	0.00%	\$1,500	\$0
Rec 4.11 Legislate a limit to BCA liability and reduce BCA inspections	\$1,500	\$750	\$1,500	\$750
Resource consents and inspection				
Rec 4.4 Standardise conditions that trigger a resource consent requirement	75.00%	25.00%	\$1,500	\$500
Rec 4.11 Legislate a limit to BCA liability and reduce BCA inspections	75.00%	50.00%	\$1,875	\$1,250
Rec 4.12 Institute a more comprehensive home warranty programme	0.50%	1.00%	-\$578	-\$2,075

¹⁹ Some people may opt out of a voluntary scheme, which would actually lower the cost of building further. However, the approach here captures the negative externalities of making a decision without perfect information.

²⁰ The final estimates of the range in which the savings are likely to fall (see Figure 8) is narrower than the result of summing the upper or lower savings values in Figure 13. This is the result of the Monte Carlo analysis that allows for the fact that there is equal probability that an upper bound saving on raw land cost could be paired with a lower bound saving on materials and plant costs for instance.

APPENDIX A: INTERVIEWS

Summaries of our interviews with a range of stakeholders follow. The RMBA, CSG and BRANZ do not necessarily share the views of all interviewees across all points. Recommendations are also those of the interviewees, or conclusions drawn from discussions with them, rather than recommendations proposed by this report's authors. All interviewees confirmed that the summaries presented here are accurate descriptions of the interviews with them.

Figure 14 A summary of the areas of expertise of interviewees

Interview	Land developer	Materials manufacturer	Materials distributor	Builder	Regulator	Independent / industry observer
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						

5.7 Interview One: Manufacturer and materials distributor

Interviewee One had experience in both building materials manufacturing and materials distribution.

5.7.1 *The Building Code over-specifies*

Interviewee One believed there was a tendency toward over-specification by New Zealand regulatory authorities, most notably through the Building Code. Various building system specifications such as glass thicknesses were highly spec-ed relative to overseas markets, and in his view, offered no significant safety improvement and doubted there was enough of an improvement in the quality of life. He estimated this single example of over-specification could add \$2,000 to a build.

“How much cost-benefit analysis is actually done on Building Code specifications?”

He raised the question as to how well-informed decisions on acceptable solutions and minimum standards were. He suggested that decision-

makers may be too inward-looking rather than looking to what comparable jurisdictions internationally have done, and to whether those jurisdictions used sound cost-benefit analysis in their decision-making.

He believed that some of the claimed lower costs of construction in Australia for example was the result of their scale as well as their more fit-for-purpose specifications. He noted that due to the scale of production, standard single-glazed windows are cheaper in Australia than in New Zealand, but double-glazed windows are cheaper in New Zealand than double-glazed windows in Australia.

5.7.2 BCAs go beyond the Building Code and act inconsistently

There is no formal process for challenging the apparently arbitrary interpretation of the Code by different BCAs. Interviewee One questioned where the inspector's responsibilities and authority should start and end. Often, failed inspections on individual interpretations of the Building Code, or requirements beyond what the Code called for, meant a build could be delayed. This had knock-on impacts on the merchant as the builder would not be ready for delivery of the next batch of building materials. This added to the merchant's cost of business, and ultimately these costs were passed onto the builder and their customers.

5.7.3 Some imported products are under-regulated

At the same time as BCAs tended to over-regulate by requiring better-than-Code specifications and the Code itself may have over-specified without cost-benefit analysis that indicated the value of those specifications, Interviewee One believed that some imported products of inferior quality were being used. In many cases, BCAs were unaware that products that may be below Code requirements were being used, and without a central standards testing regime, these products would continue to be used.

In addition, Interviewee One felt there was some unfairness in products in New Zealand being manufactured under stringent health and safety conditions. At the same time, imported products could have been manufactured far less safely and therefore more cheaply.

Interviewee One felt this created a playing field that was not level. Some products could be imported and accepted by BCAs either because they had a foreign certification (such as the EU), or because BCAs were unaware that the products did not meet the requirements or were overseas-made. There were also examples of building materials that may no longer meet code being salvaged from Canterbury demolitions and being used in new-builds or renovations. Yet New Zealand manufacturers were accountable for producing products that meet the Building Code requirement.

This lack of awareness by BCAs, and lack of independent random testing of non-appraised products, allowed sub-standard products to get through, to the detriment of building quality. This may make housing more affordable in the short-term, but may well prove to be detrimental to the long-term sustainability of new housing stock.

5.7.4 Customers stick with what they know

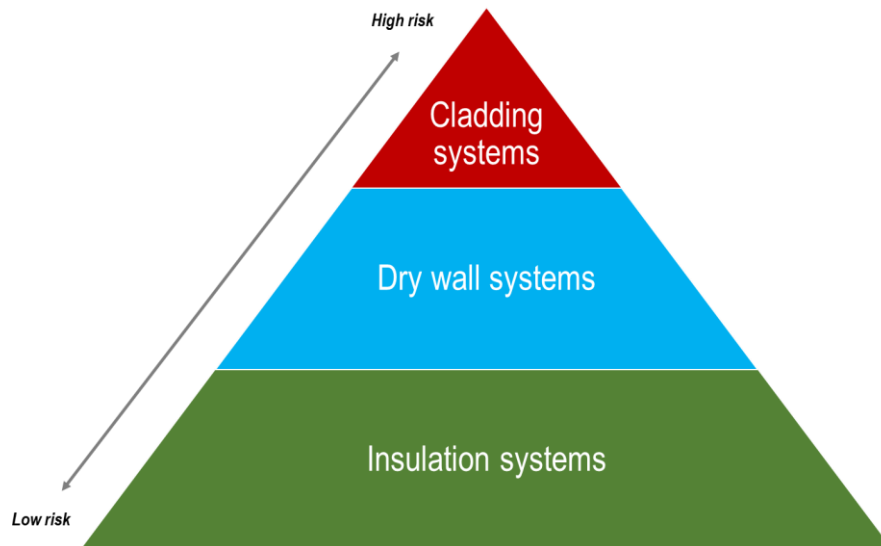
Interviewee One believed that his past and present customers (mostly builders) stuck with products they knew and could rely on. They needed evidence a product was safe before they would adopt it. In many cases, a generic version of a well-known product would be less popular simply because it was competing against the well-known incumbent.

“Being out of the box different is not rewarded.”

For a product to grab market share, it would need to be innovative, making some part of the build process better, perhaps through easier installation. Risk-aversion of BCAs and builders post-leaky buildings meant builders would typically only substitute materials that were low-risk, e.g. did not pose a risk to the weather-tightness of the building if they proved to be not as good. Interviewee One proposed a Pyramid of Risk, with products at the top of the pyramid unlikely to be substituted. Examples of where products might sit on this pyramid are set out in Figure 15.

He acknowledged that marketing and promotion of materials did play a big role in decision-making, but builders needed to see the value of adopting a new product.

Figure 15 Pyramid of risk determines likelihood of adoption



5.7.5 Distributor decision on stocking and promotion

But in many cases, the merchant had a major role in determining what products were bought and sold. This ranged from the decision to stock certain products, through to merchants in many cases acting as the QS for smaller, less capable builders. The merchant often helped the smaller builder to estimate the amount of different products needed to complete a project. They would therefore recommend products they thought the builder should use and would be most comfortable with.

Merchants consider a number of factors in deciding whether to stock a product:

- What risks are associated with an unknown or untested product versus its likelihood of generating new revenue?
- What type of product assurance is there?
- Is the product fit for purpose or fit for Code, and what evidence is there for this?
- Does the product innovate on an existing product, making it more attractive to the builder? Generic, less known versions of the same thing are likely to be less attractive given the administration and costs associated with stocking a product across multiple stores if it offers little advantage over existing products.
- What exclusivity incentives, rebates, and promotional opportunities offered by current suppliers will be lost if we divert our attentions and recommendations to the new product?
- Will existing suppliers continue to supply their products to us if we stock competitors' products?

5.7.6 Recommendations

A number of recommendations flowed directly out of Interviewee One's comments:

- Look to international standards and specifications when setting Building Code requirements, adopting best practice.
- Calculate the benefits and costs of changes to Building Code requirements before changing them.
- Develop a uniform, streamlined approach to interpreting the Building Code across BCAs that allows a lot less room for individual interpretation. Digitise and centralise the process to speed it up.
- Promote a mix of self-regulation and enforced testing for low-risk and high-risk building systems respectively.
- Develop a standardised testing regime / authority and product assurance process that ensures locally produced and foreign imports are held to the same standard.
- Make the appraisals process (via BRANZ, who he saw as the most reliable authority on testing in New Zealand) faster and more cost effective.
- Use technology to aid consistency in the consenting process throughout New Zealand.

5.8 Interview Two: Manufacturer and materials distributor

Interviewee Two was a licensed builder who now works at a materials manufacturer and distributor.

5.8.1 BCAs go beyond Australia-New Zealand standards and act inconsistently

Interviewee Two felt that BCAs had gone to the opposite extreme in their risk aversion since BCAs had been held accountable for poor building standards in recent years, and that the result was over-regulation.

New Zealand and Australia had worked together on common standards across a number of building materials. Yet this Interviewee had found that whereas their products were accepted and used on that basis in Australia, in New Zealand many BCAs required numerous additional appraisals (typically undertaken by BRANZ) before they were willing to allow them to be used as part of the building project. These additional appraisals could run into millions of dollars for companies with large product catalogues.

"Councils see BRANZ as a comfort zone for accepting products into the market."

This made the beyond-standard requirements by some BCAs a major barrier to entry of new firms and/or new product ranges. In fact, although Interviewee Two's products have been sold and used in numerous countries around the world, they had found New Zealand to be the most difficult country they had entered.

Getting appraisals has proven not only to be an expensive process, but also a time-consuming one, sometimes taking up to 14 months, which the Interviewee felt was largely unnecessary anyway as the products meet the combined Australia-New Zealand standards.

BCAs have been radically different in their acceptance of building plans specifying Interviewee Two's products. For instance, Auckland and Wellington City BCAs have been relatively easy to work with, while they have had difficulties with Canterbury BCAs. The Interviewee believed the difficulties there were likely linked to increased risk aversion due to the earthquakes and also due to Christchurch's temporary loss of BCA status.

5.8.2 *Interchangeable products are not seen as such*

A further problem related to the above-Code and above-standard requirements of BCAs is the fact that functionally equivalent products that have been subject to the same tests (structural, fire and so on) cannot be interchanged with the competitors' equivalent products. Interviewee Two was of the view that when products met the same standards (and had appropriate documentation showing they met the required standards), they could be swapped out without risk to BCAs, creating flexibility and competition in the market.

Instead, many BCAs require a consent variation for swapping out equivalent products, causing further cost and time delays, and reducing the ease with which new brands can enter the market.

The company has even been required to change the format of its product specifications literature because some BCAs have insisted on that. This is being done at a cost of around \$50,000.

5.8.3 *Building systems in practice are not always fit for purpose*

Interviewee Two believed that the Code and BCA requirements sometimes relied on a building system that has become the norm through regular historical use without those systems necessarily being tested or being shown to be the approach. The Canterbury experience had shown that some systems, such as using plasterboard as part of the bracing system, were far from ideal. We need to learn from the Canterbury experience and international best practice, and add more rigour around what building systems are adopted and why.

5.8.4 *The New Zealand distribution system does not easily support new products*

Interviewee Two has tried a number of different ways of distributing their products. One way was through independent distributor channels, but this has had mixed success.

Interviewee Two had also spoken to four well-known major merchant groups in New Zealand but had seen very limited success. Incumbent products that offered rebates and other promotions were preferred even though the Interviewee's prices were lower for products of the same quality (and used internationally by comparable countries like Australia). Some merchants in fact preferred to be charged a higher upfront cost by their suppliers, which allowed them to justify a higher price to their customers, but would then claim a rebate.

Interviewee Two's equivalent products were 10% to 40% cheaper, but some merchants had no desire to pass those reductions on to their customers.

Interviewee Two's products could be supplied at 10% to 40% discounts over the pricing some competitors charged for products of the same quality (saving an estimate \$1,000 per house lot), but some merchants had no desire to pass those reductions on to their customers, meaning the benefit to housing affordability would be lost.

Another merchant's model was to have a more expensive recognised brand and a cheaper open price brand. The latter are typically lower quality. But because Interviewee Two's products are of a similar quality to the incumbents', and wanted to use their strong branding and remain accountable for the quality of their products, the merchant did not give them access.

Finally, many builders buy a package of all materials (often through significant incentives) from the main merchants. The incumbent product is typically included in the package, making it hard for new players to enter the market.

As a result, the company has recently taken a more direct approach, working directly with residential and commercial builders to improve uptake.

5.8.5 Recommendations

A number of recommendations flowed directly out of Interviewee Two's comments:

- Develop a list of accepted products: Some BCAs have already started developing a list of accepted products that have been shown to meet or exceed the Building Code and Australia-New Zealand standards. This should be expanded to encompass all BCAs.
- Streamline the appraisals process: Where appraisals may still be required, the process needs to be quick, as firms rely on these timelines for their business decisions.
- Rely on existing international standards where modifications are not required for New Zealand conditions. For instance, BCAs should not add additional layers of requirements for proof of products being fit for purpose over and above the approved standards with Australia.
- Educate BCAs: BCAs need to understand where their level of liability and responsibility end, and need to take up opportunities to learn about how other brands and product beyond those they already understand can affordably and safely be used in housing.
- Evaluate the testing and analysis that goes into decisions on what standards and acceptable solutions are required rather than relying on the fact that "we have always built this way".

5.9 Interview Three: Builder

Interviewee Three is a builder working across the Auckland, Waikato and Bay of Plenty regions (around seven different BCAs).

5.9.1 The costs to subdivide do not reflect the cost of servicing new sections

Interviewee Three estimated that the cost of an infill subdivision could easily reach \$100,000 in Auckland. This included \$27,000 to \$30,000 in development contributions, connection of services, engineering tests and surveying, and resource consents.

Many clients who contacted him about subdividing and building a second home on their property were shocked to hear the costs, and many walked away. This has a direct impact on land availability, use and price in rapidly growing areas like Auckland.

"It is hard to be positive with new clients when discussing all the negatives and additional costs to building."

Development contributions and the cost of services are two areas Interviewee Three thought were particularly exorbitant, and these charges had no relation to the true cost of servicing new subdivisions. For instance, even putting a granny flat on a rural property could cost \$8,000 in development contributions despite that property being self-sufficient in terms of fresh water, wastewater and stormwater.

Further, the fact that other BCAs Interviewee Three works with could supply water metres and connections for \$1,000 to \$2,000 indicated that there was no valid reason Auckland Council charged around \$12,000, which is clearly not a true reflection of the cost of materials and installation.

All up, subdivision could cost \$100,000 per section once soil engineers, minor earthworks, surveyors and the like had been included.

5.9.2 *Resource consents are required too often and arbitrarily*

Along the same lines as other comments made to us by previous interviewees, BCAs are inconsistent with their rules as to when resource consents are required. Some examples include:

- Moving more than 80 m³ of earth
- Moving more than 40 m³ of earth
- Cutting more than 500 mm of earth
- Any impermeable surface of more than 25 m².

Interviewee Three pointed out that the last of these is particularly questionable, as practically every house being built has a paved driveway area in excess of 25 m² and would therefore require a resource consent, adding considerable cost and time delays to a project.

The dramatic increase in requirement for resource consents had slowed the build process, and added further compliance costs when most people's budgets were already stretched because of the high cost of land (see reasons above).

5.9.3 *BCAs are inconsistent in their communication, attitudes and interpretation of the Code*

Some BCAs are proactive. They let builders know within seven to 10 working days of the building consent application being lodged whether there are any issues or extra information is needed. They communicate via email, producing scanned copies of all documents for their records. Planners respond quickly to questions via email.

Other BCAs provide no feedback on lodged applications and the first Interviewee Three hears from them may be after the 20 day approval period has concluded, when a letter is received in the mail. This causes a lot of frustration and time delays.

Auckland Council uses three sub-contracted companies to process building consents, but whenever extra information or permissions are required from Council teams (roading, drainage and so on), communication once again becomes a problem.

Interviewee Three estimates they receive five to six Requests for Information (RFIs) per building consent, but this varies widely across BCAs. More frustratingly, interpretation of the Code varies across individuals within a BCA, creating a great deal of uncertainty.

To reduce time delays, submitted plans have to err on the side of caution by providing as comprehensive a set of plans as possible. Interviewee Three estimates that submitted plans are typically 30 pages long today, up from 15-16 pages eight years ago. Yet some BCAs, or individuals, are now asking them to pare back what they submit.

Interviewee Three commented that other than junctions (e.g. between cladding types), the actual house plans caused few problems. Most RFIs and other challenges came in the areas of drainage, foundations, stormwater and wastewater. Much more work by engineers and surveyors is being required than in previous years.

Because of the uncertainty related to how a BCA will treat a building project, even if it is very similar to other builds done in the same BCA jurisdiction, it is hard to provide a fixed price contract to clients on anything where the BCA plays a role because there is no telling what additional costs will be imposed. This affects the level of trust between the builder and the client, and the client's bank, which typically requires a fixed price contract.

"The house itself is easy. It's what's under the house or ground that's the problem."

5.9.4 The LBP programme has not reduced administration or inspections

The Interviewee was under the impression that the Licensed Building Practitioner (LBP) programme would have reduced the number of inspections required if work was undertaken by LBPs. This is because LBPs have taken on more responsibility (insurance cover and the like). Yet the number of inspections per house has grown to between nine and 11.

5.9.5 Health and safety guidance is not understood and therefore benefits are not maximised

Interviewee Three has seen a significant ramp up in health and safety, particularly working at heights, enforcement over the last six months. He believes the cost associated with health and safety are large.

He has tried speaking to WorkSafe New Zealand about how best to apply guidance, but has not yet got clarity on how to comply with new guidance without reducing productivity.

He believes that a lack of clarity by builders on what flexibility there is within the guidance to keep workers safe without compromising productivity or even increasing productivity leads to one of two outcomes:

- Lack of compliance with guidance, meaning no gain to worker safety, and potential fines for builders if caught
- Over-compliance due to risk-aversion of being fined or shut down, but with lost productivity due to uncertainty of what is an acceptable standard.

The extra work for scaffolders has also seen them increase their prices, and Interviewee Three believed some people actually erecting the scaffolding do not understand the build process and therefore do not erect the scaffolding in a way that supports maximum productivity.

5.9.6 Recommendations

A number of recommendations flowed directly out of Interviewee Three's comments:

- Improve communication between BCAs and builders. Communication by regular mail, as opposed to email, slows down the build process dramatically. Further, there should be more upfront communication, and BCAs should request more information as they need it, not waiting until the 20 working day period is all but complete before requesting information.
- Related to the first point, Builders and BCA planners need to work closer together from the plan schematic stage of a project rather than waiting until detailed design to engage.
- Create consistency across BCAs and across individuals at BCAs, and let reasonableness prevail (see examples of different standards on when a resource consent is required, some of which are hard to justify).
- Charge for actual costs associated with subdivision, rather than adding up to \$30,000 in development contributions for an infill subdivision, and up to \$100,000 in total costs for a subdivision.
- Be practically-minded / flexible such that reasonable, site-specific solutions can be implemented, rather than a one-size-fits-all approach that is impractical.

5.10 Interview Four: Land developer and builder

Interviewee Four is a large Auckland-based land developer who also brought along one of several builders he has building spec houses on the subdivision.

“Work back from what it [housing] should cost and take out the fat.”

5.10.1 *Parts of the industry have the wrong pricing strategy*

Interviewee Four believes the building industry in many ways works on a cost-based pricing strategy, rather than a price-based costing strategy. He suggested that the industry should be determining the price point at which housing needs to be delivered, and that better supply chain management is then required to ensure that housing can be delivered at that price point.

He believed there was a lot of “fat” that could be removed from the supply chain through working back from what housing should cost.

5.10.2 *BCA costs have not kept in touch with other cost changes in the industry*

Interviewee Four said that since the recession began in 2007, many costs in the industry had reduced, at least temporarily until about 2011/12, with the exception of BCA compliance costs. Everything that BCAs charged for appeared to have risen fast. For instance, development contributions and infrastructure growth charges had risen over the last few years from around \$6,000 to \$28,000 in Auckland, while they are as high as \$40,000 in other parts of the country.

At a time when housing shortages are constantly claimed, especially in Auckland, Interview Four thought BCAs should be creating incentives for growth. Instead:

- Development and infrastructure contributions, and utilities services typically cost \$50,000 per section
- The process of getting subdivisions approved by BCA planning and urban design schemes, including requirements for site engineering, survey, urban design, traffic engineering, colour design and landscape design was estimated to add \$50,000 to the cost of a section.

“The administrative cost of bringing land to market is around \$100,000 per section.”

Increasing numbers of PS4s, and other charges are creating additional cost burdens, often unjustifiably.

In other words, the administrative process of getting a property to market added around \$100,000 to costs on top of the raw land cost.

5.10.3 *Monopoly utilities providers charge customer for full cost of infrastructure upfront*

Interviewee Four was particularly concerned about the cost of securing new services for subdivided properties. Specifically, the Interviewee referred to electricity, water and telecommunications. The Interviewee felt that these utility set-up costs:

- Charged the developer upfront for the full price of providing new infrastructure. On completion, ownership of this infrastructure passed immediately to the infrastructure provider, who then charged the customer lines charges or other fees to use the infrastructure the developer (and ultimately the new-build purchaser) had paid for.
- Placed the burden of sub-standard historical infrastructure planning solely upon the developer / new-build customer.
- Bore little resemblance to the actual cost of providing the infrastructure, with, for example, charges of \$5,000 for connecting electricity not uncommon, and water connections being up to \$12,000. Historically, services like power and telecommunications were provided free as

the power and telecommunications companies took possession and revenue from finished services.

Options for covering the cost of infrastructure were either to charge a special tax, increase rates, or charge the developer. Interviewee Four believed BCAs thought the latter was the most palatable, and therefore placed charges for delivering infrastructure that would benefit many beyond the subdivision on the developer / new-build buyer.

5.10.4 BCAs have taken ownership rather than custodianship

Interviewee Four believed BCAs have assumed a role that they should not be taking. He believed that the commercial world [the market] would sort out the design side of new housing, or no one would buy those properties. One extreme example he gave was of a BCA questioning whether the layout of a dwelling required too long a walk from the kitchen to the living room.

Interviewee Four felt that BCA's tendency to take ownership (imposing additional requirements beyond that needed even by the District Plan) rather than to ensure new developments stayed within the rules, delayed many subdivisions for years. Red tape appeared to be growing year by year, with little incentive to speed up the development process as BCAs "clip the ticket" each time they impose another requirement on developers.

There appears to be no mentality of "how can we make this go faster", but instead, the opposite.

Interviewee Four believed that many urban designers, especially at Auckland Council, appear to have little experience or understanding of the New Zealand urban design environment. Their requirements are based on personal opinion and limit the options available to design cost efficient houses. They are incentivised to make objections and don't consider the effect on cost of providing housing. New developments take too long, with too much red tape. Developers don't want to go to the Environment Court due to the delay. An arbitration system is needed to get quicker resolution.

5.10.5 BCAs act inconsistently

The builder who joined Interviewee Four at the interview commented on the inconsistency of requests for information from different individuals even at the same BCA. Whereas before, subdivisions could be done on schematic plans, detailed plans are now required, with the number of pages for a standard brick and cavity home now around 26 pages versus five pages a few years ago.

5.10.6 The LBP system is not being trusted to deliver

The Licensed Building Practitioner (LBP) system was developed to improve the quality of work being done, and to create accountability by requiring the LBP to personally sign off the quality of their workmanship as part of the code of compliance process.

However, despite this, the number of BCA inspections (and associated time and cost delays) has risen. BCAs appear not to trust that the LBPs are in fact doing what they should. This means two systems which are both intended to fundamentally ensure the same thing. i.e. a house built to deliver what was approved in the building consent. This adds additional unnecessary cost. Either LBPs should be trusted to deliver what they say they are, or the LBP programme should be done away with and the BCA inspection system retained.

5.10.7 Recommendations

A number of recommendations flowed directly out of Interviewee Four's comments:

- Provide independent arbitration: Interviewee Four had found some BCA requirements during the subdivision process increasingly unreasonable, but as the BCA is the final arbiter, there is no real, cost-effective recourse for the developer. An independent, binding arbitration service would bridge this gap.
- Adopt a Precinct Plan approach like Australia: In some Australian jurisdictions, Precinct Plans are developed for each neighbourhood in the city, explicitly setting out what the look and feel of that neighbourhood is intended to be. As long as developers operate within those guidelines, development is more easily facilitated.
- Take a price-based costing approach: Developers and builders need to decide on the price point at which to deliver housing and then work to deliver that with the cooperation of planners.
- Let the LBP programme do what it is supposed to, or use a BCA inspection regime, not both.
- Modernise communications: Some BCAs still operate by regular mail rather than email, which slows down communication and wastes time.
- Adopt realistic and flexible energy and other solutions: For instance, new social housing is required to be built to a six-star Homestar rating. There is uncertainty as to whether this energy efficiency level is affordable or stacks up from a cost-benefit perspective, particularly once the cost of capital is included.
- Don't create gold-plated solutions where they are unnecessary. This applies to infrastructure development and planning, as well as urban planning and design.
- Increase understanding at BCAs of what the housing affordability implications are of their requirements for gold-plated solutions.

"If we want to deliver affordable housing, we can't deliver a Rolls Royce on every home."

5.11 Interview Five: Manufacturer

Interviewee Five was a manufacturer of a wide range of building materials across the North and South Island.

5.11.1 *Materials prices are broadly competitive and entry is relatively free*

Interviewee Five believed their products were sold in a broadly competitive market. They sell products both directly to builders and via the merchant chains. While they do have to fight for shelf-space like in any competitive market, they felt that this competition broadly ensured that materials prices were reasonable.

The Interviewee believed there was relatively free entry of products into the market although typically new products required some kind of approvals or appraisal process.

Interviewee Five felt that in a small market like New Zealand, with its limited scale, it was hard to avoid a monopoly or duopoly just to achieve the scale needed to operate profitably, but did not believe there were any real barriers to entry.

In addition, product prices were often indexed internationally, so there was always incentive to keep costs lower due to global pricing.

5.11.2 *It is hard to police materials use*

One concern raised was that a number of cheaper alternatives were now entering the New Zealand market and were not being adequately monitored for quality.

"All the regulations are in place but they are not enforced."

Materials were being used regardless of whether they met the standards or not, and BCAs were often not in a position to evaluate the appropriateness of materials as it was not evident on simply looking at them as to whether they met the standards or not. This raised the question as to what benefit the regulations provided, if they could not be enforced.

Interviewee Five felt that some builders would get away with anything they could. Some builders bid a low price to get work, and then cut quality to meet the price point they had set.

5.11.3 *Having an LBP programme and approval of products by BCAs is double regulation*

Interviewee Five believed the BCA inspection system was superfluous given:

- The requirement to submit a building consent application which detailed all the key materials in the house build
- the LBP programme that required the LBP to sign off the key components of the build.

Given the concerns already raised about to what extent the BCA could monitor the quality of materials used, and the expense of the LBP programme, the Interviewee did not see the value in having both these measures in place. An approach like that used in parts of Australia, where the builder had to have in place insurance for the build, removing liability from the BCA, was proposed as a way to get past what amounted to double regulation with no genuine reduction in liability for BCAs.

5.11.4 *It is hard to justify the cost of a build*

Interviewee Five suggested that it was hard to understand how a build could cost \$450,000 when, in their view, the cost of putting in the slab, frame and roof was often as little as \$50,000.

The Interviewee believed that builders were setting prices based on the market, not on what it cost to build. Alluding to the earlier point about the quality of materials being used, there was a big difference in quality and price across building providers.

5.11.5 *Recommendations*

A number of recommendations flowed directly out of Interviewee Five's comments:

- Develop a comprehensive, independent builder insurance programme that would only allow approval of a building consent that was submitted by an insured builder. This would reduce the liability and associated risk aversion for the BCA.
- Streamline the LBP and inspections process on introduction of the insurance system. As BCAs would no longer be liable, the LBP programme could do what it was intended to do in guaranteeing work, underpinned by the insurance programme. Inspections could be pared back to a minimum.
- Create and enforce a transparent standards system used across all BCAs and that allowed them to effectively monitor what materials were being used and that they met the standards.

5.12 Interview Six: Land developer

Interviewee Six is predominantly a commercial and high density urban property developer.

5.12.1 *Many BCAs lack the skills, resources and commercial focus needed*

Interviewee Six felt that some BCAs did not have the skills or resources required to make commercially sound flexible approvals. Staff were not empowered to make decisions, often needing to escalate issues, being unable to address these issues themselves. This led to long time delays.

“Councils don’t have the skill to combine commercial and regulatory awareness to make the right decision about what can be economically built.”

The problem seemed to be particularly noticeable in urban planning. Interviewee Six believed that New Zealand’s pool of urban planners was small, with increasing numbers of designers being from overseas, who were unfamiliar with the New Zealand urban design environment or took a principles-based rather than pragmatic approach.

Interviewee Six was concerned that many of the people they dealt with at BCAs did not have the skill to combine commercial and regulatory awareness to make the right decision about what can be economically built.

The Interviewee felt that BCAs had a natural distrust of developers (some of which was not without basis), but there appeared to be a culture of “not getting things done until you’ve done all of this” – that is, tick all the boxes before proceeding.

Interviewee Six felt that some planners who may otherwise be open to flexible development approaches were afraid to raise their heads above the parapet. Much of the more “progressive” mind-set they had seen in the old Auckland City and Waitakere City Councils had been lost in the new Auckland Council.

5.12.2 *BCA planning is at risk of being aspirational rather than achievable*

Interviewee Six felt there was a disconnection between market forces, economic reality and what urban planners in particular were trying to achieve through the District Plan. Added to this, most new developments could not be appropriately dealt with by a “tick-the-box” approach, which the Interviewee felt the RMA created. This reduced flexibility, and created a gap between reality and the expensive design ideals many planners had.

The Interviewee hoped that the Unitary Plan in Auckland would go some way to creating the flexibility required. At present, the Interviewee believed there was huge economic wastage through over-specification and standards that BCAs could unilaterally insist upon.

“The quality of a BCA skews the market as to where development occurs.”

The quality of a BCA skewed the market by encouraging development in areas where BCAs operated more efficiently.

5.12.3 *Current planning regime creates too much uncertainty for developers*

Interviewee Six said that there was a lot of uncertainty in any consent application process that did not need to be there. The development community is seeking certainty across the projects and this relates to time, costs and consenting ability. One concern was that individuals at BCAs interpreted the same requirements differently. Thus even though there was a District Plan and

an RMA framework, which should eliminate interpretation, consent processes could be quite unpredictable.

Developers had become fearful of over powerful BCAs because they had no way of knowing how a process would play out, and at what cost.

Developers also found themselves often being asked for more information at RMA processing or a level of detail on development plans that they believed had no impact on the actual approval stage of the project. The level of design detail and consultant reports at Resource Consent was now not far shy of a Building Consent set of documentation. Developers sometimes had several potential projects of which only one or two may proceed depending on BCA feedback, but developers were unable to get sufficient feedback at a preliminary stage because BCAs required fully developed proposals, which were expensive.

The subdivision planning and resource consents process had, as a result, become one of the biggest costs of a new development, as the level of information required was so detailed.

5.12.4 Development and infrastructure costs are not defensible

Interviewee Six pointed out that development contribution and infrastructure costs were not proportionate to the scale of the development. A single infill property would likely incur the same development contribution costs as a multi-unit complex of 100 units (where the bulk infrastructure costs were smaller on a per-unit basis). Watercare would typically charge the same \$12,000 water connection fee for each of the units in the 100-unit complex as they would for a stand-alone house.

Telecommunications and electricity suppliers had a “last cab off the block” mentality. If a development triggered an infrastructure update, the assumption was that your development would pay the full cost of the upgrade. This view was maintained even though, for instance, a new transformer paid for exclusively by the developer would serve the needs of future developments and even provide greater service continuity for existing customers.

Interviewee Six also questioned why the developer (and ultimately new-build customer) had to pay upfront to build infrastructure for the utilities provider, hand over that infrastructure, and then pay lines charges to use it.

“Why does the developer (and ultimately new-build customer) have to pay upfront to build infrastructure for the utilities provider, hand over that infrastructure, and then pay lines charges to use it.”

Costs for infrastructure had also escalated beyond explicable levels. For instance, water connection prices had tripled in 10 years. The Interviewee questioned where the transparency was in the return that Council-owned monopolies such as Watercare delivered to ratepayers.

5.12.5 There is little incentive for developers to build smaller and cheaper

Interviewee Six raised the question as to why developers do not build smaller or cheaper homes. They suggested that developers may be part of the problem. Developers want to maximise profits and get as much as they can out of a development. It is possible to significantly increase the perceived value of a development for little extra capital outlay in design. According to Interviewee Six, there is no incentive to deliver housing at the lower end of the market.

5.12.6 Recommendations

A number of recommendations flowed directly out of Interviewee Six’s comments:

- Improve commercial focus of BCAs: Planners need to understand the implications that time delays and additional design requirements have on the cost of delivering housing or development.
- Provide incentive or motivation for BCAs to enable development: Linked to the previous point, a culture of encouraging planners to be forward-thinking and to support development of housing is needed.
- Increase flexibility and officer accountability in meeting the requirements of the District Plan.
- Review and clarify the logic behind development contributions and infrastructure connection costs.

5.13 Interview Seven: Manufacturer

Interviewee Seven was a manufacturer of a wide range of building materials.

5.13.1 Levels of impediment vary by product type

Interviewee Seven did not feel that there were currently significant impediments to his firm's products entering the market. However, given his firm manufactured a wide range of products, he was able to point to bigger challenges across some products than others.

His products all had ISO certification, while only a few of the products had BRANZ appraisals. Certifications tended to be primarily a marketing advantage. There had been an instance where a competitor had gotten Codemark certification, which changed the market, and pushed the Interviewee's firm to seek Codemark certification. This was because Codemarked products cannot be refused by a BCA, giving the competitor an advantage.

5.13.2 BCAs vary on acceptance of products

Auckland Council had taken the lead by developing a list of accepted products, which Interviewee Seven believed other BCAs looked to in making their own decisions on approval of the use of a product. Yet there was talk that Auckland Council would be doing away with its register of products, and that Codemark certification would be required for all waterproofing and roofing products. This would make operating prohibitively expensive given they had several of these products on the market.

"Councils are a law unto themselves with regard to product approvals."

Other BCAs have differing requirements, increasing the difficulty of achieving nationwide approval.

Interviewee Seven was surprised that waterproofing was not on the list of work that had to be signed off by an LBP given the risk of catastrophic failure. He was concerned that this area should be better regulated.

5.13.3 Current system does not encourage innovation

Interviewee Seven said that the current system of product approvals by BCAs does not encourage innovation. Through innovation, mistakes do occur, but there needs to be a way to test and incorporate new products and systems in a way that benefits housing affordability.

5.13.4 Recommendations

A number of recommendations flowed directly out of Interviewee Seven's comments:

- Consider the risk and implications of product failure in product approval processes. Some products are under-regulated while others are over-regulated.

- Extend the LBP programme to cover waterproofing.
- Encourage the maintenance of an approved materials register, and roll it out across more BCAs so that BCAs benefit from the knowledge of other BCAs, and the extra effort required to convince multiple BCAs to accept a product is minimised.

5.14 Interview Eight: Land developer

Interviewee Eight was mainly involved in land development and operates across the country.

5.14.1 *It takes a long time and a lot of money to bring land to market*

Interviewee Eight believed his perspective was different from most. He felt that land prices were not directly the result of greenfield land availability, it was more subtle and complex. Opportunities exist, but time delays and the lack of infrastructure causes delays.²¹

Due to communities and those who govern the back-end infrastructure, development takes a great deal longer than it would otherwise. It typically takes three to five years to develop. However, there have been cases where even projects the BCA was keen to promote took 10 years to get approval.

There are also a very small number of parties with the capability and money to do land development of the scale needed. The time that the land needs to be held and the costs associated with putting infrastructure in place limits the number of players who can develop land at any scale.

5.14.2 *Local authorities and other distributors/providers need to work with developers*

The Interviewee felt that the financial process was singular in direction. The land developer puts in the infrastructure at a cost to them (and eventually the first homeowner), but BCAs are then able to reap the benefits of that infrastructure through increasing the number of ratepayers. In one particular project, local authorities had no interest in roading engagement, and assumed that the infrastructure to link the Interviewee's development (and several neighbouring developments) would be fully funded by the developer. The roading authority appeared to think the developer should develop the roading connection plan themselves, with little to no input, and then the roading authority would tell the developer "what was wrong" with their proposal.

There is also the example of putting in infrastructure for the electrical and water services of the homeowner. This infrastructure is paid for by the land developer (and eventually the first homeowner), but then is owned by the electricity distributor or water provider. These distributors/providers are then able to charge for the use of this infrastructure.

In effect, new house owners, through both development contributions and infrastructure charges, pay the full cost of delivering infrastructure that will benefit the wider community both in terms of access to improved infrastructure and by providing income streams in excess of maintenance costs.

²¹ Continuing on this point, a distinction could be made between technical land availability and actual land availability. Technical land availability refers to the sum of all residential zoned land in a particular area. Actual land availability refers to the sum of all land where the owner intends to develop it in the short-term, and that can be brought to market in the next few months.

5.14.3 BCAs act like clients and do not appreciate the cost implications of their decisions

As illustrated by the roading example above, Interviewee Eight felt that BCAs often acted like they were the client, requiring the developer to do all the work. Yet when it suited them, BCAs would insist on design decisions without understanding or seeming to care about the implications for delivering housing affordably.

One example was where an additional lane had to be built between two rows of terraced houses so that their garages could be set to the rear rather than the front of the property for aesthetic reasons. This wasted additional land that could not be used for building houses and also required the actual sections to be larger. An estimated \$100,000 in additional costs was added to each house because of this requirement.

“We are driving less efficient land use for a number of theoretically good reasons.”

5.14.4 Client expectations have led to over-inflated house sizes

The process involved in bidding for bare land for development rather than speculative purposes typically involved working backwards. Developers would work out the price-point at which they would expect the houses to be offered, then what they would expect the build to cost (including the builder's margin and time), the cost of selling the land, margin and time for the developer, the cost of connection to infrastructure, the land development costs and council development costs. This would dictate how much the land developer should bid for the land.

The cost of building the house and the builder's margin and time is largely dependent on the size of house that is going to be built. Given that a larger house costs more to build, and that house sizes have grown sharply over the last 40 years, the implication is that housing becomes more expensive. Interviewee Eight suggested that many buyers valued housing by dollars per square metre, illustrating the preoccupation with house size rather than the quality of the house. The size of house that is expected from new-build housing clients impacts on the price-point at which the houses would be offered.

5.14.5 New Zealand is and will be an expensive place to build. But where do we want to get to?

Interviewee Eight suggested that there is perhaps a need to communicate the benefits of the increased regulatory costs imposed. New Zealand is a special case in terms of resilience, seismic and weather requirements. This has resulted in requirements such as those for double glazing and insulation that are not comparable to other countries. If we want this, we have to pay for it, therefore New Zealand is expensive.

“If we want to support the objectives of the current regulatory regime, we need to understand that it is going to cost.”

The additional requirements do have an additional cost associated with them. Therefore when comparing the cost of building in New Zealand to other countries (such as Australia or the United States of America), these differences must be taken into account.

We need to decide where on the regulatory spectrum we want New Zealand to be, being fully aware of the costs of maintaining or reaching that goal. If we want double glazing, better insulation, greater resilience, and more parks, we will have to pay. If we want new subdivisions to be developed without cul-de-sacs, with shorter block lengths, more open space, and with garages having their own lane-way access, we will have to pay.

5.14.6 Recommendations

The recommendations that Interviewee Eight suggested were:

- Territorial authorities must work with developers to build infrastructure in a way that spreads cost between parties and over time and to deliver developments more quickly.
- Communicate the benefits to clients and the wider market of building requirements that have brought about increased regulatory costs.
- Help BCAs to understand the housing affordability implications of design choices, and that they would be accountable for this.
- BCAs must acknowledge the costs their decisions impose on the new house owner.
- New house seekers need to “get over ourselves” and accept that our house may look similar/the same as our neighbours and may be smaller, as there are large savings in spec built housing.

5.15 Interview Nine: Land developer and builder

Interviewee Nine was both a land developer and builder of new housing.

5.15.1 *Time delays and direct costs in BCA approvals are the big problem*

Interviewee Nine felt that items such as development contributions, idle land rates, land development costs (such as the provision of roading, reserves, power, gas etc.) and getting BCA approval for subdivision plans caused 80% of the costs and frustrations they faced. Just 20% of the challenge was in the actual building of the house. Interviewee Nine felt the land development challenge was getting worse by the year.

On the building side, the local BCA was willing to work with the builder to get approval. However, on the land side, the BCA was not collegial. Ten years ago, it would have taken months to get subdivision titles. It is now taking two or more years, with fees that might range from \$15,000 to several hundred thousand dollars depending on the project.

“Getting houses to market is 80% of the problem.”

Interviewee Nine stated that land prices in Wellington haven’t gone up because of developers putting up costs but because of many factors involving timing and costs. He showed us how much it cost to build a house in 1990 and how much a comparable house costs to build today. The cost of the section has increased 240% between 1990 and today in real terms, whereas the dwelling cost has increased just 20% per square metre in real terms.

Not all of this change could be explained by increase in demand for land as the city expanded. Much of the change had been in additional design requirements, and consultancy reports. For instance, Interviewee Nine recently spent \$140,000 on consultants’ fees over 14 months to acquire an amended consent. These costs had to be shared across perhaps 20 sections.

5.15.2 *Regional Council approach to earthworks is unrealistic and impractical*

The Regional Council is now taking a bigger interest in subdivisions due to environmental issues, such as concerns related to streams. The land developer is required to provide ecology reports, which are debated over lengthy periods of time at large costs. Interviewee Nine spent \$80,000 on ecology reports in 2013.

Because of the topography of the area, the Regional Council made what appeared to be unrealistic demands on water management, with a \$2,200 per month monitoring reporting system in place.

In addition, rather than allowing bulk earthworks to be done to terrace the subdivision, at a cost of around \$2,500 to \$3,000 per section, the BCAs had often insisted on individual earthworks for each section, which raised the cost to \$20,000 per section as smaller equipment had to be

used on a piecemeal basis. This added \$17,000 to the cost of each house. This was often accompanied by perverse outcomes to the environment.

For instance, to get a subdivision approved by the BCA, a certain amount of topsoil would need to be brought in and even planted. This topsoil would then be dug out and removed when the individual earthworks (rather than mass earthworks across multiple sections) was done. Finally, topsoil would be brought back in again when the build was complete.

The Interviewee stated that new home owners purchased a section, selected a home that required a flat site and subsequently carried out earthworks and retaining wall construction in order to provide the flat area. This behaviour supports the Interviewee's argument that the market doesn't want an "undulating site that fits the natural topography".

The environmental impact of carrying out the earthworks once a road and footpath are established is much greater than the impact of doing it at the early stages. Interviewee Nine argued that the approach whereby earthworks at the beginning of a subdivision were minimised, in order to protect the environment was therefore short-sighted and had a worse long-term environmental impact.

5.15.3 Some teams do not appreciate the cost implications of decisions

Interviewee Nine felt that certain teams from whom approvals were required are incompetent and anti-development. He noted that the interpretation of the Resource Management Act is inconsistent and showed no understanding of the costs involved.

For instance, the local BCA had no understanding of the cost of holding idle land (zoning approval, debt servicing, idle land rates etc.) to be developed

"The Council has no understanding of the cost of idle land."

while battling with these hurdles. Urban designers debated (among themselves and with the developer) what development was appropriate. The developer estimated he was charged \$90,000 per year in rates on idle land, which had no one living on it, and had few services provided by the BCA. He argued that given the development contributions of \$14,500 per section (the developer is also providing local reserves as part of the development, so does not pay the reserves component), there should be a rates rebate.

The Interviewee this year will bring approximately 10 properties to market (lower than a typical 20 to 25) due to Wellington's new housing demand. That meant the cost of idle land rates was adding a further \$9,000 to the cost of each dwelling.

5.15.4 Infrastructure is paid for and then handed over to council

The Interviewee felt that they (and eventually the homeowner) was incurring the cost of building infrastructure, such as roads, reservoirs, the three waters, and power connections, which are then handed over to the BCA or private monopolies like the local lines company. These huge costs are incurred for infrastructure that is then owned by someone else. The cost of doing so is passed on to the new homeowner, and therefore has a large impact on the cost of new housing. The home owner continues to pay for these services in their rates and line charges for the life of the property.

These charges are over and above development contributions, which are meant to cover the potential for the BCA to have to extend its macro infrastructure because total capacity in the area rises with development. Further, the Interviewee pointed out that development creates more ratepayers across whom costs can be shared.

Often the charges by monopolies are well above market rates, but the developer has no option but to pay because there are no alternatives. For instance, Interviewee Twelve spent \$200,000 building infrastructure free for the local lines company in the last year because he had to use the sub-contractors selected by the lines company.

5.15.5 Recommendations

The following recommendations were given by Interviewee Nine:

- BCAs and in particular Regional Councils need to be more pragmatic about streams and water ways, subdivision plans, earthworks plans, water monitoring and the like, taking into account the costs of these decisions on the community.
- See the affordability value of upfront development of several sections rather than requiring individualised earthworks for each section.
- Rebate idle land property rates against development contributions.
- Charge development contributions only where BCAs require large infrastructure upgrades and have assessed the cost of providing that infrastructure over and above the assessment of the new rates generated by the subdivision.
- Revise the Resource Management Act: The objecting minority are the only ones being listened to, with the majority silent but not necessarily opposed.
- Stop giving infrastructure monopolies brand new infrastructure.

5.16 Interview Ten: Materials distributor

Interviewee Ten is an executive at a major materials merchant.

5.16.1 The primary barrier to selling products is commercial

Interviewee Ten acknowledged that there were regulatory costs in getting products to market, such as showing that products were fit for purpose. The recent removal of tariffs without confirming that new imported products were fit for purpose in New Zealand also raised concerns.

Broadly, however, the Interviewee believed that as distributors, they would supply the needs of the marketplace. A builder would be unwilling to take the risk on using a new product. This led to an attitude where unless the gains (time and cost) were sufficient to offset risk, the builder would stick with what they know and trust. Therefore, it was hard for new products to come to market without having approvals in place.

“Commercial barriers are primarily a function of a lack of trust [in new products], the success of current products, and supply chain certainty.”

Further, many clients insisted on using products they knew and trusted.

Commercial barriers were therefore primarily a function of a lack of trust, the success of current products, and supply chain certainty, and are what would ultimately drive uptake of products.

5.16.2 There is inconsistency in BCAs approving products

Notwithstanding the large role commercial concerns played in specifying a product, Interviewee Ten stated that there was inconsistency in how BCAs interpreted the same solution using particular products. This worked against new products that were not well-known by BCAs, as the inconsistency across BCAs created uncertainty for builders working across more than one BCA.

The Interviewee believed the reluctance to approve use of new products was a function of:

- Risk aversion of BCAs, who were concerned that they would be held liable for product failure
- Lack of knowledge of products by BCAs.

Delays at BCAs in approving building consents with products that were unfamiliar to the BCA meant time delays and associated costs for builders, further discouraging them from adopting new materials unless there was a significant cost or installation time saving.

5.16.3 *The current regime creates risk aversion*

With the leaky buildings failures still fresh in everyone's minds, and the BCAs picking up a large share of the costs for remediation, Interviewee Ten felt the current system encouraged risk aversion by BCAs, rather than explicitly stating the extent of their liability, which may help overcome some of the risk aversion. He understood that the revision of the Building Act was planning to explicitly limit the liability of the BCAs.

The Interviewee felt that responsibility for product performance should always lie with the manufacturer, while the LBP programme should place responsibility for building a house according to the building consent on the LBP. Each party should only have responsibility for what they can control, which would limit the liability of the BCA, and therefore free them up to act in a less risk averse way.

At present, an appropriate insurance regime that would provide highly credible insurance cover to the home owner in the event of poor building practices or product failure is not in place. While the RMBA and CBANZ offer guarantee schemes, two-thirds of builders are not part of CBANZ or RMBA. Interviewee Ten felt that there would need to be a more comprehensive insurance programme, probably bulked up to cover liabilities across the building industry.

"There is no broad coverage highly credible insurance cover for the home owner in place."

5.16.4 *The value of a number of regulatory costs are not evident*

Interviewee Ten believed that the value (if any) of a range of regulatory interventions was not understood and therefore was seen as a compliance cost only. Examples include the RMA and its interpretation by BCAs, and health and safety regulations. He felt that government agencies did not understand the costs imposed by regulation, and that the market had little information on the risks and rewards of various regulations.

5.16.5 *Recommendations*

A number of recommendations flowed directly out of Interviewee Ten's comments:

- Improve efficiency at BCAs, creating consistency in how the RMA and Building Code are interpreted, and reducing time delays in approving consents.
- Build a national register of products and quality assurance so that BCAs can confidently approve products despite a lack of personal knowledge. e.g. if the national register allows the use of this product in our wind and snow zones, we can approve its use.
- Develop an impact and risk matrix that allows a focus on what matters. BCAs and as a result, builders, often will not adopt or approve a product because the risk of failure may be significant. Nevertheless, the impact of failure may be small, meaning there may be insufficient reason to warrant not approving that product.
- Apportion risk better and build in safeguards: At present, BCAs are risk averse because they have been held responsible for previous housing failures. The extent of responsibility the BCA has must be stated explicitly. The current combination of LBP sign-offs, and

RMBA/CBANZ guarantees system is insufficient to remove liability from BCAs. Risk should be borne by those best positioned to manage it, which is not currently the case.

- Evaluate risk and reward of health and safety measures and explain this risks and rewards to the industry prior to implementation. These safety measures increase the cost of housing, and the benefits of these costs must be better quantified, reasoned, and explained before implementation.

5.17 Interview Eleven: Industry observer

Interviewee Eleven is an academic with a strong understanding of the property market overall, and is not affiliated with any particular development, building, materials, or distribution stakeholder.

5.17.1 *Savings on input costs of delivering housing may not lead to improved affordability*

Interviewee Eleven argued that land developers took signals from the asking prices for the existing housing stock in the area to determine the price point at which new housing would be offered. Using a residual valuation process, they would work back through the cost of building to estimate the maximum acceptable bid-price for the land from the original landowner. After accounting for the price of regulation for bringing that land to market, the developer would be left with a price that they could offer for the land.

The Interviewee argued that if the costs of regulation were reduced, it cannot be assumed that all these costs savings would be delivered to the house purchaser. This was especially the case when house prices were rising and housing demand was increasing rapidly. Any saving from a reduction in regulatory costs may accrue as additional profits to the land developer or builder, or may be passed on to the original land owner as the land developer may need to offer more money for the land (especially in a market where the developer is competing with others for the land).

“Depending on timing, if input costs [such as regulatory costs] fall, this frees up more money for profits or so the developer can offer a better price to the land owner.”

Interviewee Eleven argued that a reduction in regulatory costs would have an immediate and a long term impact. For existing developers, who had land ready for development, a reduction in regulatory costs would result in a potential windfall profit for the developer. As long as the sale price for the house is set by the market, there is no incentive to land developers to pass on the benefit of lower development costs to the homeowner, especially if the developer can realistically expect to earn more from the sale of the developed land.

In the medium to long term, as the market adjusts to a new ‘lower regulatory cost regime’, the developers’ cost calculation in their residual valuation will change. This change will be reflected across the industry as a whole and will result in new valuations for land at any given gross development value. If house prices are rising (reflecting increasing housing demand) it is likely that the new ‘lower regulatory cost regime’ will lead to higher land bids to secure sites.

5.17.2 *The price point the developer sets is based on current house prices*

Interviewee Eleven held the view that new housing is not delivered in the absence of an existing market. Developers will take pricing cues from the existing housing market. The developer may look at recent historical price increases, and use past experience to forecast what they believe properties may be worth in a year or two, when making a decision to purchase land for development. If developers offer comparable houses at below the market price in an area, they are in effect giving the first homeowner a guaranteed capital gain.

Development is a risky business but developers face less risk when house prices are rising. Therefore, within the development cycle, it is usually the case that developers increase the supply of house sites and houses when prices are increasing. If property prices are not increasing, the risk to the developer is greater, as it suggests demand is being met. Less development occurs when the economy is weak, immigration is down, interest rates are high, or unemployment is high.

5.17.3 *Regulation can affect delivery of housing at the lower end of the market*

In a competitive land market, competition between land users should ensure that land is developed to its highest and best use. In situations where the highest and best use is affordable housing (e.g. developing in an area that has affordable house prices), Interviewee Eleven felt that it is possible that high regulatory costs could reduce development feasibility, especially at the lower end of the market by raising the cost of delivering land to the market.

5.17.4 *Zoning regulation can instantly change the value of land*

A zoning change that opens up an area to higher residential densities or different land uses instantly increases the value of the land, but also changes how it can be used, which may influence the cost to deliver housing. Increasing housing densities can potentially reduce the unit cost of housing. However, there are externalities associated with changing land use, such as impacts on infrastructure costs, which need to be taken into account in any zoning change decision.

5.17.5 *Recommendations*

A number of recommendations flowed directly out of Interviewee Eleven's comments:

- Identify the actual benefits of the current regulatory regime: While considerable attention has been given to the 'costs of regulation' it would be worth stating the benefits and evaluating the cost implications of the current regulatory regime to create greater clarity of what the benefits of the current system are, and what we are paying for those benefits.
- Create certainty on costs developers pay: Developers need certainty on the final costs of delivering land to market and it would be helpful if all regulatory costs were transparent.
- Consider housing policies that go beyond simply reducing construction costs: House prices reflect the interaction of complex housing demand and supply factors. A significant increase in housing demand (reflecting changing employment, income and credit conditions) can 'swamp' the marginal benefits of reducing the costs of production. Attention needs to be given to considering the benefits of a range of possible housing policies (such as the provision of intermediate tenures and the potential benefits and costs of policies such as inclusionary zoning (i.e. including requirements for affordable housing in private residential developments)).

"Housing policies that go beyond simply reducing construction costs need to be considered."

5.18 Interview Twelve: Land developer and builder

Interviewee Twelve is one of New Zealand's largest housing development and building companies.

5.18.1 *The New Zealand develop then build model is not best practice*

In New Zealand, land development is often undertaken separately from building, an approach Interviewee Twelve described as archaic. Bare land is bought, subdivided and supplied with services, then on-sold to builders. Interviewee Twelve believed this meant that this limited opportunities to engineer value as the developer and builder may have very different visions of how the development would look.

This model also wasted time, and created greater costs for the developer who had to hold land for longer until the development was complete and then properties on-sold to the builder (who often could not start building in the meantime).

5.18.2 *Some of the biggest costs of land development are due to time delays*

The holding costs of buying land, then waiting years for the subdivision plan and consents to be approved, and spending millions of dollars on infrastructure before any building began, added huge costs to a property price. One example was where the developer waited 18 months to get approval to build 12 terraced houses on a \$1.5 million piece of land. The holding costs and additional rates paid on that land while waiting for approvals added an estimated \$15,000 to \$20,000 to the cost of each unit, with much bigger costs paid by the ultimate home buyer.

The large holding costs associated with land development also limited the number of potential developers in the market by pricing out smaller developers. This reduced competition and potentially increased prices for delivering housing.

5.18.3 *Developer pays for all infrastructure as well as development contributions*

Interviewee Twelve held the view that development contributions were simply a fee that BCAs benefitted from, based on the possibility that they may one day need to develop new upstream infrastructure. Yet the developer paid all the costs of delivering infrastructure on-site (the three waters, electricity, and telecommunications), and was helping create more rateable properties that would provide the funding needed by the BCA to deliver more upstream infrastructure if it was required.

An approved list of sub-contractors for the utilities is provided, but the Interviewee did not think there was any genuine competition – “they all know what the others are charging”.

5.18.4 *Urban designers don't see affordability as being in their mandate*

Urban designers are believed to “rule the roost” at BCAs. Because urban designers are hard to deal with, Interviewee Twelve believed some developers got around dealing with urban designers through developing larger sections that fell outside the jurisdiction of urban planning. This raised the cost of delivering housing because section sizes typically had to be larger than about 300 m² to avoid dealing with urban designers.

“Urban designers say that affordability is not in their mandate. They have no idea of the cost implications of their subjective decisions.”

Some examples of urban designer interference included mandating what colours could be chosen for individual dwellings, and even sketching out what they thought were appropriate

layouts for houses. Much of the requirements designers insisted upon seemed to be their subjective interpretation, rather than having their base within the District Plan or RMA.

Designers had no apparent knowledge of the cost implications of design decisions they made. For example, the desire to keep garages away from house frontages meant including extra right of ways (roading) to service garages, meaning land use became less efficient, and the cost per section rose.

5.18.5 If developers and builders don't produce what the market wants, they won't sell

Leading on from view point that Interviewee Twelve believed urban designers had too much power, he pointed out that if the developer and builder produced unattractive, badly laid out or badly built homes, the market would not pay the price they wanted for them. This created incentive for the developer and builder to produce a development where people wanted to live. This also meant that, in Interviewee Twelve's view, the BCAs should be playing a far smaller role in insisting on the subjective views of designers being incorporated.

5.18.6 Government has pushed liability to the BCAs, while LBP programme is ineffective

Interviewee Twelve believed that BCAs had been forced to bear more and more liability, as the last man standing in the event of a housing failure. This had led to strong risk aversion.

At the same time, the LBP programme has been ineffective in that it:

- does not cover all trades, meaning there are gaps in the assurance chain.
- does not provide genuine assurance that in the case of failure, the LBP will be responsible for making good.
- does not reduce the number of inspections by BCAs, because they understand that unlike some builders, they will "always be there" and will ultimately be held liable.

At many BCAs, the risk aversion had led to a process whereby each project was signed off by the relevant LBPs, the BCA undertook eight to 10 inspections, and then the inspectors' paperwork was internally audited at the BCA.

One key way for builders to produce houses more cost effectively was to have a builder working across multiple building sites at the same time. But the inspection and LBP system does not allow this as inspections have to be booked long in advance and the builder has to be on a particular site almost full-time while other trades are there and to meet inspectors.

"The number of inspections required has also increased the chances that an inspection will fail."

Because inspections have to be booked far in advance (due to resourcing challenges at BCAs and the sheer number of inspections per property), builders have to make educated guesses about when the site will be ready for the next inspection. Any delay in getting the site ready for inspection then resulted in a failed inspection, requiring an additional inspection and more time delays.

5.18.7 The explicit and hidden costs of health and safety measures are not understood

Interviewee Twelve believed that the Working at Heights and other health and safety programmes had added \$10,000 to \$15,000 to the cost of building. He felt that many of these costs were hidden. It was easy to estimate the financial costs of erecting new scaffolding, but other costs like the administration and project management costs associated with adding

additional steps to the build process meant project managers could manage fewer projects at any one time.

The Interviewee also said there was a lot of uncertainty as to what they could and could not do to stay within the regulations. He felt that the Guidelines issued in 2012 were not nearly explicit and clear enough.

5.18.8 Recommendations

A number of recommendations flowed directly out of Interviewee Twelve's comments:

- Improve the integration of the development and building model: By vertical integration, or developers and builders working more closely together, housing could be delivered more quickly, value engineering would be possible, and holding costs could fall.
- Remove inconsistent behaviour and subjectivity within BCAs: The role and extent of authority of urban designers in particular needs to be explicit and limited.
- Increase commercial knowledge among BCAs and central government agencies: At present, there is little evidence that BCA staff understand or appreciate how much time delays, inconsistent, or over-designed requirements add to housing costs.
- Simplify paperwork: A common complaint among builders is that they spend too much time on administration leaving fewer hours for the actual project.
- Reduce time delays to cut holding costs and support a larger group of players.
- Act as a referee, not a police officer: Urban designers and other BCA staff are there to ensure land is developed and houses built in accordance with the law, not to add subjectivity to the process. BCAs should be more open and in-tune with commercial realities.
- Improve prescription / certainty on urban design and health and safety: Greater prescription on what was required in particular neighbourhoods would reduce the additional subjective influences urban designers could play, while more explicit guidance on health and safety would help builders make the right choices to protect workers and maximise productivity.
- Re-evaluate the LBP-inspections mix: The LBP programme has been effective in reducing inspections as BCAs still believe they bear all the risk. This lessens the value of the LBP programme and suggests that the extent of BCA liability needs to be clarified.

5.19 Interview Thirteen: Land developer

Interviewee Thirteen is a major land developer.

5.19.1 Technical land availability has little impact on actual land availability

Interviewee Thirteen said most talk seemed to suggest that by zoning land for residential development, the problem of land availability would be solved by the market, but he disagreed with this. Zoning technically made land appropriate for development via subdivision, but did not guarantee it would be available for development. Owners of zoned land did not always want to sell to developers; many own land for a life style purpose or as a future nest egg. Others did not have the ability to develop due to lack of experience and or lack of capital.

"The solution to providing affordable housing is not the amount of land zoned residential."

Many land owners in areas where zoning had changed (say from rural to residential) had unrealistic expectations of the price they could expect to get for their land, delaying land development. Rezoning land generally came with a huge expectation of increased value, which is not necessarily the case.

On top of this, the time and cost associated with getting subdivision and resource consents through the RMA process often puts people off subdividing. As a result, the actual amount of land brought to market was far different from the technical amount of land made available by zoning.

5.19.2 BCAs (and some developers) don't appreciate the dollar value of time

Interviewee Thirteen felt that BCA staff members had little understanding of the cost implications of decisions they made. Perhaps more importantly, they did not appreciate the costs associated with holding land for years while BCAs required multiple rounds of consultation. A further frustration was that frontline staff lacked the empowerment to make decisions, meaning many proposals to meet BCA requirements needed escalation up the chain, and further long delays.

A further complication of the time BCAs take to process applications is staff turnover at the BCAs. Often the process could have been underway for years when a staff member leaves and the new staff member dealing with that application brings a different interpretation and new requirements to the process.

Additionally, there was often secondary involvement from BCA staff who were not involved in the original process, whose views could even be at loggerheads with other BCA staff views. The developer would be expected to incorporate their requirements even though much of the subdivision plan had already been agreed with the BCA.

"Councils see themselves as gatekeepers rather than enablers."

Not only BCAs miscalculated the value of time, however. Many smaller, or less experienced developers did not account for the cost of holding land. This meant they got burned when the consent process took longer than they had planned. As a result, the most successful development projects could not afford to be debt-funded as a turn in the market could cause sudden cash flow problems leading to forced sales by banks seeking to retrieve their outstanding loan balances along with overdue interest monies.

5.19.3 Pre-application meetings do not reduce consent process length or cost

One way BCAs have tried to encourage interaction with developers is through the pre-application meeting. Interviewee Thirteen felt that this had not reduced the time taken to get consent significantly at all. If anything, it added cost as the time of BCA staff members was charged at an hourly rate to the developer's account for these pre-application meetings, over and above the cost of the consent application.

5.19.4 When both Regional and District Councils are involved, delays multiply

Regional Councils were increasingly involved in subdivision plan consent evaluations. This created another level of red tape, and communication between District and Regional Councils was not always quick or effective. This created further time delays and associated costs.

Interviewee Thirteen pointed to examples of unitary authorities around New Zealand as systems that worked better because the developer did not have to deal separately with Regional and District Councils.

5.19.5 People don't make house size choices to avoid under-capitalisation

One common view that has been expressed for why house sizes have grown sharply in recent years is to avoid undercapitalising on an expensive piece of land. This question was raised with Interviewee Thirteen. He did not think it held much merit.

He suggested that people made the choice to build based on economic drivers or lifestyle choices. In New Zealand, the decision to build was not usually a financial instrument. People considered their total budget (perhaps as constrained by what a bank is willing to lend them) and determine how they might split that budget across land and building. They may choose to live in a better location and sacrifice house size, or to live further away but in a bigger and/or newer house.

5.19.6 Land values have risen faster than build prices

In many ways, the same materials and labour cost pressures that have affected build prices have affected land development. The cost of bitumen, piping and labour, for instance, had risen strongly. In places like Christchurch, scarcity of resources had pushed up prices even more.

Yet land prices have risen faster than build prices, both due to demand for new sections, and regulatory costs that had risen rapidly, often led by the economics of holding land.

5.19.7 Innovation in how subdivisions are developed is hard

Interviewee Thirteen said there were options to innovate in the land development space, but this was hard because:

- BCAs often did not approve alternative materials or design choices
- Insurers were risk averse, meaning higher premiums if different products were adopted
- The BRANZ appraisals process was lengthy and costly
- There were virtual monopolies with regard to provision of some products in the market.

“There is not a lot of opportunity for innovation in subdivisions.”

5.19.8 Recommendations

A number of recommendations flowed directly out of Interviewee Thirteen’s comments:

- Develop a better framework: The intent of the RMA is good, but implementation is hard. Further, the mechanics to make it work are a nightmare and it is too open to interpretation.
- Create clarity through prescription: In many ways, having a clear set of rules that remove the likelihood of subjective interpretation by BCAs would make the process simpler.
- Foster a customer-focused mind-set: Planners and urban designers are there to help the development process rather than hinder it.
- Empower BCA personnel to make decisions: There are often long delays because frontline staff cannot make decisions without getting permission up the chain. Empowerment could probably also reduce staff turnover, solving the continuity problem.

5.20 Interview Fourteen: Industry observer

Interviewee Fourteen helped establish the development contributions regime at a major metropolitan Council, and now advises a number of BCAs on similar issues.

5.20.1 Development contributions are intended to fund capex

Interviewee Fourteen confirmed that can legally only be used to cover the cost of capital expenditure, not the ongoing maintenance costs of infrastructure (which should come from rates). The rationale for DCs is that while an individual development may be able to be incorporated into the exist infrastructure with minimal cost, at some stage a system-wide upgrade is needed. As the new developments cause this upgrade they should pay for it and DCs are the best available mechanism to do this.

5.20.2 *There is a theoretically sound approach to estimating DCs*

Interviewee set out the process typically used by BCAs in determining DCs as:

- Use Statistics New Zealand population growth projections as a starting point for estimating how many new households and businesses would be formed over, say, the next 15 years
- Convert these households and businesses to Household Unit Equivalents (HUEs)
- Estimate the cost of new infrastructure needed to service these new HUEs by considering the extent to which capex involves:
 - Renewing existing assets earlier than would otherwise be the case
 - Upgrading service levels versus creating capacity for growth
- Apportion growth costs to the new HUEs accordingly.

5.20.3 *DC estimation has its challenges but overall is a fair system*

He suggested that there were a number of challenges in the DC regime:

- **Separating out who benefitted and to what extent was challenging.** For instance, renewing or upgrading existing infrastructure did carry benefits for existing households that the new developments should not pay for. BCAs are required to identify any benefits to the existing community and the associated costs cannot be included in DC charges. In practice, this is a complex, time consuming and often subjective process.
- **Timing challenges:** Because DCs are estimated based on projections of population growth, any acceleration or slowdown in growth has implications for when infrastructure needs to be delivered. In cases where growth slowed, this could mean DCs were paid well in advance of when they were used to build new infrastructure. In cases where infrastructure was commissioned in expectation of new development, if that development failed to materialise, BCAs would struggle to pay back debt. As BCAs cannot know the interest costs they will pay or the timing of income (as growth rates will vary from forecasts), there will inevitably be mismatching between costs and income.
- **Institutional memory was often limited.** BCAs often did not keep sufficient records of which developments triggered which infrastructure requirements and the division of benefits (and therefore costs) between existing and new developments. This made it harder to trace what DCs were covering, and to see if they had been sufficient or an over-charge for infrastructure that eventuated.
- **Double charging for infrastructure** is likely as it is a complex model to allocate correctly.
- **Charging is sometimes uniformly based** across a jurisdiction without trying to allocate particular assets to suburbs. However, most BCAs will apply different charges for different catchments based on access to infrastructure.

"In practice, DCs are very hard to estimate accurately."

Despite these shortcomings, Interviewee Fourteen believed that, in general, DCs are about right at \$20 to \$40K across various Councils. He believed that much of the growth in DCs (e.g. from \$6,000 to \$30,000 per HUE in Auckland was likely because of a better understanding of the growth needs and their actual costs rather than an attempt to generate revenue from developers. He acknowledged that there probably was some pressure at some BCAs to cover costs through the DC system rather than through politically unpopular rates rises, but this would be at the margins, and would put them at risk of legal challenge.

5.20.4 Recommendations

Recommendations flowing from the discussion with Interviewee Fourteen include:

- **Support intensification** in places like Auckland, where the true costs of additional development are higher on the outskirts of the city than through infill housing. If DC charges reflected these different costs better, it would provide better price signals. However, the complexity of the current policy framework makes this more difficult.
- **Use a DC estimation model that smoothes costs over time:** A rolling average of the infrastructure costs built over, say, a 15 year period starting five years ago could be used to provide smoother estimates of DCs over a longer period. This would overcome the “lumpiness” of individual growth capex projects and might simplify some of the complex modelling otherwise required, by establishing a long-run incremental cost to support a new HUE. This would create greater certainty for developers.

5.21 Interview Fifteen: Regulator

Interviewee Fifteen was a North Island BCA. Members of both the planning and consenting teams attended.

5.21.1 Wider economic conditions affect the speed of development

This particular BCA felt they had a good stock of land zoned for development, but agreed that far more than just the correct zoning was required. The economic slowdown had led to less development. The recent improvement in the economy had been accompanied by some recovery in the amount of building.

Proximity to employment opportunities also determined likelihood of actual development, regardless of zoning. While there was some land banking, most developers were keen to sell.

5.21.2 There is a set process for estimating DCs

The BCA's DC Officer provided written comment on the BCA's DC approach, which was read out by one of the meeting attendees. In summary, the BCA averages out infrastructure costs so that all developments within the same category generally pay the same charge per unit of demand.

“We have plenty of land zoned for residential development. There's a lot of other factors that determine uptake.”

The methodology to determine the cost per unit of demand is complex and requires Council to determine the capacity of its infrastructure and the cost of this, then to split this between existing ratepayers and future ratepayers (new developments). Much of Council's infrastructure is provided in advance of development. This means a DC may pay for infrastructure **already in place** that has been built in anticipation, or for infrastructure not yet provided but planned for growth. The process relies on accurate assessments of infrastructure capacity to determine the cost per unit of demand.

The methodology is all provided publicly but development contribution calculations are inherently complex and the methodology to determine this cost is difficult for most people to grasp. The complexity arises largely from the need to be equitable and to provide full information. It was likely further clarification would be provided in the next policy review.

In addition, the BCA often provided detailed analysis on how the DCs were estimated if requested.

5.21.3 Amendments to the Local Government Act will increase flexibility

The Interviewee believed that the changes to the Local Government Act (LGA), especially with regard to explicitly allowing for developer agreements, would add some flexibility to development. The Interviewee's BCA had allowed developers to stage development for some years already, meaning they did not have to pay all the DCs up front.

The LGA was not expected to have a major impact on estimation of DCs other than procedural changes. The expense and inconvenience of the objections process may encourage the BCA and developer to enter into agreements. However, the BCA is already moving towards more developer agreements so this may not necessarily reflect the LGA amendments.

5.21.4 BCAs have limited control over infrastructure provision

Interviewee Fifteen highlighted the fact that when it came to some utilities, BCAs had little say. For instance:

- Electricity was provided by one firm, who had a macro-level agreement with the BCA, but the Interviewee had no immediate visibility on whether or not charges by the power company for individual development connections was fair
- Some developers were responsible for paying for upfront infrastructure like transformers if their development triggered that demand.
- Telecommunications providers had no links to the BCA. Their provision or failure to provide sufficient telecommunications links could affect development.
- Being a relatively small BCA, there was only one provider of water connections. This lack of competition was a form of natural monopoly rather than an intentional one.

5.21.5 The District Plan is sufficiently prescriptive

The Interviewee believed the current District Plan (which is also under review) provided a lot of clear detail as to what was allowed in developments. Designers did not always consult the District Plan and so often produced designs that were not appropriate, which could be easily solved if they took the time to consult the District Plan. Around 35% of consents were rejected at first glance because they were non-compliant, but this could be even higher if the BCA was more "ruthless" in its approach. Sometimes the designer provided insufficient detail because they were uncertain whether their client would proceed.

"Some designers use the Council review process as their due diligence rather than checking they comply with the District Plan themselves."

The BCA also encouraged pre-lodgement meetings, which allowed them to work through any likely obstacles before they eventuated. They had streamlined the consents process and were currently processing 100% of consents within the 20 working day timeframe.

The revised District Plan was expected to be more prescriptive, which it was hoped would add further clarity. The BCA saw the District Plan as being additional to the covenants that many developers placed on land to maximise value by ensuring a certain amenity value, and there was likely to be some overlap in some areas.

5.21.6 Consent approvals seldom required work that exceeded the Building Code

Interviewee Fifteen indicated that they do not require standards in excess of the Building Code to approve consents. They suggested that builders often failed to understand that a collection of acceptable solutions and New Zealand standards do not constitute the Building Code.

The more avant-garde the design, the more likely it was to require more information and rigour before it could be approved.

The Interviewee believed that a further reason more consents were challenged these days was because Building Control Officers (BCOs) were better trained than in the past, and not because they had raised expectations of builders. BCOs were picking up more problems than before. All BCOs were either completing or had completed relevant national qualifications; suppliers were providing more product information; and the BCA had ongoing professional development programmes.

The Interviewee indicated that the building industry did not think it lacked knowledge and that it was the BCA being more stringent, but the opposite was true. Design detail was often insufficient, as was designer attention to height restrictions, site coverage and other Plan requirements, meaning that the BCA was forced to reject many applications, and request more information in 95% of cases.

5.21.7 *The LBP programme has increased BCA costs without reducing risk*

Interviewee Fifteen believed the LBP programme had not decreased risk for BCAs, and if anything, had increased costs. The LBP programme was no guarantee that skills had improved; it simply meant a builder had a licence. The BCA's feeling of exposure had not been reduced at all. Instead, it raised costs as the BCA had to follow procedures to ensure LBPs signed off the build.

Nevertheless, the risk remained that the builder would leave the country or go bankrupt, and the home owner would be left with no recourse other than to go after the BCA. The Interviewee mentioned that since 1989, the idea of a licensing system similar to that in Australia had been promoted, whereby the builder would have comprehensive insurance to build.

Instead, the New Zealand system was an ad-hoc licensing system that meant very little. It did not restrict access to the industry nor did it necessarily improve quality.

5.22 Interview Sixteen: Regulator

Like Interview Fifteen, Interviewee Sixteen was a North Island BCA and members of both the planning and consenting teams attended.

5.22.1 *The Interviewee stays within the intent of the Building Code*

Interviewee Sixteen commented that they like to think that they don't go beyond the Building Code. They felt that there was less complexity in designs that they received compared to some BCAs so buildings were more conservative in nature. Acceptable solutions were easy to use.

The Interviewee felt that nothing fitted perfectly within the acceptable solutions within the Building Code, so there was always some extent of "acceptable solutions". They often had to determine how far an alternative solution was from an acceptable solution (e.g. with claddings and joins). This is due to some builders/designers trying to stretch acceptable solutions to fit too much, so as not to have to use an alternative solution.

Interviewee Sixteen thought that they had sufficient capability (in terms of exposure and experience) on-site in most cases to determine acceptability of solutions provided to them. This meant that they did not have to send work off-site to engineers or other professions to determine whether the solution was fit for purpose. They did nevertheless require certification by

engineers and surveyors for earthworks and ensuring a dwelling kept within the building envelope.

5.22.2 *Consenting authorities still bear risk for bad building and new products*

The Interviewee stated that the LBP program has not reduced risk for the council although the program has made who did what more transparent. However, owners would still be looking to the BCA if their housing failed, and it was up to the council to recover the costs from others. Often it was not worth chasing the responsible parties as the costs involved in litigation outweighed the amount that would be recouped.

When new products enter the market, BCAs try to look for links between overseas and local certification to find where they line up. It was common for some overseas products to look the same as the local counterpart, including the deliberate (and sometimes illegal) use of identifying features of the local product. This made it hard to telling the difference between products.

"While we have joint and several liability, we will always be dragged into it."

Interviewee Sixteen also had issues where bigger manufacturers made alterations or modifications to their products. Often, it was difficult to determine if any changes had been made or what (if any) the implications of the change on the performance or acceptability of the product would be.

Interviewee Sixteen suggested that by the time the product was on the market, it was too late for testing.

5.22.3 *Development is driven by demand and restrictive covenants, not zoning constraints*

The BCA stated that they were not a high growth area and that there is sufficient land available to develop. Instead, the pace of development is more dependent on local demand conditions, as well as who owns the land and how they go about developing.

Affordable housing can be constrained by covenants. Often, covenant rules established by the developer restrict what may be built on a site. This can add significantly to the cost of the house. A covenant rule cited by the interviewee was that the developer insisted that the house built on the section must cost twice the amount of the land. This in effect means that no affordable housing can be built in this development, as land prices are over \$200,000.

Interviewee Sixteen believed the only way to get around these covenant rules would be for Central Government to limit covenant rules as BCAs have no power to do so.

The Interviewee had been approached by several smaller builders to try to determine how they could obtain some land to develop affordable housing. Builders building on existing subdivisions felt that existing land prices and private covenants made it hard to deliver affordable housing and reduced the segment of the market that could be catered for. The needs of a limited number of customers at the high-end of the market was being met. These builders were looking for opportunities to undertake their own subdivision and house packages through which they felt they could relatively easily deliver affordable housing.

The Interviewee also felt that while developers were driven by the profit motive, they had a responsibility to balance this by ensuring development, which they were in favour of, did not happen at the expense of the environment.

5.22.4 Streamline resource consent requirements

Interviewee Sixteen said that policy planners at the BCA valued the opinions of the consents team. It was important that the policy people listened to the consent team's fears with regard to practical implementation of policies. This meant that the policies could be written in a way that was sensible.

The policy team was strong on consultation with the affected community. They did not introduce rules without consultation. The interviewee stated that this feedback loop was important as a reality check.

The Interviewee stated that it was important for BCAs to remember that they do not always need to impose an additional rule. They did not need to write rules into the District Plan that require a resource consent if it could be avoided while upholding environmental protections through permitted activity standards. The goal was to minimise the likelihood of needing a resource consent by writing rules clearly enough.

"If it doesn't have to be a controlled activity, then don't make it a controlled activity."

The BCA typically met with the developer at the start of a proposed development process to ensure the developer understood any requirements that may impact the viability of the development.

5.22.5 Designers and surveyors do not design with the District Plan in mind

It was common for the Interviewee to receive designs that do not consider the District Plan. Common issues that they had included designers and/or surveyors:

- Not considering the District Plan in their design
- Knowing that the design does not comply but applying for a building consent anyway without applying for a resource consent at the same time
- Leaving out the component that doesn't comply.

Interviewee Sixteen thought that design students were not taught about District Plans so designers/architects were unaware of the role Plans play in setting design rules for the District.

The BCA encourages pre-lodgement meetings with designers, surveyors and/or builders so that the process can be smooth for everyone involved. However, the Interviewee felt that project management (or even professional competence) was often lacking in the building industry. A common example was for developers or builders to apply for resource and building consents sequentially, but time could be saved by applying for both the resource consent and building consent at the same time.

5.23 Interview Seventeen: Regulator

Interviewee Seventeen is a South Island regulator. We spoke to three members of the Resource Consents and Planning team.

5.23.1 Zoning is insufficient to stimulate development

The Interviewee believed zoning land for residential development was insufficient to stimulate residential development. The residential development market in their District tended to be dominated by a small number of big players. Land was drip-fed to the market in a way that kept prices up.

The Interviewee felt that substantial rezoning in recent years had ensured zoned land available, such that the technical supply of land was not a problem, but rather the actual bringing of land to the market by the private sector was.

Another issue with the current state is that there are multiple owners of zoned land. There is agreement needed between these multiple parties to bring this land to market efficiently and cost-effectively. Interviewee Seventeen commented that a mechanism was needed that allowed territorial authorities or the government to assist in the delivery of that land to the market for residential development.

5.23.2 Changes to the LGA have a material impact on how some costs will be paid

The Interviewee felt recent changes to the LGA had required territorial authorities to objectively reconsider their DC calculations, particularly in light of it removing the ability for BCAs to fund certain community infrastructure such as libraries through DCs. Explicitly excluded infrastructure types would now have to be funded from general rates.

The Interviewee suggested that it was hard for a person in the street to understand DC calculations although professional developers could work it out. The developers and public needed to understand that the money collected via DCs did not only provide infrastructure for that one development.

Interviewee Seventeen stated that existing houses in proximity to new development already had services in place, and saw DCs as a mechanism to offset the negative impacts of new development. Developers typically had a view in mind of how they might share costs of development with the territorial authority when they first approached the territorial authority to discuss a development proposal. The territorial authority typically pays for part of a new piece of macro-infrastructure required for the proposed development if it will have benefits beyond that development, such as new pump stations.

The LGA changes put in writing what territorial authority had been doing for some time in being willing to discuss development agreements with developers.

5.23.3 Some efforts to create RMA consistency are already underway but must be flexible

The Interviewee pointed out that Central Government is already considering changes to the RMA specifically aiming to improve consistency across District Plans through a national template. Nevertheless, the Interviewee felt it was important for there to be sufficient flexibility in any changes to allow individual territorial authorities to deal with the idiosyncratic issues they face, such as land stability issues that Wellington might need to deal with.

5.23.4 Cost-benefit analysis of District Plan changes already occurs

Interviewee Seventeen pointed out that under Section 32 of the RMA, territorial authorities are already required to undertake CBA of proposed changes to the District Plan. There is also a transparent process of hearings before a package of provisions are implemented. The Interviewee felt that developers were well-represented in the submissions received on Plan changes. They felt there was some scope to make provisions for rules to be more consistent.

“Councils are already required to consider the economic implications of a plan change via a Section 32 analysis.”

In subsequent (post-interview) follow up questions on the role of Design Guides as part of the District Plan or outside of it, the Interviewee indicated that Design Guides could be either. However, if they were part of the District Plan, they would be subject to the same Section

32 analysis as other proposed changes as part of the Plan. If a Design Guide is not part of the District Plan, they function as a guide for information purposes in order to assist the design process.

APPENDIX B: CURRENT WARRANTY SCHEMES

The **Master Build 10-year guarantee** is one example of a warranty scheme, with each build underwritten by the guarantee programme. Levels of cover currently vary, with the standard guarantee covering up to \$100,000, while the premium guarantee covers up to \$500,000.

Warranty schemes in New Zealand including the Master Builders programme, Certified Builders programme, and warranties offered by developer-builders already cover more than half of new-builds.

Internationally, a good example is the **National House-Building Council (NHBC)** in the United Kingdom, which insures around 80% of all new-builds in that jurisdiction. The NHBC undertakes its own inspections at various stages of the build including foundations, drainage, close-in, pre-plaster and pre-handover. Under the NHBC system, the builder is responsible for fixing defects in the first two years of the 10-year warranty, while the NHBC is responsible for years 3 to 10.

In Australia, the **NSW Self Insurance Corporation** was established (2010) as the sole home warranty insurer in New South Wales (NSW). It outsources premium collection and policy wording to two private companies and holds a central fund into which premiums are deposited and from which claims are paid. Home warranty insurance needs to be provided by all builders or tradespeople before taking any money from a home owner under a residential building contract and before starting any work. The system also covers spec-builds, owner-builders, and developers where builders are undertaking work.

Explicitly limiting a BCA's liability, creating greater certainty for homeowners, and improving the quality of building work delivered are three likely outcomes of a comprehensive warranty regime.

Similarly, the Queensland system is run by the **Queensland Building and Construction Commission (QBCC, a government agency)**, with private insurers assisting with premium collection and policy wording. Around 70% of the value of policies are re-insured with the private sector, limiting exposure of the QBCC.

A point of departure for the Queensland system is that the QBCC evaluates the suitability of a contractor for both licensing and insurance as a single-step process. The complexity of the process for getting licensed and insured varies depending on the amount of building work being done each year (i.e. with risk exposure). Builders who complete less than \$300,000 of work a year, for instance, are subject to less stringent documentation requirements than those who do \$2 million of work. The licensing process evaluates the contractor's technical capability, financial viability, business management capability, and experience.

All building work valued at more than \$3,300 is covered under the QBCC system.