

Regulatory Impact Statement

Regulatory Impact Statement for the Proposed National Policy Statement on Urban Development Capacity under the Resource Management Act 1991

Agency Disclosure Statement

This Regulatory Impact Statement has been prepared by the Ministry for the Environment (MfE) and the Ministry of Business, Innovation and Employment (MBIE) with input from MRCagney, Covec and Beca.

It articulates the expected impact of a recommended national policy statement on urban development capacity (NPS-UDC), in addressing the problem with local authorities' supply of appropriate urban development capacity in their resource management plans, to enable existing and future communities to sustainably provide for their wellbeing.

An earlier version of this Regulatory Impact Statement informed Cabinet's decision to publicly consult on a draft NPS-UDC. This consultation took place in June and July and Cabinet agreement is now being sought to approve a revised, final version of the NPS-UDC.

Caveats, uncertainties and limitations of analysis

A national policy statement is an instrument issued under the Resource Management Act that directs local authorities to do specific things in their regional and district plans relating to matters of national significance. They contain objectives and policies (the 'why' and 'what') that local authorities must give effect to in their resource management planning. Under current legislation a national policy statement cannot name specific local authorities. It also cannot direct decisions made under other legislation (such as the Local Government Act 2001).

The recommended NPS-UDC is as directive and as targeted as is possible under current legislation. It would add further detail to the Resource Legislation Amendment Bill requirement that local authorities provide sufficient development capacity in their plans.

However the benefits of the NPS-UDC depend on how well-received, interpreted and implemented it is by local authorities. There is a risk that some local authorities will not adequately comply with NPS policies within the timeframes. This is particularly the case for local authorities that would be newly defined as "high growth" or "medium growth" as a result of revisions to Statistics New Zealand population projections (which will be made between June and September 2017).

Local authority implementation of the NPS-UDC will in turn be affected by the extent to which government supports implementation and/or is prepared to intervene to address non-compliance. This Regulatory Impact Statement outlines a proposed implementation programme, including a process for monitoring local authority compliance and options for government intervention. This implementation programme and its costs are yet to be agreed.

The success of the NPS-UDC in ensuring that plans provide sufficient development capacity also depends on some factors that national policy statements cannot directly affect, including:

- Local authority funding for infrastructure
- Inconsistencies between the Resource Management Act 1991 (RMA), Local Government Act 2002 (LGA) and Land Transport Management Act 2003 (LTMA)
- Governance and incentives facing local decision-makers.

There are also other drivers of escalating house prices, such as global finance and migration trends, patterns of concentrated land ownership in some local areas, the scale and productivity of the construction sector, and the use of covenants.

Some of these issues outside the scope of the NPS-UDC are being addressed to some extent through other government initiatives. These initiatives include the Housing Accords and Special Housing Act; the Resource Legislation Amendment Bill; the Housing Infrastructure Fund; urban development legislation; and the government's response to the Productivity Commission's reports on *Using Land for Housing* and *Better Urban Planning*. The NPS-UDC is part of a broader government package of options to improve housing supply and affordability.

Finally, there are gaps in the availability of data and models that result in limitations to the cost benefit analysis supporting this Regulatory Impact Statement. When assessing the costs and benefits of existing land use plans, policies, and rules in district plans, and of the benefits of enabling more competitive and responsive urban development, it has been necessary to model the impact of policy changes on the housing market and on a range of positive and negative externalities. This modelling has generally assumed that markets will be able to respond efficiently in response to changes to regulations – e.g. in the medium to long term we do not assume any limits in the long term on resources other than urban land, such as labour or infrastructure. Key modelling assumptions and estimates are based on empirical evidence and/or validated through several analytical approaches.



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Executive Summary

MfE and MBIE recommend that Government issue the attached national policy statement on urban development capacity (NPS-UDC) at the end of 2016.

Previous work by the Productivity Commission and undertaken for this NPS-UDC suggests that planning can significantly constrain housing supply, contributing to rapidly increasing and “unaffordable” housing prices. This NPS-UDC would seek to address this by directing local authorities to provide sufficient urban development capacity in their resource management plans to support housing and business growth. “Development capacity” is defined here as zoning in plans, supported by infrastructure, which enables urban development of some amount. This includes development “up” (through intensifying land use) and “out” by newly developing land.

The recommended NPS-UDC contains objectives and policies that direct local authorities on:

- outcomes of planning decisions
- evidence to support planning decisions
- responsive planning
- coordinated planning processes.

Different policies would apply to different urban areas depending on their size and growth. The NPS-UDC policies, the local authorities that they apply to, and their timeframes are summarised at pages 12 and 13.

This Regulatory Impact Statement summarises the problem definition, and cost-benefit analysis of a) non-regulatory and regulatory options for addressing the problem, and b) three different options for a NPS-UDC. This analysis informed the content of the draft NPS-UDC, which was as directive and targeted as possible under current legislation. The Regulatory Impact Statement also summarises the cost-benefit analysis of amendments to the draft NPS-UDC recommended following consultation.

The Regulatory Impact Statement should be read along with the following attachments.

- The recommended NPS-UDC.
- The *Recommendations on amendments to the notified NPS-UDC*, prepared under Section 51 of the RMA.
- The cost benefit analyses of the draft and recommended final NPS-UDC, prepared under Sections 32A and 32AA of the RMA.

This Regulatory Impact Statement notes matters that a NPS-UDC can and cannot address. It also highlights risks that some of the intended outcomes of the NPS-UDC are not achieved, and it summarises a proposed programme of government support for implementation that would help mitigate this. It also outlines a process for monitoring local authority compliance with NPS-UDC requirements and its effectiveness, and powers of Ministerial intervention under the RMA.

Status quo and problem definition

Understanding the problem

Cities are complex. In the words of Edward Glaeser:

“Cities are the absence of physical space between people and companies. They are proximity, density, closeness. They enable us to work and play together, and their success depends upon the demand for physical connection.”

A corollary of this is that cities are also concentrations of *effects*, both positive and negative. They are shaped by a wide range of market actors, as well as by local and central governments, whose actions in turn have repercussions for people around them. This complexity is one of the factors that in turn creates the potential for various market failures and regulatory failures.

Urban growth provides an opportunity to improve social and economic outcomes for people and communities. However, it also creates challenges for resource management. The balance between positive and negative effects may not be realised: as the New Zealand Productivity Commission has highlighted¹ local governments face political incentives that mean that they may make planning decisions based on the potential adverse effects of development without appropriately (or adequately) providing for the positive effects that urban development delivers. Consequently, the following high-level “presenting” problem has been identified:

“Existing RMA land use planning practices appear to respond poorly to the opportunities and challenges arising from urban development. In particular, planning policies can constrain development capacity and limit the ability of the market to meet demands in growing cities. This results in a limited supply of housing and rising property prices, as well as some localised problems meeting demands for business space.”

This problem of insufficient development capacity (resource management regulations and infrastructure that enable development) is caused by a range of factors, not all of which can be attributable to RMA planning practices².

Drawing on work by the Productivity Commission report *Using Land for Housing*, and research undertaken for the NPS-UDC³, we identify five specific regulatory failures that arise within the context of RMA land use planning by local authorities:

¹ In its 2015 report, *Using Land for Housing*.

² Others include economies of scale in infrastructure provision and limits on debt held by councils and used to fund infrastructure.

³ Three research reports are available on the Ministry for the Environment website:

- Ministry for the Environment, 2016. *How Councils Estimate Demand and Supply of Development Capacity for Housing and Business*. Ministry for the Environment: Wellington.
- BERL, 2016. *Business land: problems and causes*. Ministry of Business, Innovation and Employment: Wellington.
- Ministry for the Environment and Ministry of Business, Innovation and Employment, 2016. *International approaches to managing development capacity*. Ministry for the Environment: Wellington.

1. Resource management planning policies and processes, including plan-making, plan changes, and resource consenting, that do not respond quickly to market changes, especially shocks in demand.
2. Decisions are informed by inadequate evidence about demand for residential and business land or the development capacity (particularly ‘market-feasible’ capacity) enabled by plans.
3. Existing policies and rules that are inefficient – i.e. that have high costs that are not justified by their benefits – or which are not adequately compared to non-regulatory policy options.
4. Potential coordination failures between local authorities, and between land use and infrastructure planning. Local authorities and the Environment Court make planning decisions under the RMA. Local authorities and/or their council controlled organisations make some infrastructure and financial decisions, under the LGA and LTMA. Other public and private parties also make infrastructure decisions affecting development capacity (e.g. Land Transport New Zealand, Ministry of Education, and energy and telecommunications companies)⁴. Local authorities are separately elected and accountable governments, and many infrastructure providers are independent of them, so that collaborative planning processes usually fall short of agreeing decisions that will have financial consequences for the parties⁵. These governance arrangements and separate legislative requirements are a significant disincentive for making consistent decisions, both across urban markets and between resource management planning and infrastructure.
5. Planning practices that place priority on some effects over others that are not necessarily consistent with the purpose of the RMA – e.g. weighting current interests over future interests, or local effects over regional / national effects.

The first four causes relate to *technical* shortcomings related to RMA planning practices, while the fifth addresses the *political incentives* facing local governments. The political economy of planning is a fundamental driver of observed outcomes (Fischel, 2015). Although urban development policies have significant effects on both current and future generations, there is evidence that future interests are under-represented in planning processes. The interests of current homeowners are well represented in planning processes, as they have the opportunity to elect representatives and submit on plans (Fischel, 2015).⁶ On the other hand, there is evidence of a “democratic deficit” in local government processes, as younger

⁴ Land use and infrastructure planners are usually accountable for different objectives: land use planning tends to pursue multiple but localised objectives while infrastructure planning aims to optimise a single, often regional or even national network.

⁵ Much of the infrastructure needed for urban development is publicly funded, so that the private benefits of development incur social costs that are initially born by a local authority or other infrastructure provider.

⁶ However, all current *residents* may not be equally well represented. Morrow (2013) finds that changes to urban planning in Los Angeles between 1965 and 1992 were strongly influenced by input from affluent, predominantly white homeowners associations, while residents of low-income and minority communities had less input. In a similar vein, there were significant variations in submission rates on the Auckland Unitary Plan from different local board areas. Some local boards had as few as 0.4-0.8 submissions per 1,000 residents (Otara-Papatoetoe, Mangere-Otahuhu), while others had as many as 12.3-12.5 submissions per 1,000 residents (Orakei, Rodney). A statistical analysis showed that local boards with higher median personal income and a greater share of residents over 65 were more likely to submit at higher rates.

people vote and submit on planning processes at lower rates (Productivity Commission, 2015).

In a similar vein, there is tension between localised negative externalities associated with urban growth and benefits that often accrue at a regional or national level (as identified below). This can create a “wedge” between local and regional / national interests. This gives local political actors an incentive to limit growth through planning regulations (and non-regulatory mechanisms, if available). This may be rational for individual areas, but in the aggregate it will reduce social wellbeing (Albouy et al, 2014).

Section 3 of the RMA provides for the consideration of local, regional, and national effects, while Section 5 encompasses consideration of the social, economic and cultural wellbeing of future generations. However, the current dynamics of public input and democratic participation appears to create a bias against enabling urban development to meet future needs and provide for regional or national wellbeing.

Consequences of the presenting problem

In growing cities, RMA land use planning practices that inappropriately limit development capacity will in turn limit the ability for people and communities (both existing and future) to provide for their social, economic, cultural and environmental wellbeing. The limit on development capacity contributes to high and increasing housing costs, relative to incomes, in some urban areas in New Zealand (although it is not necessarily the sole contributing factor). Reduced housing affordability in turn has both local and national impacts.

Rising prices favour current homeowners at the expense of people who wish to enter the housing market. It may also adversely impact renters, depending on the extent and speed at which rents move with property prices. However, there are also flow-on effects throughout the economy, including:

- discouraging people from living and working in productive locations
- increasing the costs of capital for investment in other parts of the economy, including export sectors
- increasing the financial stability risks arising from volatility in housing prices
- increasing social and economic inequalities, including wealth inequality
- exacerbating health problems associated with inadequate or overcrowded housing
- imposing fiscal costs to Government as a result of expenditures on accommodation supplements for a large share of rental properties (60% in Auckland). At present, the Government spends \$2 billion a year on accommodation supplements; if constrained supply pushes up rents, these expenditures also increase.

Assessing the magnitude of the problem associated with the status quo

The regulatory failures arising in the context of RMA planning for urban development have the following consequences:

- Limited competitiveness of urban land and development markets as a result of regulatory constraints on development capacity and barriers to entry such as regulatory uncertainty for developers. This results in a less responsive urban development market that delivers less housing (or business floorspace) at a higher cost.
- Planning regulations that address externalities (or other market failures) in an inefficient way – ie, they have high costs and relatively few benefits. In Auckland, this includes rules that limit development capacity, such as the former Metropolitan Urban Limit and building height limits, as well as regulations that affect building characteristics, such as minimum parking requirements and minimum apartment sizes.

We identify several key pieces of evidence for the existence and magnitude of these problems.

First, there are “discontinuities” in land prices at the boundary between rural and urban zones such as Auckland’s former Metropolitan Urban Limit (MUL), suggesting that regulations have limited development capacity in the city. Several studies found that land just inside the MUL was five to ten times as valuable as land just outside the MUL (Grimes and Liang, 2009; Productivity Commission, 2012; Zheng, 2013).

Such discontinuities reflect the impact of multiple, overlapping regulations that limit development within the city. For example, building height limits and other rules that limit development within the urbanised area or make it more costly will push up demand for fringe land and thus exacerbate the impact of an urban limit such as the MUL. Consequently, policies that enable more intensive development within the urbanised area *and* policies that enable an increased supply of land by extending the urban limit can assist in better matching rising demand for land and housing, thereby reducing the gap between demand and development capacity (which has the consequential impacts on prices).

Second, constraints on competition in land and development markets reduce the flexibility, or elasticity, of housing markets (and other development markets). Over time, this results in a slower supply response – and higher prices – in response to growth.

Empirical evidence suggests that New Zealand’s housing supply is relatively inelastic, with measured elasticities of supply ranging from 0.7 to 0.9 (that is, a 1% increase in price is associated with a 0.7-0.9% increase in construction). Furthermore, given ongoing increases in prices and the relatively slow pace of construction, it is considered likely that supply has become less price-responsive in some cities, including Auckland, over the last decade.

Third, there is evidence that the costs of planning policies and rules outweigh the benefits. To supplement previous research into the costs (and sometimes benefits) of planning regulations (MRCagney, 2013, 2014, 2015; NZIER, 2014, 2015a; Grimes and Mitchell, 2015), we have analysed the costs and benefits of loosening Auckland’s former MUL and building height limits to enable increased development capacity. Table 1 summarises our estimates of these costs and benefits – the underpinning sources and calculations are detailed in an Appendix to this RIS. This analysis suggests that the long-term gains from loosening particular planning constraints such as were imposed by these legacy policies are likely to be large.

However, we note that the benefits (and costs) of loosening regulations would not arise instantaneously but over time as development adjusted to different plans, policies and rules. There may also be other factors constraining councils’ ability to achieve these benefits. For

example, debt servicing ratios established by the *Local Government (Financial Reporting and Prudence) Regulations 2014* issued under the LGA may limit councils' ability to take on more debt to provide infrastructure to greenfield areas. In this regard, changes to regulation alone may not remove all market and regulatory failures in improving development capacity.

Table 1: Net benefits of changing legacy regulations limiting development capacity in Auckland

Expanding the Metropolitan Urban Limit		Lifting building height limits	
Cost / benefit	Present value (7% discount rate)	Cost / benefit	Present value (7% discount rate)
Benefits for city residents (lower housing costs) ⁷	+\$5,761 million	Benefits for city residents (lower housing and transport costs)	+\$6,258 million
Cost of additional road infrastructure	-\$1,270 million	Benefits of reduced road infrastructure costs	+\$866 million
Cost of other network infrastructure	Not estimated	Benefits of reduced costs for other network infrastructure	Not estimated
Cost of foregone peri-urban open space	-\$578 million to -\$1,011 million	Cost of overshadowing	-\$993 million to -\$2,308 million
Net benefits	+\$3,481 million to +\$3,914 million	Net benefits	+\$4,816 million to +\$6,131 million

Objectives

The Government goals or objectives to respond to the problems arising from insufficient development capacity are to:

- maximise the economic, social, environmental and cultural benefits of urban environments at the local and national level in a sustainable manner;
- improve the availability and choice of housing and economic opportunities in urban areas to enable more people in communities to provide for their wellbeing (particular for those on median incomes for whom access to housing in urban areas is becoming increasingly constrained);
- promote greater efficiency in the supply of development capacity to respond to change and growth in urban areas (providing for the social, economic, cultural and environmental wellbeing of future generations).

The extent of the problems identified above suggests that there is scope for improving local authorities' planning processes and policies under the RMA so that their role (in managing land use and the allocation of resources) will assist in delivering to the above government objectives.

⁷ These estimates of benefits to households assume that all households rent their dwellings and thus pay for housing on an annual basis. This contrasts with the modeling that we undertake later, which focuses on purchases of properties. We note that rents and prices implicitly reflect short- and long-term demands for housing – i.e. people rent houses because they need a place to live *today*, and buy houses partly in anticipation of future housing needs.

Options and impact analysis

After identifying specific problems associated with RMA planning for urban development, we reviewed a range of policy options for addressing problems. The “long list” of options we considered included:

- **Maintaining the status quo:** This option would entail no change to existing arrangements, other than changes that have already been signalled, such as the Resource Legislation Amendment Bill, which addresses slightly different problems. As this approach would not involve any incentive for change in the planning processes of local authorities, it is concluded that this would not result in any measurable change to the problem. As such, it is not considered to be an efficient approach.
- **Non-regulatory options:** These include a range of options, such as providing local authorities with best practice guidelines, training, or grants to assist them to make planning decisions that are more responsive to changes in housing demand. These options are typically voluntary in nature and rely upon council participation to be effective. Given the existing pressures for councils to maintain planning processes that they already have in place, non-regulatory options are unlikely to be effective in addressing the problem.
- **Regulatory interventions:** These options include amendments to legislation⁸, ministerial intervention, and issuing national direction or regulations under the RMA. While a number of these options would be effective by requiring responses from local authorities, they may not be efficient. In particular, the ability for standard regulation to apply to all local authorities without these authorities (and their communities) being able to define their own responses to development capacity gaps is likely to be costly or inefficient.

On balance, a National Policy Statement on Urban Development Capacity (NPS-UDC) is most likely to achieve an appropriate balance between effectiveness and efficiency. This is because a national policy statement under the RMA can provide clear direction on outcomes and bottom lines (the ‘why’ and ‘what’), while allowing flexibility in how to respond to different local circumstances. We undertook targeted consultation on the case for national direction on urban development⁹, which also demonstrated support for a NPS-UDC.

We have evaluated the degree to which a NPS-UDC, as an option, is able to address the underlying causes of the problem (set out above). A national policy statement (NPS) under the RMA comprises objectives and policies (the ‘why’ and ‘what’) that decision makers must give effect to when making RMA planning decisions that affect urban development. Under current legislation a national policy statement cannot contain ‘methods’, i.e., it cannot direct local authorities on *how* they must give effect to the NPS-UDC, or the specific decisions they must make. A national policy statement also cannot name specific local authorities. Finally, national policy statements cannot direct decisions made under other legislation (such as the Local Government Act).

⁸ Potentially including amendments to legislation to change incentives or costs to enable development, e.g. changes to pricing for infrastructure networks.

⁹ All local authorities, iwi and select other groups were consulted on the case for national direction on urban development during December 2015 and January 2016; of the 47 submissions received the majority supported a national policy statement on urban development.

It is likely to be more effective at addressing some problems than others, which suggests that it will be necessary to progress Government reforms in other areas. In particular, a NPS could require local authorities to develop better evidence and undertake frequent monitoring and respond to this, which would improve the responsiveness of planning. However a NPS would not change the fundamental drivers of the speed of planning processes¹⁰.

A NPS could require local authorities to coordinate with infrastructure providers. However, it cannot address drivers for inconsistent decisions (including legislation and governance / institutional arrangements) that sit outside the scope of the RMA¹¹. A NPS could also stimulate more explicit consideration of the costs and benefits of urban planning decisions in relation to future interests, and their effects at a regional / national scale, and support this through better information. However, it cannot fully address some of the political incentives on local decision-makers that tend to act against providing more urban development capacity.

Options for a NPS-UDC

On the basis of the above, and following targeted consultation under the RMA on the case for national direction, it was decided that a NPS-UDC should be drafted. Notwithstanding the limits of a national policy statement outlined above, the impact of a NPS-UDC would also depend on its content, i.e. how directive, beneficial and/or costly its policies are.

In developing the content of the NPS-UDC, a “short list” of three options was evaluated alongside the status quo. These options would all provide direction on outcomes for urban development, but would vary in terms of additional policy requirements to support these outcomes: Option 1 would apply to all local authorities, while Options 2 and 3 would target some policies to the local authorities experiencing the most significant urban growth.

- Status Quo Option: As discussed above, this would entail no changes to existing arrangements other than changes that have already been signalled.
- NPS-UDC Option 1: This would direct all local authorities in respect of the outcomes they must take into account when making decisions affecting urban development. These would include providing for wellbeing including of future generations; choice; national benefits; and the competitive operation of land and development markets; as well as sufficient development capacity to support housing and business growth.
- NPS-UDC Option 2: This would add to Option 1 by requiring more specific actions of high and medium growth local authorities - the development of evidence, co-ordinated decision-making and ‘responsive planning’, comprising:
 - developing resource management plans that reduce the extent to which zoning and other regulations restrict development capacity
 - plan changes when evidence shows there is insufficient development capacity

¹⁰ The Resource Legislation Amendment Bill (RLAB) may go some way to addressing these.

¹¹ Other reforms may help to address parts of this problem, including some of the proposals in the Better Local Services reforms to the Local Government Act 2002 (LGA). In addition, the Government intends to look further into a wider range of possible governance arrangements and pricing tools for water infrastructure.

- consenting processes that facilitate development.
- NPS-UDC Option 3: This would add further to Options 1 and 2 requirements for selected 'high growth' urban areas (e.g. Auckland, Hamilton, Tauranga, Christchurch and Queenstown). These policies would require the relevant local authorities to set development capacity targets in their resource management plans for housing against which they would be held accountable, and to prepare future (long term) land release and intensification strategies¹². This is our recommended option. The key components of this option are summarised in the following A3.

¹² Medium growth local authorities would also be encouraged to give effect to these policies.

Summary of the National Policy Statement on Urban Development Capacity

	A: Outcomes for planning decisions	B: Evidence and monitoring to support planning decisions	C: Responsive planning	D: Coordinated planning evidence and decisions
Objectives	<i>These objectives apply to all local authorities and decision-makers. Policies PA1 to PA4 apply to any urban environment expecting to experience growth.</i>			
	<p>OA1. Effective and efficient urban environments that enable people and communities and future generations to provide for social, economic, cultural and environmental wellbeing.</p> <p>OA2. Urban environments that have sufficient opportunities to meet demand, and which provide choices that will meet the needs of people and communities and future generations for a range of dwelling types and locations, working environments and places to locate businesses.</p> <p>OA3. Urban environments that, over time, develop and change in response to the changing needs of people and communities and future generations.</p>	<p>OB1. A robustly developed, comprehensive and frequently updated evidence base to inform planning decisions in urban environments.</p>	<p>OC1. Planning decisions, practices and methods that enable urban development which provides for the social, economic, cultural and environmental wellbeing of people and communities and future generations in the short, medium and long term.</p> <p>OC2. Local authorities adapt and respond to evidence about urban development, market activity and the social, economic, cultural and environmental wellbeing of people and communities and future generations, in a timely way.</p>	<p>OD1. Urban environments where land use, development, development infrastructure and other infrastructure are integrated with each other.</p> <p>OD2. Coordinated and aligned planning decisions within and across local authority boundaries.</p>
	<i>Policies PB1-PB7, PC1-PC4, PD1 and PD2 apply to local authorities with a Medium or High-Growth Urban Area within their district or region. The application of the policies is not restricted to the boundaries of the Urban Area.</i>			
Policies	<p>PA1. Local authorities shall ensure that at any one time there is sufficient development capacity available as follows:</p> <ul style="list-style-type: none"> Short term capacity must be feasible, zoned and serviced with development infrastructure Medium term capacity must be feasible, zoned and either serviced with development infrastructure, or development infrastructure identified in a long term plan under the LGA Long term capacity must be feasible, identified in relevant plans and strategies, and the development infrastructure to support it must be identified in an infrastructure strategy under the LGA <p>PA2. Local authorities shall satisfy themselves that other infrastructure required to support urban development is likely to be available.</p> <p>PA3. When making decisions that affect the way and rate at which development capacity is provided, decision-makers shall provide for the social, economic, cultural and environmental wellbeing of people and communities and future generations, having regard to:</p> <ul style="list-style-type: none"> Providing choices that will meet the needs of people and communities and future generations for a range of dwelling types and locations, working environments and places to locate businesses Promoting efficient use of scarce urban land and infrastructure Limiting as much as possible adverse impacts on the competitive operation of land and development markets. <p>PA4. When considering effects of urban development, decision-makers shall take into account:</p> <ul style="list-style-type: none"> The benefits that urban development will provide with respect to the ability of people, communities and future generations to provide for their social, economic, cultural and environmental wellbeing The benefits and costs of urban development at a national, inter-regional, regional and district scale, as well as local effects. 	<p>PB1. Local authorities shall carry out a housing and business development capacity assessment at least three-yearly that:</p> <ul style="list-style-type: none"> Estimates housing demand, including for different types, locations and price points; and the supply of development capacity to meet that demand, in the short, medium and long term Estimates demand for different types and locations of business land and floor area for businesses and the supply of development capacity to meet that demand in the short, medium and long term Assesses interactions between housing and business activities, and their impacts on each other. <p>PB2. The assessment shall use information about demand including:</p> <ul style="list-style-type: none"> Demographic change (including Statistics New Zealand population projections) Future changes in business activities of the local economy and potential impacts on demand for housing and business land Market indicators monitored under PB6 and PB7. <p>PB3. The assessment shall estimate the sufficiency of development capacity provided by plans including:</p> <ul style="list-style-type: none"> The cumulative impact of all zoning, objectives, policies, rules and overlays in plans Actual and likely availability of infrastructure under PA1 Current feasibility of development capacity Rate of take up of development capacity The market's response to planning decisions obtained through monitoring indicators under PB6 and PB7. <p>PB4. The assessment shall estimate the additional capacity needed if any of the above factors indicate that the supply of development capacity is not likely to meet demand in the short, medium or long term.</p> <p>PB5. In carrying out the assessment local authorities shall seek and use the input of iwi authorities, the property development sector, significant land owners, social housing providers, requiring authorities and the providers of development and other infrastructure.</p> <p>PB6. To ensure they are well-informed about demand, development capacity, urban development activity and outcomes and how planning decisions may affect this, local authorities shall monitor quarterly:</p> <ul style="list-style-type: none"> Prices and rents for housing, residential and business land by location and type; and changes in these over time Resource and building consents relative to population growth Indicators of housing affordability. <p>PB7. Local authorities shall use information provided by indicators of price efficiency in their land and development market, such as price differentials between zones, to understand how well the market is functioning and how planning may affect this, and when additional development capacity might be needed.</p> <p><i>Local authorities are encouraged to publish the housing and business development capacity assessment under PB1 and monitoring results under PB6 and PB7.</i></p>	<p>PC1. To factor in the proportion of feasible development capacity that may not be developed, in addition to the requirement to ensure sufficient, feasible development capacity as outlined in PA1, local authorities shall also provide an additional margin of feasible development capacity over and above projected demand of at least: 20% in the short and medium term; and, 15% in the long term.</p> <p>PC2. If evidence from the assessment under PB1, including information about the rate of take-up of development capacity, indicates a higher margin is more appropriate, this higher margin should be used.</p> <p>PC3. When the housing and business development capacity assessment or monitoring indicates development capacity is not sufficient in any of the short, medium or long term, local authorities shall respond by providing further development capacity and enabling development.</p> <p>PC4. Local authorities shall consider all practicable options for providing sufficient, feasible development capacity and enabling development to meet demand including:</p> <ul style="list-style-type: none"> Changes to plans and regional policy statements including zoning, objectives, policies, rules and overlays that apply in both existing urban environments and greenfield areas Integrated and coordinated consenting processes that facilitate development Statutory tools and other methods available under other legislation. <p><i>These policies apply to local authorities with a High-Growth Urban Area within their district or region. Local authorities with a Medium-Growth Urban Area within their district or region are encouraged to give effect to these policies. The application of the policies is not restricted to the boundaries of the Urban Area.</i></p> <p>PC5-11. Local authorities shall set minimum targets for sufficient, feasible development capacity for housing. Regional councils shall incorporate these into their regional policy statement and territorial authorities shall incorporate these as an objective in their relevant plan.</p> <p>Minimum targets shall be set for the medium and long terms and reviewed every three years. When evidence shows that the minimum targets set in the regional policy statement or relevant plans are not sufficient, local authorities shall revise those minimum targets.</p> <p>Local authorities shall set and revise the minimum targets in their regional policy statement or relevant plan without going through the consultation process set out in Schedule 1 of the RMA.</p> <p>PC12-14. Local authorities shall produce a future development strategy that demonstrates there will be sufficient, feasible development capacity in the medium and long terms and that the minimum targets will be met. This strategy shall:</p> <ul style="list-style-type: none"> Identify the location, timing and sequencing of future development capacity for the long-term, including both future greenfield areas and intensification opportunities in existing urban environments Balance certainty about future urban development with being responsive to demand. <p>This strategy:</p> <ul style="list-style-type: none"> Shall be informed by the relevant long term plans and infrastructure strategies under the Local Government Act 2002 (LGA) Can be incorporated into a non-statutory document outside the RMA. <p>In developing this strategy local authorities should:</p> <ul style="list-style-type: none"> Undertake a consultation process that complies with either Part 6 of the LGA, or Schedule 1 of the RMA Be informed by the housing and business development capacity assessment Have particular regard to policy PA3 when considering how to provide development capacity. 	<p>PD1. Local authorities that share jurisdiction over an Urban Area are strongly encouraged to work together to implement this NPS, and particularly to cooperate and agree on:</p> <ul style="list-style-type: none"> A joint housing and business development capacity assessment The provision and location of sufficient, feasible development capacity. <p>PD2. Local authorities shall work with providers of development infrastructure and other infrastructure to achieve integrated land use and infrastructure planning in order to implement PA1-PA3, PC1 and PC2.</p> <p>PD3. Local authorities that share jurisdiction over an Urban Area are strongly encouraged to cooperate and agree upon:</p> <ul style="list-style-type: none"> The specification of minimum targets and their review The development of a joint future development strategy. <p>PD4. Local authorities shall work with providers of development infrastructure and other infrastructure in preparing the future development strategy.</p>

Definitions

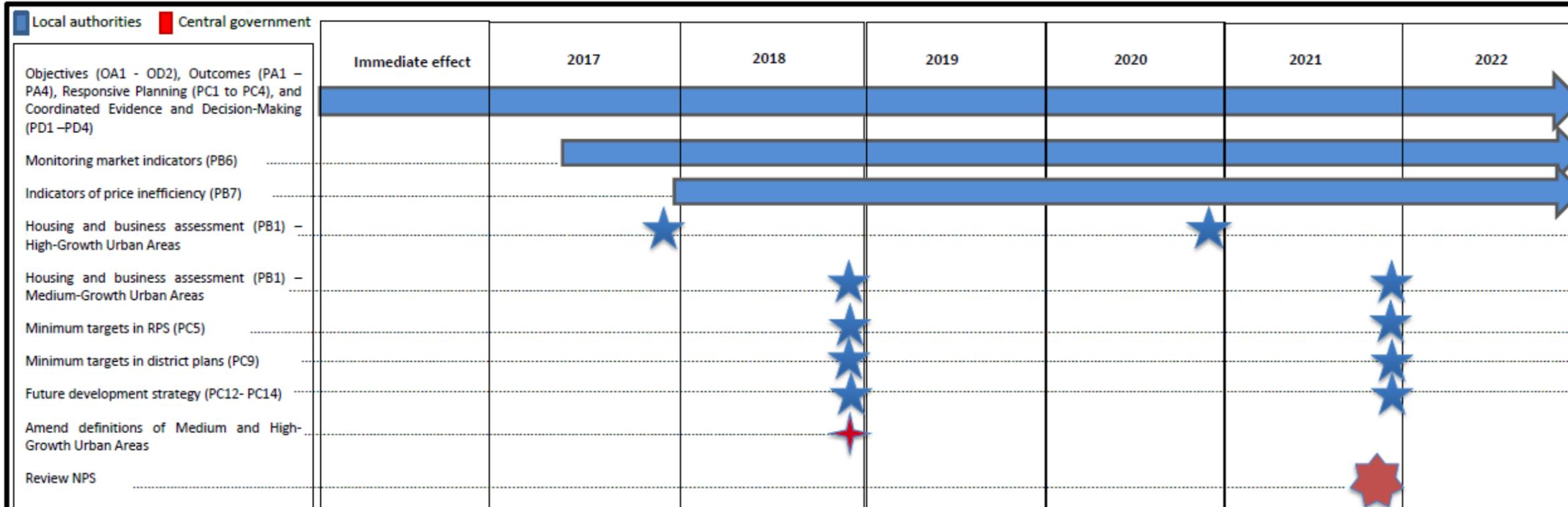
<p>Development capacity: means in relation to housing and business land, the capacity of land intended for urban development based on:</p> <ul style="list-style-type: none"> a) The zoning, objectives, policies, rules and overlays that apply to the land, in the relevant proposed and operative regional policy statements, regional plans and district plans; and b) The provision of adequate development infrastructure to support the development of the land.
<p>Feasible: means the development is commercially viable development, taking into account the current likely costs, revenue and yield of developing; and <i>feasibility</i> has a corresponding meaning.</p>
<p>Sufficient: means the provision of enough development capacity to meet housing and business demand, and which reflects the demands for different types and locations of development capacity</p>
<p>Short term: means within the next three years Medium term: means between three and ten years Long term: means between ten and thirty years</p>
<p>Development infrastructure: means network infrastructure for water supply, wastewater, stormwater and land transport as defined in the Land Transport Management Act 2002, to the extent that it is controlled by local authorities.</p>
<p>Other infrastructure means: open space; community infrastructure as defined in the Local Government Act 2002; land transport as defined in the Land Transport Management Act 2002 that is not controlled by local authorities; social infrastructure such as schools and healthcare; telecommunications as defined in the Telecommunications Act 2001; energy; and, other infrastructure not controlled by local authorities.</p>

Which NPS-UDC objectives and policies apply to which local authorities^^

Area	Relevant Local Authorities	Relevant Objectives and Policies for Implementation		
		All Objectives and Policies PA1-PA4	Policies PB1-PB7, PC1-PC4 and PD1-PD2	Policies PC5-PC14 and PD3-PD4
<i>(Subject to change as population projections are revised)</i>				
High-Growth Urban Areas				
Auckland	Auckland Council			
Tauranga	Tauranga City Council, Western Bay of Plenty District Council, Bay of Plenty Regional Council			
Hamilton	Hamilton City Council, Waipa District Council, Waikato Regional Council			
Queenstown	Queenstown Lakes District Council, Otago Regional Council			
Christchurch	Christchurch City Council, Waimakariri District Council, Selwyn District Council, Environment Canterbury Regional Council			
Medium-Growth Urban Areas				
New Plymouth	New Plymouth District Council, Taranaki Regional Council			
Nelson	Nelson City Council, Tasman District Council			
Kapiti	Kapiti Coast District Council, Greater Wellington Regional Council			
Palmerston North	Palmerston North City Council, Horizons Council			
Wellington	Wellington City Council, Porirua City Council, Lower Hutt City Council, Upper Hutt City Council, Greater Wellington Regional Council			
Rest of New Zealand				
All others	The remainder of New Zealand's local authorities			

^^Note, it is highly likely that a number of additional urban areas will be defined as either a high or medium growth urban area when Statistics New Zealand revises population projections in 2017. Revisions are expected by September 2017.

Timeframes for Implementation**



** Local authorities with urban areas newly defined as either high or medium growth urban areas due to Statistics New Zealand revisions in 2017 will have extra time to complete some of these requirements.

Assessment of Policy Options

The three options developed for the content of a NPS-UDC were assessed against the status quo. The assessment takes account of the Treasury's *Regulatory Impact Analysis Handbook*, as well as Section 32 of the RMA, which establishes evaluation reporting requirements for policy interventions under the RMA.

In order to assess these policy options, we undertook a two-step process:

- First, we analysed the costs and benefits that may arise if a NPS-UDC were to be implemented that would be as effective as it can be, in addressing the five regulatory failures identified in the problem definition.
- Second, we assessed the relative merits of each of the three NPS-UDC options. In particular we assessed the degree to which the more specific policy requirements included in NPS-UDC options 2 and 3 are necessary to contribute to achieving the objectives (and hence the net benefits of doing so), taking into account the following five assessment criteria:
 1. Consistency with the purpose (Section 5) of the Resource Management Act 1991 (RMA)¹³
 2. Effectiveness—the extent to which any policy meets the objectives of ensuring sufficient capacity for urban development;
 3. Efficiency—whether the policy option is an efficient way of achieving the objectives;
 4. Feasibility—the practicality of the policy; and
 5. Degree of risk—the likelihood that the estimated costs and benefits will be materially different from the primary estimate.

Step 1: Cost benefit analysis of achieving the objectives of the NPS-UDC options

We undertook a cost benefit analysis to understand the potential impact of a NPS-UDC that went as far as it could to address the regulatory failures identified in the problem definition. In doing so, we note that:

¹³ This criteria is required for a Section 32 analysis. The purpose of the RMA is to promote the sustainable management of natural and physical resources. Sustainable management is defined in the RMA as "managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while—

- (a) Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
- (b) Safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and
- (c) Avoiding, remedying, or mitigating any adverse effects of activities on the environment."

- The end outcomes from a NPS-UDC, including the magnitude of costs and benefits, will depend upon how councils (and other actors in RMA planning) respond to statutory direction. This depends on the degree to which an NPS-UDC (and government support for its implementation and/or intervention to address non-compliance) creates incentives or requirements for councils to change existing behaviours
- A NPS-UDC is not likely to address all of the problems that arise in the context of more responsive urban development, as some are outside the scope of RMA land use planning.¹⁴

Following our analysis of the problem, we consider that enabling sufficient development capacity would result in more competitive and responsive land and development markets that would enable growth in demand for housing (and business floorspace) to be met at a lower cost. Achieving this outcome would:

- Result in benefits to consumers of housing (and business floorspace), who would benefit from lower growth in prices. This benefit will primarily accrue to new entrants to the housing or business land market, but also (to a lesser extent) to those already in the housing market who are either buying additional property (e.g. for investment purposes) or who are moving between housing sub-markets.
- Result in larger cities over time by enabling increased development in urbanised areas and greenfield areas. This would in turn lead to:
 - Added negative externalities associated with development, which may include congestion, overshadowing from tall buildings, loss of access to peri-urban open space, water and air quality externalities, and various noise and nuisances. These costs would often, but not always, accrue at a localised level in areas experiencing development.
 - Added positive externalities from increased agglomeration in production and consumption. These benefits would accrue at a regional or national level.

To understand the magnitude of these costs and benefits, we developed two microeconomic models for understanding the impact of marginally increasing the responsiveness of housing supply on house prices and city size. These models are explained in an Appendix to this RIS. Importantly, this analysis does not assume that housing supply becomes *fully* flexible, or that additional supply would result in a *reduction* in house prices – rather, it considers a scenario in which other elements of the status quo scenario, or residual problems (such as the ability of the construction industry to meet demand) left unaddressed by a NPS-UDC, continue to impose some limits on supply responsiveness.

Based on these models, we estimated that the consumer benefits of enabling more flexible / responsive urban developments are in the order of \$110,000 to \$129,000 per added

¹⁴ We have addressed this in our modelling by assuming that an NPS-UD would result in incremental improvements to housing supply responsiveness but not necessarily enable supply to increase to the point where prices declined or stopped rising.

household. (These models have been calibrated to Auckland; however, scenario testing suggests that they can also be applied to other cities, with comparable results.¹⁵)

Table 2 compares these benefits with quantitative estimates of the magnitude of positive and negative externalities associated with urban development in either existing urban or new greenfield areas.¹⁶ While the magnitude of costs and benefits differs depending upon model specification, the overall findings are clear: enabling more flexible / responsive urban growth will result in net social benefits under any scenario for growth. The consumer surplus benefits associated with doing so outweigh the negative externalities (and external infrastructure costs not borne by users) under either urban or greenfield growth scenarios. Furthermore, the presence of agglomeration economies in production and consumption means that the net direction of externalities associated with urban growth may in fact be positive.

This suggests that policy interventions to enable urban development, such as the NPS-UDC options, are likely to be socially beneficial.

Table 2: Costs and benefits of achieving NPS-UDC objectives in Auckland

Costs / benefits	Model 1 results (forward-looking model of supply elasticity)		Model 2 results (backward looking model of supply, prices, and rationing over 2001-2013 period)	
	<i>Low cost (urban)</i>	<i>High cost (greenfield)</i>	<i>Low cost (urban)</i>	<i>High cost (greenfield)</i>
Modelled consumer benefits of increased housing supply	\$2.6bn		\$7.2bn	
Modelled change in city size (households)	23,256		55,560	
<i>Externality scenario</i>	<i>Low cost (urban)</i>	<i>High cost (greenfield)</i>	<i>Low cost (urban)</i>	<i>High cost (greenfield)</i>
Estimated increase in negative externalities	-\$0.7bn	-\$2.4bn	-\$1.7bn	-\$5.6bn
Estimated increase in agglomeration economies	\$2.2bn	\$1.1bn	\$5.2bn	\$2.6bn
Net benefits	\$4.0bn	\$1.3bn	\$10.7bn	\$4.1bn

Distribution of costs and benefits

This analysis also provided us with a basis for understanding the distribution of costs and benefits between locations and between existing property owners and new entrants to the city. In particular, we observe that:

- Consumer surplus benefits from enabling more flexible housing supply will accrue primarily to new entrants to the housing market.
- There will be some transfers between current property owners and new entrants, and between landlords and renters, as a result of the fact that the price of existing housing

¹⁵ For example, if we re-estimate Model 1 with a starting city size of 60,000 households, average house prices of 450,000, and a 20% demand shock – somewhat similar to Hamilton or Tauranga – it gives us a consumer surplus estimate of \$65,000 per added dwelling. This is likely to be substantial to exceed the magnitude of additional externalities from development in those areas – noting that Auckland-specific evidence on some externalities cannot necessarily be applied directly to smaller cities that are less congested.

¹⁶ A full explanation for the derivation of these estimates is beyond the scope of this RIS; however, we provide a brief summary in the Appendix.

rises more slowly. (However, under these model parameters, existing property owners would not suffer an actual loss in value.)

- There is a significant difference in the composition of externalities in greenfield and urban areas: externalities in greenfield areas are more likely to relate to infrastructure costs that are not fully borne by users (and hence externalised widely across ratepayers and taxpayers), while externalities in urban areas are more likely to relate to localised “spillovers” to neighbouring properties. Agglomeration benefits, on the other hand, accrue to many firms and employees, as well as to central government as a result of taxes on increased labour income.

Step 2: Analysis of the degree to which each NPS-UDC option delivers these benefits

After quantifying the benefits associated with achieving the policy objectives via a NPS-UDC, we undertook a more detailed, qualitative assessment of the policy options. The key question here is the degree to which NPS-UDC options will create incentives or requirements for local governments to change existing behaviours, and the degree to which they may leave “residual” problems that may need to be addressed through other means.

Our key finding is that NPS-UDC options that include additional policies targeting high-growth and medium-growth urban areas are likely to be more effective and efficient. All options are technically feasible based on MfE’s review of current local authority practices.

Option 1 requires all local authorities to provide sufficient development capacity to meet demands for residential and business space (as well as considering other objectives). However, the effectiveness of this option is likely to be limited in urban areas facing challenges in accommodating growth for two reasons.

- First, this option does not include any specific requirements around evidence and monitoring to support decisions. This means that there is a risk that councils (and Government) will be unaware of the existence of problems that exist as a result of existing plans, policies, and rules. This may reduce their ability (or willingness) to respond to those problems.
- Second, this option provides little specific guidance how councils should seek to respond to evidence of problems. Consequently, it is likely to result in a high degree of variability between councils and the risk that some councils simply choose not to address problems.

Option 2 provides more specific policy guidance to local authorities with high-growth and medium-growth urban areas in response to documented problems related to inadequate information on urban development demand and capacity, unresponsive and inefficient planning policies and processes and lack of alignment between RMA and infrastructure planning and funding. The effectiveness and efficiency of this option is likely to be greater, for two reasons:

- First, it provides specific guidance on the evidence that councils must gather in order to support plan-making and implementation. These requirements address specific biases and gaps in current practices that may undermine planning processes, including (1) incomplete information on demand for housing and business space, (2) a lack of information on the degree to which development capacity enabled by plans will be taken up in practice, and (3) price signals.

- Second, it provides specific guidance on the policy options that councils must consider in the short, medium, and long term in response to evidence that development capacity is insufficient. This recognises that there are a range of potential responses, and that requiring one particular approach is not likely to be efficient in all contexts. However, it does not necessarily require councils to act in response to evidence, which again creates the risk that some councils will choose to leave problems unaddressed.

Option 3 provides additional specific policy guidance for local authorities with responsibility for high growth urban areas (Auckland, Hamilton, Tauranga, Christchurch, and Queenstown) to set development capacity targets for housing in their plans, and develop a future land release and intensification strategy¹⁷. This option is likely to be more effective and efficient than other NPS-UDC options for two reasons:

- First, requiring specific development capacity targets to be set and incorporated into Regional Policy Statements (RPS) and district plans creates an additional lever for achieving the desired outcomes in plan-making and plan implementation. While RPSs currently set objectives to be realised through other plans, policies, and rules, these are not typically stated in quantitative terms and hence it may be possible to avoid their implications for policy. The inclusion of quantitative targets will make it harder to leave RPS objectives un-met. The requirement for territorial authorities to set development capacity targets in their district plans as a proportion of the RPS targets reinforces this. Further, the RPS and district plan targets must be informed by the relevant housing and business assessments prepared by the local authorities, and not go through the consultation process in Schedule 1 of the RMA. This will help ensure that the targets are based on evidence.
- Second, requiring councils to provide a future land release and intensification strategy is likely to shift councils' focus from short-term outcomes to medium- and long-term outcomes and thereby reduce the bias towards current interests over future interests. The requirement that this strategy balance certainty regarding the provision of future urban development, with the need to be responsive to demand, builds in flexibility.

Targeting these policies to high-growth urban areas is likely to be efficient, as these areas are most likely to experience problems as a result of the combination of urban growth and existing plans, policies, and rules that restrict development capacity (and hence the competitiveness and responsiveness of urban development markets).

Risk that NPS-UDC will not address regulatory failures

Lastly, we note that all NPS-UDC options may result in some residual risk of problems remaining unaddressed in two areas.

First, as discussed in the problem definition, the potential for coordination failures between RMA planning and infrastructure planning and funding may remain partly un-addressed, due to the fact that these areas of policy are governed by separate legislation. To that end, the NPS-UDC options include objectives and policies that attempt to manage the risk of

¹⁷ The option also *encourages* medium growth urban areas (Wellington, Kapiti, Palmerston North, New Plymouth and Nelson) to set development capacity targets for housing in their plans, and develop future land release and intensification strategies.

coordination failures; however, we acknowledge that this risk cannot be fully avoided under current arrangements.

Second, the NPS-UDC requires high growth and medium growth local authorities to prepare a comprehensive housing and business assessment and to begin monitoring market indicators during 2017. This information would provide the basis for other requirements in the NPS-UDC, including more responsive planning decisions, the setting of minimum targets and the preparation of future development strategies. The tight timeframe for high growth urban areas to produce their first housing and business assessment (by 31 December 2017) could compromise the quality of this information. This risk can be somewhat mitigated by government providing guidance to local authorities on the quality of this housing and business assessment.

Finally, while NPS-UDC Options 2 and 3 direct councils to gather specific data that is relevant for understanding the impact of plans, policies, and rules, and to respond to this information through various planning processes, a national policy statement cannot specify actual decisions (e.g. “upzoning” a specific quantity of land for development). This does create a risk that councils will choose not to address documented problems. This is mitigated by the fact that there are a number of “points of intervention” at which NPS-UDC objectives and policies can drive change, including:

- The setting of minimum targets in plans, and the preparation of future land release and intensification strategies.
- Major plan reviews: When councils undertake periodic plan reviews, they will be required to give effect to NPS-UDC objectives and policies. If they choose not to, Environment Court appeals create an additional opportunity for review of plans against requirements.
- Other RMA processes: NPS-UDC objectives and policies, including for an improved evidence base, are likely to affect the outcome of resource consent applications and plan change processes by placing a greater weight on provision for urban development.
- Government involvement in the planning process. This includes a programme of guidance and other support for implementation, and Ministerial intervention powers under the RMA. These powers are to investigate and make recommendations about local authority performance, direct plan changes, and as a last resort appoint someone to carry out the local authority’s functions and duties. Government also has the option to legislate further changes to planning processes, e.g. to enable independent hearings on plan reviews along the lines of the Auckland Unitary Plan or Christchurch Replacement District Plan. NPS-UDC policies around evidence to support plan-making will provide additional information on when and where this may be necessary.

Consultation

As required under section 46A of the RMA, a two-step consultation process was used to develop the recommended NPS-UDC.

The first step comprised a targeted consultation between December 2015 and February 2016 on the case for national direction on urban development. Consultation letters were sent to all local authorities, iwi and some other groups seeking feedback on this. We also met with some of these groups. We received 47 written submissions, the majority of which supported

a national policy statement on urban development (with many seeking a broad scope for the content of this). A summary of these submissions was published on the MfE website.

The second step involved public consultation on a draft NPS-UDC for six weeks from June 3 2016. (We also met with a range of local authority officers and other groups during this period to help inform submissions). A total of 140 written submissions were received. The two most numerous groups of submitters were the local government sector (35% of total) and the development sector (15% of the total). Overall, three-quarters of submitters supported the intent of the NPS-UDC and the policies, but nearly all recommended amendments to how they were drafted. A summary of these submissions will be published on the MfE website.

The recommended NPS-UDC incorporates detailed amendments to the draft that address most of the points made in submissions. These submission points and the corresponding amendments and reasons are provided in the attached report: *Recommendations on amendments to the notified NPS-UDC*, prepared under Section 51 of the RMA. The main amendments are to:

- The definitions of ‘medium growth urban area’ and ‘high growth urban area’, to provide greater certainty about policies would apply to local authorities.
- Definitions and policies for ‘development capacity’, ‘development infrastructure’, ‘other infrastructure’ and ‘sufficient’. These are to provide greater clarity about expectations, and to prevent significant unnecessary costs for local authorities that are not expected to grow.
- The requirements to monitor price signals, to ensure that these would be achievable.
- Timeframes, again to ensure that these would be achievable.

The recommended amendments do not change the policy intent of the NPS-UDC but improve its effectiveness and efficiency. The cost/benefit analysis on these amendments undertaken under Section 32AA of the RMA (attached) concluded that they would have minor to moderate positive effect.

Conclusions and recommendations

In summary, our assessment of policy options finds that:

- There are significant social costs associated with maintaining the status quo approach to urban development, as a result of reduced supply of urban land and development markets and higher costs of land and housing from the existence of local authority plans, policies and rules that have higher costs than benefits.
- Addressing the problems associated with a lack of sufficient development capacity for housing and business space in cities experiencing population growth is likely to reduce these costs. National direction under the RMA would be a more efficient way of doing this than non-regulatory options or legislation (although such national direction cannot address all of the causes of the problem and other initiatives are also important). Consequently, we find that an NPS-UDC that requires more evidence-based, coordinated and responsive planning for urban development would deliver substantial net social benefits.

- Of the three NPS-UDC options considered, Option 3 is the recommended option. This option targets different policies to different urban areas according to their size and growth. It includes additional policies requiring local authorities with high growth urban areas to incorporate development capacity targets for housing in their resource management plans, and to develop a land release and intensification strategy. This option would be the most effective in achieving the Government's objective to ensure sufficient development capacity is provided in plans, because of the specificity and challenge of its policy requirements. It would minimise the risk of objectives not being met. It would also be the most efficient option, because it would target different policies to different areas according to their size and growth, therefore maximising benefits and minimising unnecessary costs.
- The amendments to the NPS-UDC, made following consultation on the draft, would have minor to moderate positive effects.
- The benefits of some of the NPS-UDC policies would depend on how local authorities interpret and implement them (and also the extent to which government supports implementation and/or is prepared to intervene to address non-compliance). A government programme of support for implementation would mitigate risks of benefits not being achieved.

Implementation plan

The NPS-UDC will be supported by a package of non-statutory guidance and other implementation actions. An effective implementation programme is critical to extract maximum value from the NPS-UDC, while also reducing compliance costs for local authorities. Without adequate implementation by local authorities there is significant risk that the NPS-UDC will not have the intended effect. The NPS-UDC requires many planners and decision-makers to adopt new skills and ways of thinking, including economic modelling and using price signals. To be successful it is important that the NPS-UDC is supported by a strong implementation programme.

The cost benefit analysis report on the changes to the NPS-UDC required under section 32AA of the RMA (attachment B) found that while the changes proposed to the notified NPS-UDC are likely to have a positive effect, there are several cases where there is some ambiguity or uncertainty about the direction of those effects. The report notes that this is most likely to arise in areas where there are uncertainties about how local authorities will receive and implement requirements and in the impacts on the operation of urban land and development markets.

To ensure that any uncertainties about implementing the policies in the NPS-UDC do not result in poor outcomes as highlighted as a possibility in the section 32AA report, a comprehensive implementation and guidance programme is needed. Experience implementing other national policy statements shows that written guidance by itself is not effective; it is best reinforced through monitoring and working with local authorities, which allows Government to influence analysis and decisions early, as well as skills development.

We recommend the following comprehensive cross-government approach to implementation, phased over 2017-2021:

- A launch of the NPS-UDC including written introductory guidance that explains the NPS-UDC provisions, and a roadshow and/or workshops with local authorities;

- Written guidance on the housing and business development capacity assessments, monitoring and responsive planning, during 2017. This could be co-created with key stakeholders (local authorities, the development sector, and infrastructure providers) through the use of technical advisory, and best practice groups;
- Workshops and training with all local authorities, with a focus on those in high and medium growth areas;
- Sharing best practice from the Auckland Unitary Plan hearings process and the response to the Housing Accords and Special Housing Areas Act 2013;
- Central government ensuring the necessary data that is centrally collected is readily available for local authorities, including a proposed Housing Affordability Measure and price efficiency indicators;
- Central government monitoring of how well local authorities are implementing the requirements of the NPS-UDC, including regular reports to the Minister for the Environment and Building and Housing. This could include identifying whether and how government might intervene, as well as more intensive monitoring in priority areas such as Auckland; and
- Central government review of the effectiveness of the NPS-UDC by 2021.

The total costs of effective implementation of the NPS-UDC is estimated to be in the order of \$4.4 million over the next six years. This will require resources over and above those already available of approximately \$2.3 million. We consider this to be a wise investment, given the potential net benefits of an NPS-UDC that would loosen regulations limiting development capacity. Table 2 shows the results of modelling the net benefits of achieving the NPS-UDC in Auckland alone as:

- between \$1.3bn and \$4.0bn (using a forward looking model of supply elasticity)
- between \$4.1bn and \$10.7bn (using a backward looking model of supply, prices and rationing between 2001-2013).

There are likely to be some synergies with other work programmes (such as the implementation of the Resource Legislation Amendment Bill, the Auckland Unitary Plan and the wider programme of national direction) which will be fully explored. Training and direct support will also be necessary to help ensure that local authorities can implement the full programme of national direction in the way intended. Over the next 2 – 4 years local authorities will have to implement more than ten new or amended pieces of national direction.

Monitoring, evaluation and review

MfE and MBIE propose to monitor the effectiveness of the NPS-UDC in achieving the Government's objectives and the objectives of the NPS-UDC, and report on this to the Minister for the Environment and Building and Housing twice during 2017 and annually thereafter.

It will be important to monitor the outcomes of the NPS-UDC rather than just the process. Key performance indicators (KPIs) of success could include:

1. *Decisions relating to urban development meet the NPS-UDC requirements under policies PA3 and PA4 (i.e. they provide for choice; promote efficient use of land and infrastructure; limit adverse effects on the competitive operation of land and development markets; take into account the needs of future generations; and take into account the benefits and costs of urban development at a national scale).* MfE and MBIE would focus their attention on significant decisions that are made by local authorities from the point that the NPS-UDC is made operative. This would include district plan reviews and plan changes, and decisions that could affect development capacity at scale, in medium or high growth urban areas.
2. *Councils are better informed when making decisions about urban development. This indicator would be informed by whether the requirements for the 'housing and business development capacity assessment' are covered, that price signals are monitored, and how this feeds into the quality of the end product (the assessment).* Monitoring must start by mid-2017. Local authorities with high growth urban areas must produce the first assessments by the end of 2017. MBIE and MfE will ideally work closely with these local authorities to develop the assessments and support the monitoring, and thus will have a good understanding of the quality of this work and be able to begin reporting on it by the end of 2017.
3. *Local authorities with high growth urban areas in their district or region coordinate together to agree minimum targets for development capacity.* This should be based on the evidence gathered from the assessment. Minimum targets must be set in RPS and district plans by the end of 2018. Local authorities' progress on working together can be reported before this.
4. *Sufficient feasible development capacity is provided in the short, medium and long term in the plans of local authorities that have part or all of a high or medium growth urban area in their district or region by 2021.* Sufficient development capacity would be assessed against the short, medium and long-term requirements in policies PA1 and PA2 of the NPS-UDC, and the minimum margins over and above demand in policy PC1. The housing and business development capacity assessment produced by each area would provide baseline information for assessing whether sufficient development capacity is being provided, and what changes are being made to achieve this. Local authorities with high growth urban areas will produce this information by the end of 2017 and medium growth urban areas by the end of 2018. MBIE and MfE would focus on key areas including Auckland or other high growth urban areas.
5. *Local authorities enable development through coordinated consenting processes.* MfE and MBIE would work with local authorities to share best practice and would report on this regularly from 2017 on.

It would be relatively easy to assess whether local authorities produce products required by the NPS-UDC on time (such as the housing and business assessments), and whether these cover what is required. The guidance will provide more detailed information about best practice against which to assess quality.

Other outcomes would be more difficult to assess, and will require considerable judgement. Throughout the monitoring and evaluation process officials would look for reasons for non-

compliance or ineffectiveness, and provide advice on the appropriate government intervention. These interventions could include:

- Options under the RMA available to the Minister for the Environment to:
 - investigate the performance of local authorities in giving effect to the NPS-UDC
 - provide recommendations to local authorities on improving their performance
 - direct plan changes
 - as a last resort, residual powers to appoint someone to carry out the local authority's functions and duties.
- provision of other government support for implementation (for example financing of infrastructure)
- another government initiative
- amendment of the NPS-UDC.

This monitoring and evaluation will feed into a full review of the NPS-UDC by December 2021 which will have a focus on evaluating its impact on planning decisions and outcomes.

In the longer term, monitoring of whether or not the Government's objectives are being met around housing and land availability may be collated through ongoing monitoring systems including the Ministry for the Environment's Environmental Monitoring System.

Appendix: Background to modelling

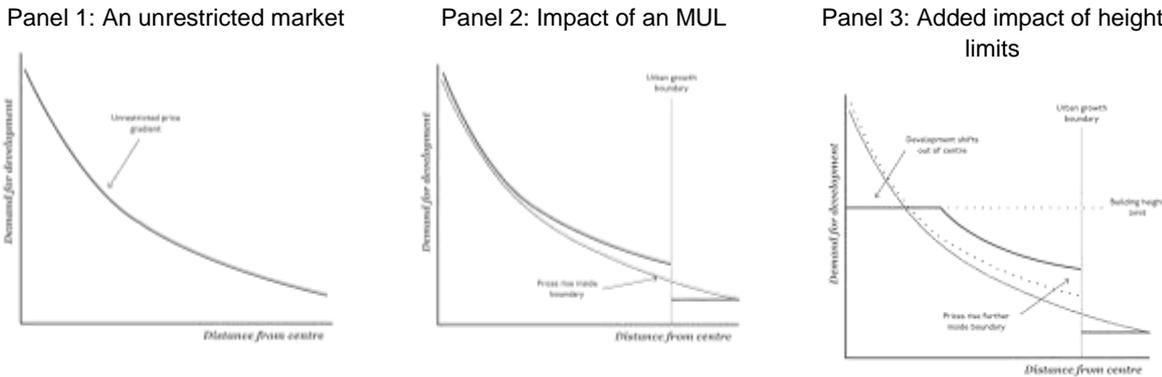
In this Appendix, we briefly describe the basis for our cost benefit analysis of existing planning regulations and of the impact of enabling more flexible / responsive urban development.

Analysing the impacts of Auckland’s MUL and building height limits

Planning rules that limit development, such as MULs, building height limits, and density controls, will alter development outcomes and raise housing costs. This reflects the fact that people will have to either pay more for housing or incur additional transport costs to live in an undesirable location.

Figure 1 illustrates the expected impacts of these rules on urban development. Relative to an unrestricted market (Panel 1), adding a binding MUL will tend to raise prices just inside the urban fringe, and lower them immediately outside (as shown in Panel 2). This reflects the fact that land just outside the MUL will not be able to be converted from agricultural use to higher-value urban use. However, restrictions on denser development within the city, such as building height limits, will also inflate the magnitude of the discontinuity, by shifting some development out of higher-value central areas and towards the fringe. (In this respect, urban development is a little like a waterbed or a game of whack-a-mole: if you push down growth in one area, it pops up in another.)

Figure 1: The causes of discontinuities in land prices at the MUL



These effects can be observed empirically; however, economic modelling is required to understand the potential effects of relaxing (or tightening) restrictions on wellbeing. NZIER (2014, 2015a) use the Alonso-Muth-Mills “monocentric city” model¹⁸ to estimate the impact of expanding Auckland’s MUL or relaxing building height limits on the overall housing and transport costs faced by city residents. We use their results in order to understand the benefits of relaxing regulations:

¹⁸ In the Alonso-Muth-Mills model all employment is assumed to take place in the city centre. Households then choose whether to live close to work in a smaller cheaper house or live further from town in a larger house that comes with a longer commuting time.

- NZIER (2014) model the impact of a 22% increase in the amount of land available within the MUL, finding that this would result in annual benefits of \$859 per household. When extrapolated over the approximately 470,000 households in Auckland (as of the 2013 Census) this equates to annual benefits of approximately \$403 million.
- NZIER (2015a) model the impact of a of a three-storey building height limit throughout the city, finding that relaxing this restriction would result in annual benefits of \$933 per household. When extrapolated over the approximately 470,000 households in Auckland (as of the 2013 Census) this equates to annual benefits of approximately \$438 million.

We then compare these benefits with the costs associated with relaxing these restrictions, in terms of additional (socialised)¹⁹ infrastructure costs and negative externalities. We estimate the magnitude of these costs based on NZIER's model outputs and a review of various urban externalities. We find that:

- Extending the MUL will increase demand for transport and other network infrastructure and reduce benefits associated with access to peri-urban open spaces. NZIER's modelling results suggest that expanding the MUL would result in an 8.2% increase in peak vehicle kilometres. Serving this increased demand would result in road infrastructure costs of approximately \$0.65/year/peak veh-km (Wallis and Lupton, 2013). Similarly, increasing the size of the city would incur disbenefits of approximately \$38,750-\$67,750 per hectare (based on the findings of a meta-analysis by Brander and Koetse, 2011).
- Raising building height limits will increase the potential for overshadowing, while reducing demand for transport and other network infrastructure (leading to cost savings). NZIER's modelling suggests that relaxing building height limits would result in taller buildings in the inner 10km area of Auckland. Based on a review of several data sources, we estimate that this will result in costs of \$3,900-\$11,500 per dwelling in these areas. However, against this, NZIER's modelling implies a 5.6% reduction in peak vehicle travel (and other infrastructure requirements), resulting in savings.

Analysing the impacts of enabling more flexible / responsive urban development

We consider that an NPS-UDC will, if successfully implemented, have two main effects:

The primary effect will be to enable urban development to happen more flexibly and at a lower cost. This will result in benefits to consumers of housing (or business space), who will be able to locate in New Zealand cities at a lower cost. We estimate the magnitude of these benefits using two economic models of housing demand and supply dynamics.

All else equal, enabling more flexible urban development will allow New Zealand cities to grow larger, and potentially with different spatial forms. This may result in additional positive and negative externalities associated with housing / business development and city size. We estimate the magnitude of these costs and benefits based on a comprehensive literature review, supplemented where needed with new analysis.

¹⁹ That is paid for by society, e.g. as rates, rather than by developers or property owners

The consumer benefits of enabling more responsive housing supply

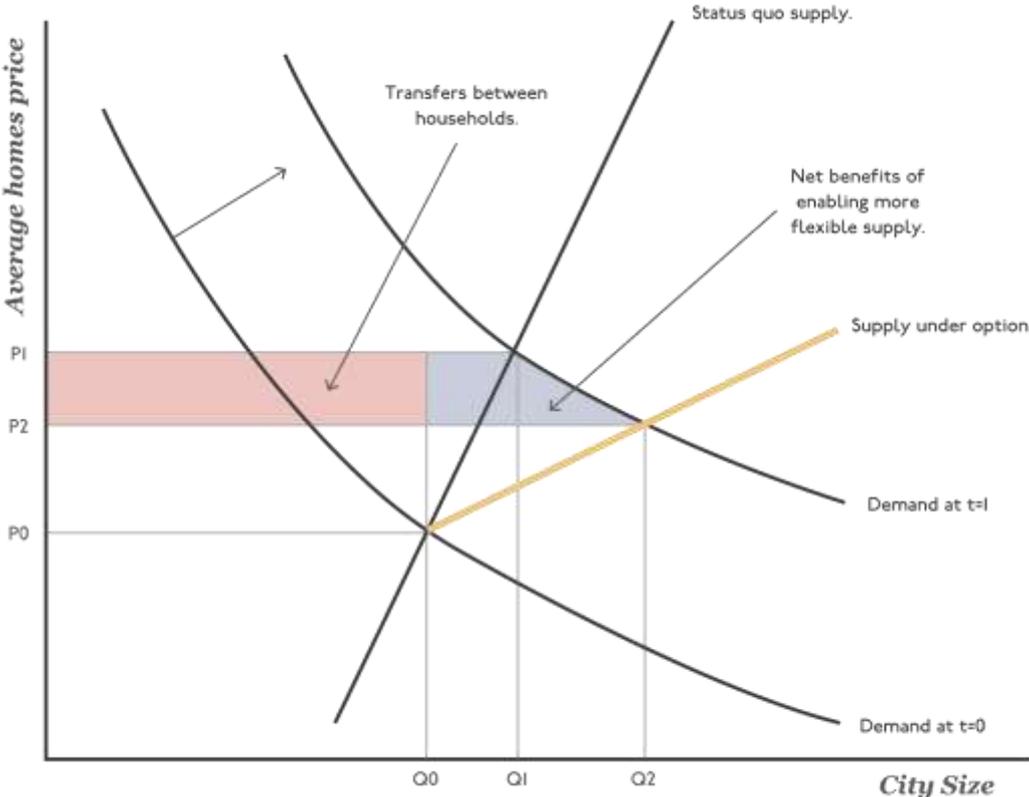
To analyse the benefits of enabling more responsive housing supply, it is necessary to define alternative scenarios for comparison and to clearly identify beneficiaries (or potential beneficiaries).

Following our analysis of the impact of existing plans, policies, and rules on New Zealand’s urban development markets, we consider that the main impact of policies that restrict development capacity is to reduce the elasticity of housing supply – that is, to reduce the degree to which new housing is constructed in response to rising prices. An alternative approach would be to assume a uniform increase in supply costs without changing the slope (elasticity) of the supply curve. However, the impacts of development restrictions (e.g. MUL, height limits) are likely to be felt increasingly as supply increases.

Figure 2 illustrates these dynamics in a simple supply and demand diagram. It includes the following elements:

- A demand curve that shifts outwards over time, showing the impact of population growth from natural increase or migration as well as income growth increasing demands for housing
- Two supply curves – the “status quo” curve is steeper than the “option” curve, indicating that housing will be constructed more slowly in response to rising demand.

Figure 2: Consumer surplus arising from more responsive housing supply



We can use this analysis to estimate net consumer benefits for entrants to the housing market (e.g. new entrants to the city, people forming new households, or people buying new rental properties to meet demand), excluding transfers between existing households and new entrants.

If we compare between the two supply scenarios, we observe that:

- Growth under the “status quo supply” scenario will result in some increase in city size (Q1) and significantly higher prices (P1) relative to time t=0. This primarily reflects the fact that some people will be unable to live in the city due to high prices (or will be forced to accept crowded living conditions).
- Growth under the “option” scenario will result in a larger city size (Q2) than at time t=0 and relative to Q1, and lower prices (P2) than for the same point in time under the status quo supply option.

We can use this analysis to identify the distribution of costs and benefits between parties.

The blue-shaded area between Q0 and Q2 represents an increase in consumer surplus that accrues to those who constitute the additional demand. This reflects the fact that there is an increase in dwellings due to construction of new supply. This area can be estimated as follows:

$$\text{Consumer surplus} = (P_1 - P_2) * \left[\frac{(Q_1 + Q_2)}{2} - Q_0 \right]$$

By contrast, the red-shaded area between zero and Q0 represents a transfer between households. This reflects the fact that the value of existing homes (Q0) will tend to appreciate less rapidly if more new homes are built in response to growth. This is described as a transfer, rather than a net benefit or net cost, because the benefits accruing to buyers of these houses (in terms of cheaper housing) are offset by the fact that existing owners can’t sell (or rent) their houses for as much. We have therefore excluded the red-shaded area from our calculations of consumer surplus to avoid over-stating the benefits of enabling a more responsive urban development market.

Modelling consumer benefits

We employ two microeconomic models of aggregate urban housing markets to estimate the potential consumer benefits of enabling urban development.

Our first model is a “comparative statics” model of housing supply dynamics under alternative scenarios for elasticity of housing supply. The key insight underpinning this model is that planning regulations can reduce the elasticity, or flexibility, of housing supply. Over time, this means that less housing will be built in response to rising demand, leading to higher prices, and ultimately a smaller city.

This model is a simple supply and demand analysis based on the linearised supply and demand curves described in Table 4. To calibrate the model to Auckland, we choose the parameters Q0=500,000 households; P0=\$750,000/dwelling; Pmax=\$2,500,000, g = 20% growth in demand (roughly equal to one decade’s worth of growth); E_{dm}=0.8; and E_{opt}=1.0. Alternative model calibrations could be used to estimate benefits for different cities.

Table 4: Linear supply and demand curves for modelling city growth under alternative elasticity of supply scenarios

Curve	Functional form
Demand at t=0	$Q_D = \frac{P_{max} * Q_o}{P_{max} - P_o} - \frac{Q_o}{P_{max} - P_o} * P$
Demand at t=1	$Q_D = \frac{P_{max} * Q_o}{P_{max} - P_o} * g - \frac{Q_o}{P_{max} - P_o} * P$
Supply under status quo regulation	$Q_{dm} = \left(E_{dm} * \frac{Q_o}{P_o} \right) * P + (Q_o - E_{dm} * Q_o)$
Supply with policy option	$Q_{opt} = \left(E_{opt} * \frac{Q_o}{P_o} \right) * P + (Q_o - E_{opt} * Q_o)$

Our second model is an econometric model estimating the quantity of new construction required to stabilise housing price growth in urban areas. This model was developed by the California Legislative Analyst’s Office (2015) for use in policy analysis in the Californian context.²⁰ The key insight underpinning this model is that, if housing supply is constrained, prices must rise until some households exit the market, which may mean moving to another location or crowding into existing dwellings.

The LAO estimated this model using panel data on housing prices and supply in large US counties (>850,000 people) from 1980-2010, controlling for exogenous supply and demand factors (geographic constraints, climate, unemployment). The model finds that a 10% increase in house prices in a county is associated with 8.3% slower growth in housing supply – evidence of price-driven rationing. Higher prices in neighbouring counties also tend to push up local demand for housing – evidence of “spatial spillovers” between adjacent housing markets.

Based on Census data and REINZ data on house prices, Auckland’s population grew by 22%, its housing stock increased by 19%, and real median house prices increased 78% over the 2001-2013 period. The LAO model allows us to “simulate” the impact of a lower rate of real house price inflation on housing demand in Auckland. For example, if Auckland house prices had appreciated half as rapidly over this period – i.e. if they had gone up 39% rather than 78% - then the resulting increase in housing purchases can be calculated as follows.

Equation 1: Estimated increase in housing demand associated with a lower rate of house price inflation

Increase in house purchase
 = (Reduction in real house price increase)
 * (Elasticity of housing demand w.r.t. real price) = (-0.39) * (-0.83)
 = +32%

This suggests that, to limit house price increases to half of the level experienced over the 2001-2013 period, Auckland would have had to have expanded its housing stock by 32% rather than 19%. This would in turn be associated with faster urban growth and lower rates of household crowding than actually occurred.

²⁰ The LAO recently undertook a review of urban planning issues that covered much of the same territory as the Productivity Commission’s recent inquiries.

Estimating the positive and negative externalities associated with urban development

Both models predict that enabling more flexible / responsive urban development will result in an increase in city size. Consequently, it is possible that it will also result in an increase in positive and negative externalities associated with urban development. This includes:

- Localised nuisances associated with development, such as building overshadowing and incompatible land uses
- Increased traffic congestion
- Environmental externalities
- Infrastructure costs that are not borne by users
- The benefits of increased agglomeration economies in production and consumption.

To estimate the magnitude of these externalities for Auckland, we review the existing New Zealand-specific evidence base and empirical literature from other jurisdictions. In some cases (e.g. with congestion and overshadowing externalities) it has been necessary to develop estimates, as none have been previously available. Our resulting estimates are summarised in Table 55 – a full derivation is available in a companion report. We report different estimates for development in different locations, e.g. within the existing urbanised area versus at greenfield sites.

Table 5: Estimated magnitude of externalities associated with housing development in urban and greenfield areas (externalities per dwelling)

Externalities	Urban intensification		Greenfield	
	Low	High	Low	High
External infrastructure costs				
• Transport	\$0	\$0	-\$6,787	-\$10,298
• Water / wastewater	-\$3,240	-\$12,740	-\$3,240	-\$21,432
• Stormwater	\$0	-\$1,626	\$0	-\$1,626
• Open spaces and community facilities	\$0	\$0	-\$2,086	-\$3,186
Congestion	-\$22,717	-\$29,682	-\$35,228	-\$48,975
Overshadowing from tall buildings ²¹	\$0	-\$9,832	\$0	\$0

²¹ We considered three scenarios for the cost of overshadowing from new development in urbanised areas:

- A (1) a low scenario in which the potential for overshadowing from tall buildings is controlled by height and setback controls, which results in an overshadowing cost of \$0 per added dwelling
- A; (2) a medium scenario in which areas are built out to mid-rise (4-8 storey) density, resulting in an increase in household energy costs from overshadowing that is equal to \$3,9004,230 per apartment

A (in present value terms); and (3) a high scenario in which tall (4-8 storey) apartment buildings block sun from neighbouring standalone houses, resulting in an overshadowing externality of approximately \$11,5009,832 per apartment.

Externalities	Urban intensification		Greenfield	
Blocked views from tall buildings ²²	\$0	-\$10,219	\$0	\$0
Loss of peri-urban open space	\$0	\$0	-\$2,664	-\$4,657
Air quality	-\$3,814	-\$4,217	-\$3,204	-\$3,814
Freshwater quality ²³	\$0	-\$2,229	-\$1,783	-\$3,566
Coastal water quality ²⁴	\$0	-\$779	-\$1,914	-\$3,829
Noise, smells, and nuisances from incompatible activities	(Unknown)	(Unknown)	(Unknown)	(Unknown)
Agglomeration economies in production	\$92,895	\$46,419	\$92,895	\$46,419
Agglomeration economies in consumption	(Unknown)	(Unknown)	(Unknown)	(Unknown)
Total	\$63,124	-\$24,904	\$35,990	-\$54,964
<i>Total excluding agglomeration economies</i>	<i>-\$29,771</i>	<i>-\$71,323</i>	<i>-\$56,905</i>	<i>-\$101,383</i>

²² The empirical literature suggests that, in Auckland, water views are highly valued while views of land are less valuable. As a relatively small share of Auckland properties (~13% of houses sold between 2011 and 2014) have water views, view-related externalities are not likely to be common. However, in some particular cases they may be larger than the upper bound of the range reported here.

²³ These effects are likely to be addressed under the NPS on Freshwater Quality; consequently, these figures are likely to be pessimistic.

²⁴ These effects are likely to be addressed under the NZ Coastal Policy Statement; consequently, these figures are likely to be pessimistic.