A review for the Productivity Commission of its report on Using land for housing

Rob Laking Wellington December 2015

Introduction

The Productivity Commission asked me to review its report on land for housing¹. The terms of reference for the Commission's inquiry are attached as Annex A. My terms of reference are attached as Annex B.

I have organised this review as follows. First, there is a summary assessment against each of the seven criteria in my terms of reference (TOR). Second, I provide a brief evaluation of each Chapter in the report. Third, I comment on some of the underlying analysis in the main report which is critical to the Commission's argument. Finally, I comment specifically on some issues where further work would be helpful.

Summary assessment

Focus

"The relevance and materiality of the inquiry report"

The Report fully and directly addresses the questions posed by the Terms of Reference for the inquiry. Each of the topics in the TOR is covered at length, particularly on the key questions of regulation of urban land and provision of infrastructure. Some matters which were outside the TOR (such as reform of the relevant national legislation) require further discussion. The Commission has a further remit on urban planning in which these issues, including particularly the content and administration of the relevant national laws and the mode of engagement between central and local government on urban planning could usefully be discussed further. In addition, some topics such as modelling urban development for planning purposes and how and when local government intervenes to ensure an adequate supply of serviced land for development, may need further work by central and local government to give the Commission's recommendations operational content.

Process management

"The timeliness and quality of the inquiry process"

The process achieved all its main milestones and used its time well to gather evidence and develop its argument and findings. The Commission received many submissions on its issues paper draft report and also had a full programme of engagement meetings and a study tour to Australia. The final report was delivered to the government by the deadline of the end of September 2015, although public release was delayed for three weeks to suit the government's timetable.

Quality of work

"The quality of the analysis and recommendations"

This is a very complex report in which the argument must draw on several disciplines, including urban economics, spatial planning, environmental law, public administration and the political economy of local government. The Commission team has done a good job wrestling with these complexities. It has drawn well on international and New Zealand evidence and the views of stakeholders. The New Zealand evidence backing the reasoning in the report is not always readily available and the findings may therefore

¹ New Zealand Productivity Commission 2015. NB: page references to the Commission report are quoted as x (y) where x = serial page number in the PDF version on the Commission website and y = the printed page number.

sometimes be contestable but the report generally tailors its findings and recommendations to the strength of the supporting evidence. The chain of reasoning from evidence through analysis to findings is generally clear. The recommendations are mostly the logical consequence of the findings. The solutions proposed are relevant to the problems identified by the findings and the objectives of the inquiry; and are generally within the feasible range of options for decision-makers. In common with previous reports, the recommendations are a mixture of specific proposals for action and suggestions for further consideration at central or local levels but it is generally clear who should pick them up for further action. Some will require further work to be given operational content. But overall, the report has a clear line of argument, draws well on available international and New Zealand evidence to support it, and makes useful and relevant recommendations.

Engagement

"How well the Commission engaged with interested parties"

The Commission surveys stakeholders directly on the quality of its engagement, which will give a more definite answer than I can. The three key stakeholders I spoke to were strongly positive about their engagement with Commissioners and inquiry staff and a fourth indicated similar support for the report process and findings by email. Based on the documentary evidence of stakeholder participation, the Commission's engagement has been indisputably thorough. The Commission's issues paper (61 published submissions) and draft report (74 published submissions) both attracted a large number of submissions, including from a wide spread of local bodies. Local Government New Zealand (LGNZ), the Society of Local Government Managers (SOLGM) and 26 local governments (including all ten of the "high-growth" Councils selected by the Commission for specific attention) or Regional Authorities made submissions on the issues paper or draft report or met with the Commission. Fifteen central government organisations and a large number of other local and national organisations and individuals also provided input through submissions or by meeting with the Commission. There are numerous and substantive references (numbering in the hundreds) to the evidence it obtained from submissions and meetings. The material cited is generally highly relevant to the matters in the Commission's terms of reference.

Delivery of messages

"How well the work is communicated and presented"

The Commission has taken great pains to ensure that the messages from the report come through clearly. The main report is 400 pages including front and back matter but is clearly structured with many graphics and a helpful executive summary. In keeping with its usual practice, the Commission has supported this report with shorter summaries including its traditional "Cut to the Chase" – a four-pager which neatly summarises the main arguments from the report.

Quality

"The overall quality of the inquiry taking into account all factors"

Overall the Commission has done a good job in marshalling the evidence and argument for substantial change to the way that urban land use is planned and managed and has made many useful recommendations. A lot of the policy ideas require further work from central and local government but in that respect this report should be seen as a significant contribution along the way to a better future for our cities and their contribution to national productivity, requiring ongoing debate and dialogue by all New Zealanders.

Impacts

"What happens as the result of the Commission's work"

The recommendations of the report are directed about equally to central and local government. At central government level the Commission's findings reinforce the government's intentions to secure a greater supply of land for housing by greater influence on local government planning and should therefore find a ready audience. The Treasury is organising a coordinated response and advice to Ministers from the relevant central departments and agencies and is expecting to give preliminary advice shortly. The response from local government so far seems more diffuse but in Auckland (the most important target for the inquiry) the Council is actively considering the Commission's recommendations.

Chapter by Chapter Evaluation

Chapter 1 ("About this inquiry") puts the review in context and identifies the nature of the problem of land price escalation. It includes the arresting statement based on a report from the McKinsey Global Institute that "... in the world's least affordable cities (including Auckland), unlocking land supply could reduce the cost of housing by between 31% and 47%"². Factors in the supply of development capacity are identified in a helpful figure. The stage is set by a graph of the changes in median land prices over the last two decades in the ten "high growth" territorial local authorities selected by the Commission as a base for evidence collection. Escalation seems to have slowed or reversed in all of them since about 2010. Some analysis of why would help. Accepting that the study is of supply-side factors, recognition of the overlay of a shorter demand-side property cycle, and the need to disentangle these effects from the longer-term supply-side effects would be helpful.

Chapter 2 ("The planning and development system") provides the necessary background to understand the institutional variables in housing land supply: particularly the role of the planning and regulatory system in restricting supply, the role of central and local government in infrastructure development and the influence of local government autonomy and accountability on balance of local and national interests. It establishes the principle that "The [Resource Management Act] creates a hierarchy of plans and standards ... flowing down to District Plans at the bottom" but that with the exception of urban transport "the role played by central government in urban policy, regulation and the provision of infrastructure in New Zealand is minimal compared with other jurisdictions."³ This is of significance for the later discussion of a better alignment between local and national interests in reducing barriers to supply of land for housing, which is at the heart of many of the Commission's findings and recommendations. There is a very helpful discussion of the historical context for central/local government relations in urban planning and particularly that "The constitutional and institutional arrangements in New Zealand strengthen the role of local government in the planning and development system relative to other countries. As a result, any misalignment of incentives between local and national interests may be more pronounced in New Zealand than elsewhere."4

² Credited to Woetzel et al. 2014. See Exhibit 15 on p 47.

³ New Zealand Productivity Commission 2015 p 43 (31).

⁴ New Zealand Productivity Commission 2015 Finding 2.7 p 50 (38)

Chapter 3 ("Cities, growth, and land for housing") is the main evidence chapter and sets the analytical framework for the entire rest of the report. It draws extensively on international and available New Zealand evidence in support of its key propositions, particularly relating to the net benefits from urban agglomeration, the effect of planning and infrastructure restrictions on elasticity of supply of land, the factors in local politics that tend to sustain these supply-side effects, and the lack of responsiveness of the planning system to market signals. The argument is clearly made and the analysis in the rest of the report flows logically from it. I have made some comments later on in this report on the detail of the analysis and the quality of the evidence (which, particularly for New Zealand, could be stronger if there was a better database to draw on) but overall it is certainly well-constructed and supported by reference to scholarly literature, statistical information and evidence and opinions from New Zealand stakeholders.

Chapter 4 ("Incentives on landowners and ratepayers ") in its title perhaps promises a more general treatment of incentives than it delivers, because it focuses mainly on the fiscal incentives. The essential argument is that the fiscal rules shift the incentives on these groups towards continuing restriction on supply of developed land. (The loop back to decision-making on the rules is via the relative influence of incumbent property owners on electoral outcomes and therefore elected officials' incentives). A discussion on the theoretical advantages of a land value tax over a capital value tax is finally rather inconclusive, particularly given that landowners can shift the incidence onto renters and purchasers, but also for the pragmatic reason that most Councils have shifted from land value to capital value as a base and are unlikely to want to shift back. But the Chapter is useful for addressing the problem of speculative holding of undeveloped land and also makes some useful recommendations, including that the "Government should investigate removing the rating exemption on land owned by the Crown"⁵.

The discussion in **Chapter 5 ("Regulatory barriers to the growth of cities**") follows from the premise in Chapter 3 that stringency of local regulation is a major factor in the inelasticity of supply of land for housing. The evidence for that is strongly indicative rather than conclusive but includes the results of a study by the New Zealand Institute of Economic Research (NZIER) on the relationship between intensity of regulation and land values and a more compelling study of land values inside and outside the Auckland urban fence. Accepting the premise, the discussion in this Chapter is well focused on its consequences. It is a strong argument for the injection of considerations of cost into regulation of land governing urban limits, height and density provisions, building standards, covenants and other factors. I comment later on in this report on the issues. Here it is interesting to note the Commission's argument for explicit cost benefit analysis of regulation as an element of rationality in the local political discourse. I also noted a revealing comment in response from the Bay of Plenty District Council that:

While, on one level, we accept that ...the absence of demonstrable benefit is certainly a good reason to reconsider the (costly) requirement ... planners, Councils, communities themselves are enmeshed in complex local dynamics and must consider a range of other considerations too.⁶

Chapter 6 ("Rezoning and approvals processes") is mainly a practical examination of spatial planning processes and their administration by Councils: to what extent do Council processes, including plan notification, consultation, promulgation and appeals, restrict the supply of land by lengthening the time from plan to investment? The

⁵ New Zealand Productivity Commission 2015 p 103 (91).

⁶ (Bay of Plenty Regional Council, sub. DR89 to the Inquiry, p. 5 (quoted in New Zealand Productivity Commission 2015 p 136 (124)).

Commission argues that, on average, plan changes do not take as long as often supposed and that broadly speaking there is a case for improving procedures for notification and early engagement with affected parties but not for significantly reducing rights of submission and appeal. There are some practical suggestions for improving the legibility of Council administration. A subsidiary but perhaps more significant suggestion is narrowing the scope of zones subject to the full range of these due process provisions in favour of "design [of] broad zones that enable a wide range of activities to occur. Broader zones are less likely to require rezoning (and hence appeals)"⁷.

Chapter 7 ("Policies targeting lower-cost housing") has to be seen against the background that there seem to be strong factors in New Zealand urban markets skewing development towards larger and more expensive houses. The Commission's principal explanation for this on the supply side has been the rising cost of land and the (implicit) target of developers for a ratio of capital to land value to improve the return on land. There is a discussion of "inclusionary housing policies" in other jurisdictions – where governments try to provide incentives, or regulate for, a proportion of lower-cost housing in private sector developments. The Commission provides a generally downbeat assessment of the success of these policies in New Zealand. Only two high-growth cities have inclusionary housing policies and the Housing Accords and Special Housing Areas Act 2013 (HASHA) so far has not got much traction. Internationally, "Inclusionary housing policies tend to have a limited impact on the overall supply of lower-priced dwellings."8 and "Council polices on inclusionary housing are likely to struggle without a range of other supporting polices, most of which require support from central government (such as land and funding)."9 The report does not venture far into subsidised low-cost housing, relying on use of public land in partnership with private landowners and local authorities and a general attack on supply-side restrictions on developable land.

Chapters 8, 9 and 10 are an extended treatment of investment in, funding and governance of infrastructure. I comment later in the report on the arguments in **Chapter 8 ("Planning and delivering infrastructure")**. Accepting that there are difficulties in generalising about the economics of infrastructure – particularly the main drivers of infrastructure costs – the discussion of this topic is rather general. It is nevertheless central to any discussion of the future configuration of New Zealand's cities, particularly as regards extensive vs intensive development, where there seem to be arguments both ways as to which is more efficient in relation to cost and utilisation of services and transport. Hopefully the Commission's recommendations on a better database of infrastructure might lead to more sophisticated modelling of infrastructure costs in alternative scenarios for the urban environment.

Chapter 8 also usefully begins a discussion on "increasing the responsiveness of infrastructure supply" particularly through development agreements which "enable developers to take responsibility for building trunk infrastructure" which "has the potential to generate a swifter supply of infrastructure and to encourage innovative approaches to infrastructure construction".¹⁰ There are some issues raised which need further discussion somewhere: do developers finance construction themselves or would the Council fund the development? How to ensure standards of infrastructure supplied by developers? Are there free rider issues, where a developer finances infrastructure that has benefits for other developments? What if some landholders only develop land later

⁷ New Zealand Productivity Commission 2015, p 151 (139).

⁸ New Zealand Productivity Commission 2015 p167 (155).

⁹ New Zealand Productivity Commission 2015 Finding F7.2, p 168 (156).

¹⁰ New Zealand Productivity Commission 2015 Finding F8.5, p 185 (173).

on but benefit from the original infrastructure investment? A public good approach would probably argue for Council financing and recoupment.

Chapter 9 ("Paying for infrastructure") continues a discussion of how to shift the cost of new infrastructure onto those who benefit directly from it, as a response to the problem of Council and ratepayer caution over commitments to new infrastructure investment. It discusses the fiscal issues around direct investment by Councils, arguing that targeted rates and development contributions more closely matched to actual use (or as a share of the increment in land value attributable to the benefit from infrastructure) could ensure that new infrastructure is paid for by those who benefit from it. If recovery of capital cost is spread over time, Councils' cost of financing would increase, but the Commission argues that Councils could safely meet higher debt servicing ratios than they are presently allowed. The discussion then considers new forms of governance such as Municipal Utility Districts, common in the United States, where a developer is empowered to levy residents to meet the costs of common services – although the report is sceptical about the efficiency of "a proliferation of small, resident-managed infrastructure districts". But the main value of this Chapter is to raise for discussion a number of possibilities for future infrastructure funding.

Chapter 10 ("Governance of transport and water infrastructure") offers some comments on transport, not about governance so much as realigning New Zealand Transport Agency priorities to give greater weight to projects that would service land developed for housing. But the Chapter is mostly about "the three waters" (water supply, wastewater and stormwater) and, based on evidence on scale economies in water services, leading to a finding on amalgamating water supply authorities. The case for amalgamation is not particularly compelling, based on this discussion. It isn't clear where economies of scale are possible in New Zealand at least in terms of numbers of connections. There appears also to be no clear evidence on other benefits (including unified management and technical diffusion). Evidence on economies of scope and vertical integration appears mixed. But the main argument in the Chapter is not about organisational form so much as revisiting the ongoing (and often heated) political debate about pricing and competition in (or for) supply of water services. The chain of reasoning from increasing supply elasticities for land is rather longer here: basically the argument I assume is the argument made earlier that (1) the prior constraint represented by the existing arrangements for water services is the resistance of incumbents to the tax burden of further investment in new infrastructure; and that (2) signalling (to both incumbents and developers) that henceforth the long run marginal cost will be borne fully by additional connectors will relax this constraint - coupled with measures for increased efficiency such as increased competition for supply as a major factor and "benchmarking" of provision by incumbent suppliers.

Chapter 11 ("Reform of the planning framework") deals with ways of harmonising and streamlining the processes of the three main Acts (within the limitation of the Commission's mandate which did not include fundamental review of the law) but also the more general question of how to strengthen the "national interest" in the legislative framework. On the latter question the Chapter suggests in rather muted language that central government ought to be able to put more pressure on local government to provide land for housing. E.g. in a section called "Working with cities to ensure they can accommodate enough growth": "There would be benefit in central government being involved upfront in ensuring city plans are sufficiently robust to meet the demand for land for housing." The report is not precise as to how this would occur (I have commented further on this later on) but given that a lot of local government planning depends on government infrastructure decisions (particularly on transport) there is an incentive for early collaboration. **Chapter 12 ("Meeting demand for urban space")** rounds off the overall discussion in the report. I have commented in the next section on two main clusters of recommendations here: one set springs from the findings on the role of urban development authorities and the other set from the earlier discussion of the role of price changes in signalling disequilibria between demand and supply. Both seem to me to need further investigation. In the case of urban development authorities, they potentially pose a significant contingent risk to Councils and their governance needs to be clarified. In the case of a firm commitment to price triggers for land release, there are few if any precedents internationally and further study is required.

Comments on the analysis and recommendations

Introductory remarks

In what follows, two things should be kept in mind:

- (1) This report follows one on affordable housing, and further develops some issues raised there. It also precedes the Commission's current inquiry into urban planning in which the Commission may well intend to address some of the issues raised here, particularly relating to the relationship between national resource legislation and the role of central government on the one hand, and local urban planning and regulation on the other.
- (2) The fact that I have commented below on some issues with the analysis and recommendations does not imply that they were not part of the Commission's thinking nor that they have not been addressed in the report, simply that I wished to draw attention to them as significant matters on which I believe further work could be useful. One cannot fail to be impressed by how comprehensive a report this is, and I could not find any questions that it raised in my mind which had not been covered at least in passing somewhere in its 400 or so pages.

Basic line of argument

The Commission's line of argument supporting its recommendations is developed mainly in Chapter 3 of the report: "Cities, Growth and Land for Housing". The main points are:

- New Zealand cities are major contributors to national productivity through agglomeration effects, principally in services. There are costs as well as benefits in urban growth but from a national point of view New Zealand cities can grow further before the marginal costs of their growth exceed the marginal benefits.
- Relatively inelastic supply of land for housing is a significant constraint on the ability of cities to grow towards their optimum size. Significant factors in restricted supply are local regulation of land development and limits on budgets for required infrastructure such as transport and water services.
- Restricted land supply also alters developers' behaviour: expected future price rises increase the relative expected return to holding undeveloped land; higher land values encourage building higher-value houses. Development is skewed away from lower-cost "affordable" houses.
- National and local interests in further urban development may diverge; as may those of local property owners and other residents.
- Landowners resist relaxation of constraints on land development because, while further urban growth may be in the national interest, they may see their property values reduced and lose amenity. Existing ratepayers resist further investment in infrastructure because some of the increased burden of rates to finance it will be spread onto them without a matching benefit.

- Local councils are disproportionately responsive to incumbent landowner interests because of their relatively high turnout in local body elections.
- The supply of land for housing can be made more responsive to demand by reducing regulatory constraints; increasing investment in infrastructure to service new housing; increasing the incentives on landowners to develop their properties; and by Councils taking a larger direct role in land development.
- Council revenues for investment in infrastructure can be increased and ratepayer resistance to additional investment reduced by ensuring that developers bear the full incremental cost of the investment.
- Local government planning of land use for further housing needs to be made more responsive to rises in land prices as a consequence of inelastic supply.
- A better alignment of national and local interests in local government spatial planning requires a stronger role for central government in land use planning and regulation.

National and local interests in development

The national interest in urban development

The case made in the report for the role of New Zealand cities in national productivity rests on the growing relative importance of services in New Zealand's economy and the relatively large contribution of cities to services productivity. This is explained in the report as a function of agglomeration benefits: that high-productivity specialised services seem to benefit from clustering. The Commission's reasoning is that New Zealand's growing urban centres have above-average labour productivity in most services which is due in part to these agglomeration effects.

On the other side of the equation, both the costs and benefits of urban living will change with increasing size and density. Some aspects of amenity – peace and quiet at home and the relative ease of getting about – may diminish with size, while others – a wider range of social and cultural opportunities, for example – may increase.

It is difficult to see where New Zealand cities are on the curve of net benefits from agglomeration. The Commission is careful to point out that there is no simple relationship between urban size, density and net benefits but it is implied that, because our cities are quite small by developed country standards¹¹, they must still be on the upslope of benefits from agglomeration and also, that because there is continued demand to live in larger urban areas, there must be net benefits from doing so. The argument is fairly general and does not imply anything about the optimum configuration of cities: whether for example it is a single centre and periphery or multi-nodal.

The Commission's argument is based more on future development than recent history. Although services labour productivity in major urban centres is relatively better than in New Zealand as a whole, in absolute terms our cities do not have high rates of productivity growth.

Divergence between national and local interests

The report recognises that there is a divergence between local costs and benefits of urban living and national costs and benefits, arising from externalities (which are assumed to be net benefits rather than costs) generated by urban production. Similarly, within urban areas, further urban development redistributes benefits and costs,

¹¹ But not that small. Based on a widely available database of urban areas (Demographia 2015), Auckland has the highest density of New Zealand cities and is in fact somewhere above the mean size of developed country cities in the database. This comparison may have limited value however given the widely differing characteristics of the cities in the database.

particularly between incumbent property owners and other residents. This divergence creates a problem of public policy: there would be both efficiency and distributional effects from a move to less restrictive land use regulation (plus more infrastructure investment). These might be a loss of wealth and amenity for incumbents, and a gain in income and wealth for third parties (some accruing to incumbents) and new land users.

In the case of further development of land for housing, does "national interest" in improving all New Zealanders' standards of living trump the interests of existing urban dwellers (particularly incumbent landowners)? It is an important basic question in the report and the Commission "comes down squarely" in favour of the national interest¹².

Protecting this interest falls equally squarely on the government. There is nothing new in this: central government has always played a large hand in setting the rules of the game for local government's functions. The recommendations in this report would shift the balance towards further central government rule-setting and direct intervention. The current Resource Legislation Amendment Bill reflects this by seeking to remove "unnecessary restrictions on land use for residential development" and to "enable better provision of residential and business development capacity, and therefore improved housing affordability outcomes"¹³. At the level of implementation, this shift will require central government to consider how it engages with local government in future spatial planning.

As a final thought, we often refer to local resistance to development disparagingly as "nimbyism" but seen from a local perspective it not only reflects a desire of local citizens to protect their quality of life but also a longstanding principle that the shape of our cities will be determined by local democracy. If the machinery of local democracy is unfairly weighting narrower sectional or parochial interests against the wider interests of all the city's residents, then perhaps the answer lies in changing the form of local representative government.

Elasticity of supply of land for housing

The report identifies ten "high growth" urban areas for specific attention. Median land prices have risen significantly in all these areas over the last two decades, albeit at widely different rates and with a flattening out or even decline in some areas in the last five years. Land values have also increased as a percentage of total property values in most of these cities.

A large number of the recommendations in the report depend on the assumption that inelastic supply of land is the main reason for escalating land prices. There is a focus in the report on making the case that the *main* effects on land supply elasticities are a result of the combined effect of excessive public regulation and insufficient public investment in infrastructure.

Effects of land regulation

The report argues that the supply of land for housing is restricted by rules on how land may be developed for housing (particularly restrictions on density and plot size) and where it may be developed (confining housing development to particular zones within the urban region).

The case for excessive regulation is supported by reference to overseas research. Several United States studies are cited in the report confirming this result and there

¹² New Zealand Productivity Commission 2015, p 137 (125).

¹³ Resource Legislation Amendment Bill 2015, General Policy Statement.

seems to be a consensus that relative regulatory restriction and higher land prices are correlated. In addition, a study of OECD countries finds indicative evidence of a similar correlation¹⁴. In New Zealand, a survey for the Commission of regulatory restriction in housing in nine of the Commission's ten "high growth" Councils¹⁵ produced a measure which varied widely across the nine Councils and was only loosely correlated with land prices. A more telling piece of research perhaps is the sharp drop in land values across the Auckland urban boundary¹⁶ although this discontinuity presumably reflects the general and complex effect of planning restrictions inside the fence as well as the limit it sets to extensive land development. (A similar exercise on land prices across urban boundaries in other major urban centres would be useful.)

While it is clear that planning restrictions play a large part in setting land prices, it is worth noting that in a more general model, "[h]ouse prices represent the interaction of supply conditions and the individuals' desires to live and work in certain locales. Factors such as income heterogeneity across space, amenities and land use restrictions will therefore drive housing prices. This approach is quite different from the macroeconomic perspective, which emphasizes national income and interest rates."¹⁷ Other writing emphasizes the impact of population growth and urban migration on urban land values.

Furthermore, shorter-term price movements due mainly to the macroeconomic effects mentioned above will be overlaid on these longer-term factors. Models of supply (stock-flow) will have a longer periodicity than the property investment cycle because of lagged effects on investment decisions. There has in fact been a distinct flattening out in land values in many of the Commission's "high growth" ten cities since 2010 (Auckland is an exception as are Selwyn and Waimakariri but these latter two are no doubt driven by the regional impact of the earthquakes recovery investment)¹⁸. Overall this deceleration is probably mainly due to a shorter-term property price cycle driven by financial conditions.

In summary, while there is very little doubt that regulatory restrictions play their part in supply inelasticity, the interplay between these factors and others is complex and the impact on land prices from reducing them is difficult to predict. The case for reducing restrictions may be simply that it is (as one official put it) "a step in the right direction" but the magnitude of the likely supply response is not clear.

Insufficient infrastructure investment

A further factor restricting the supply of developable land for housing cited in the report is an inadequate supply of new investment in infrastructure, principally for the three waters and local transport. The argument is that developing and maintaining infrastructure is a significant part of the costs of land development and of Council budgets and therefore:

Councils tightly control the supply of trunk infrastructure to support urban growth. This is a prudent approach from the perspective of managing costs and risks. However, if the supply of infrastructure is too conservative, it can constrain the supply of land for housing. In turn, this can contribute to higher land prices

¹⁴ Caldera and Johansson 2013

¹⁵ New Zealand Institute of Economic Research 2015. Auckland Council declined to participate on the grounds of the complexity of the survey and short deadlines for response.

¹⁶ In Zheng 2013.

¹⁷ Glaeser and Gottlieb 2009 (Cited by the Commission). See also Saiz 2010, also cited in the report, who concludes that "housing supply elasticities can be well characterized as functions of both physical and regulatory constraints." (p 1254)

¹⁸ See for example New Zealand Productivity Commission 2015: graph of median house prices in Chapter 3 p 61 (49).

by reinforcing expectations among investors of a scarce supply of serviced land for housing.¹⁹

Beyond the fact that capital and operating costs of infrastructure are a large part of Council budgets, it is difficult to generalise about how infrastructure affects spatial planning, since costs within cities depend to a large degree on topography and the sunk costs of existing investment in buildings and services. The Commission says it has no preference as to whether cities grow "out" or "up". But the relative costs and benefits of the two options are critical for the future shape of New Zealand cities. The Auckland Unitary Plan for example assumes that 70% of future dwellings will be inside the existing urban fence. The validity of this assumption depends a lot on the relative efficiency of extensive and intensive development of supporting services. This issue is discussed in Chapter 8 but there is limited detailed evidence on existing capacity in New Zealand cities and accordingly the Commission's statements are rather general: that the costs of intensification depend a lot on the capacity of existing infrastructure and the additional cost of "retro-fitting" but that "Councils can unlock land supply by enabling growth in areas where spare capacity is available within existing infrastructure networks."²⁰

The evidence on infrastructure costs per head as densities rise is not completely clear. There is a broad international consensus that compact cities have lower per capita infrastructure costs. New Zealand evidence is harder to come by but the report cites a study which concludes that, at least for Auckland, costs per dwelling seem to be lower for higher density developments; although there is wide variance in costs for developments of similar densities. Further investigation of the role of infrastructure in development depends on detailed modelling of urban development. A necessary basis this work, as the report emphasizes, is an accurate database of existing infrastructure assets, their capacities and lifetime cycles.

Are there other factors at play?

There is some evidence that planning restrictions or insufficient infrastructure investment are not always the binding constraints on additional housing investment. In Auckland, a model of future Auckland development distinguishes between "plan-capable" (the theoretical maximum densities allowable under proposed planning rules) and "developable" investments (an estimate of what is "economically viable" - would provide private developers a sufficient margin for profitable investment taking into account all costs)²¹. The model "is relatively quickly able to model the impact of potential changes in zoning rules, overlays, zoning locations etc on not only plan-enabled capacity, but now also development feasible capacity."²² Over the whole of the Auckland urban area the ratio of "plan enabled" to "development feasible" dwellings is about 9:1. This is quite a startling gap. There seem to be similar shortfalls in other jurisdictions: other cases cited by the Commission include modelling work in the New South Wales region of Illawarra²³ and evidence from the Tauranga Special Housing Area.

Given the basic assumption of the Auckland study, the planning rules are not the binding constraint. (The contribution of infrastructure costs is less clear: the modelling does not directly estimate additional infrastructure costs by location, using an average regional developer levy instead). A major contributory factor is probably the higher cost of

¹⁹ New Zealand Productivity Commission 2015 Finding 8.3, p 183 (171).

²⁰ New Zealand Productivity Commission 2015 Finding 8.9, page 191 (179).

²¹ 013 Expert Group 2015 p 5.

²² 013 Expert Group 2015.

²³ Cited by the Commission to a paper from the New South Wales Department of Planning and Environment. Reference not available.

redeveloping existing "brownfields" urban land compared with "greenfield" development. The Expert Group report suggests that

Key reasons include the value of improvements on the land – especially existing buildings – which mean the upfront costs can be higher than for the equivalent area of unimproved rural land, and the fragmented ownership and small parcel sizes of urban land which means that much of the redevelopment occurs at a small scale and in an ad hoc way²⁴.

The Auckland Expert Review takes a developer rather than a national or city viewpoint. But it seems to bear out the conclusion that to close this gap something else is required besides relaxation of planning controls or better timing of infrastructure investment and then leaving it to the profit motive of private developers. Essentially the Commission argues that this missing factor is a larger direct role for local Councils in development of housing land. I return to this further on in this report.

Incentives on landowners, ratepayers and Councillors

Given, however, that planning restrictions and inadequate infrastructure investment play some part in restricting land development, why do they persist in the face of the potential gains? The Commission's argument is based on local political economy. These arguments are important because they lead on to recommendations designed to change the incentives on local government in its planning and infrastructure functions.

Discounting incumbent interests in land regulation

With respect to land regulation, the report finds that "Restricted housing supply will tend to inflate the value of existing homes. Existing homeowners have an incentive to be riskaverse in opposing developments that could affect the amenity of their neighbourhood and the value of their home"²⁵ and, because homeowners are in older age groups who figure disproportionately in local government elections, "many decisions of local government through the planning system effectively protect the interests and wealth of those who already own housing, at the cost of those who do not. These decisions also create externalities for the wider economy."²⁶

This model of the dominance of incumbent interests in local politics is not unquestioned. The large role given to further development inside the existing Auckland boundary implies that the Auckland Council is prepared to take on its local political costs. In both Auckland and Wellington, Councils have plans for higher-density housing under discussion although it is unclear at this stage how this consultation will play out. But if the finding that regulation remains a significant constraint, the balance must be tipped more towards the national interest in relaxation of local planning rules.

Reallocating the costs of infrastructure

On infrastructure, the argument for ratepayers runs: (1) increases in Council budgets to finance services to housing land (principally local roading and trunk "three waters") are largely funded by rates; (2) rates increases are allocated over the entire rating base and are therefore paid mostly by existing ratepayers who do not benefit directly from the new developments; therefore (3) ratepayers (and, through the electoral system, Councillors) have only weak incentives to support new developments.

²⁴ Export Group p 10

²⁵ New Zealand Productivity Commission 2015, Finding F3.14, p. 69 (57)

²⁶ New Zealand Productivity Commission 2015, p 79 (67)

The report argues therefore that ratepayer and Council resistance to new investment in infrastructure may be reduced if the direct beneficiaries of the additional investment pay in proportion to their benefit. This basic premise underlies a great deal of the ensuing discussion in Chapters 9 and 10 about developer levies and agreements with developers, use of full-cost recovery charges and targeted rates for new and existing infrastructure, pricing of trunk infrastructure and the governance of infrastructure suppliers.

The issue of infrastructure economies comes up again in Chapter 10 on governance of transport and water infrastructure. There are some comments about land transport but the chapter is in fact mostly about water services leading to the finding already referred to on amalgamating water supply authorities.

Areas for further work

To summarise, the major policy recommendations in the report to address the supply of housing land are:

- (1) Reducing planning restrictions particularly to permit more intensive development;
- (2) Targeting the additional costs of infrastructure to landowners who benefit from it;
- (3) Councils taking on more of the risk and financing of land development;
- (4) Relating overall planning for housing land more closely to demand;
- (5) Central government intervening more in local government spatial planning.

Reduction in planning restrictions

The report makes a large number of specific recommendations (13 by my count) for relaxation or removal of planning restrictions. The recommendations are nearly all material although a few – such as the removal of the requirement for apartment balconies from District Plans – may strike some readers as too specific. There is a more general recommendation for Councils to give more systematic consideration to the costs and benefits of new regulation and perhaps they could apply this criterion to the costs of existing regulation as well.

A general point is that undertaking the recommended cost-benefit analysis (CBA) of land use rules doesn't remove the problem of trading off (say) amenity for incumbents against dwellings for new entrants. This is fundamental to the planning paradigm at national and local levels. A CBA needs to consider (and if possible value) the distributional impacts of development including regulatory changes. It is unlikely however that the net benefits and costs can be reduced to single numéraire. Ultimately a CBA is simply additional evidence in a political discourse which will need to include consultation with all local stakeholders. The valuation that a Council applies to regulatory impacts is in the end a political judgement.

Targeting costs of infrastructure

As noted above, several Chapters in the report are concerned with how to ensure efficient supply of infrastructure in relation to the requirements of development. There are 19 recommendations covering efficient charging for new and existing infrastructure (12), efficient organisation and governance of infrastructure services (4) and infrastructure standards (3). Arguably there are efficiency gains from pricing infrastructure on a benefit principle but this is buttressed by a political economy argument that ensuring that the costs fall on the beneficiaries will reduce the resistance of existing ratepayers to infrastructure investment. The argument for how to achieve this has a number of legs:

- (1) Councils have the power to levy targeted rates now and could apply this to the amortisation of investment costs of additional infrastructure²⁷. The principle of targeted rates requires a clearly-defined benefit and beneficiary population e.g. the additional cost of bringing trunk services to a new housing subdivision. Is the relationship as clear for intensification where retrofitted infrastructure (now or in future) serves existing as well as new householders?
- (2) In practice Councils will still have to carry the risk and financing costs of new infrastructure.
- (3) Ongoing charges for operations, maintenance and replacement will be funded through service providers which, as the report points out, requires attention to the governance of these providers to ensure that they charge on a full-cost recovery basis (and also with attention to how franchising and other arrangements might mitigate the potential inefficiencies of monopolistic provision).

Larger Council role in development

As noted above, what is theoretically feasible housing land development in an urban plan may far exceed what "developable", particularly in redevelopment of existing sites. This shortfall in what is privately profitable may arise even if planning restrictions are not getting in the way, local objections to more intensive development can be resisted, and there is sufficient capacity in existing infrastructure. This conclusion has two implications. First, if development is largely left to the private sector, plans like the Auckland Unitary Plan may overestimate the contribution that can be expected from "brownfields" development. Second, it follows that Councils may need to play a larger direct role in land development authorities, in conjunction with agreements with developers.

What does a Council development vehicle bring to this relationship? Arguments for a greater direct role are based on (1) "economies of scale" - only a city wide approach will be able to take advantage of these and only the Council is big enough to reap these benefits; (2) Councils will be abler to take on the financing risk of larger-scale developments (leveraging their greater borrowing power); (3) regulatory power (e.g. compulsory acquisition) is required to aggregate land into sufficient parcels for profitable development. The Council presumably brings to the table all of these plus commitments to invest in trunk infrastructure (with assistance for developers to finance its costs) and tailoring of planning rules. In addition, the Commission argues, urban development authorities "play an important role in urban regeneration and residential growth strategies in Australia, the United Kingdom, Hong Kong and parts of the United States"²⁸. They have been advocated by several public agencies in New Zealand since 2006. There are some already in operation, including Auckland's Panuku Development Auckland. The Commission also sought feedback on urban development authorities in its draft report and received widespread if not universal support.

A major remaining question is what sort of contingent liability this implies for existing city residents and ratepayers. Is there – as there appears to be – an implied "risk subsidy" in the form of Council entrepreneurship? Further work may need to be done on the appropriate powers and governance of Urban Development Authorities, particularly in relation to Councils as their residual legatees.

 ²⁷ It was interesting to see in the report's valuable historical chapter that targeting has its antecedents in the century-old – and almost entirely unused – provision for Councils to set a betterment levy on the same benefit principle.
²⁸ New Zealand Productivity Commission 2015 P 312 (300)

Better planning of land

The Commission argues that "a fundamental disconnect exists between the demand for housing and the supply response of the planning system, which essentially is a policy and political process": "The planning system is not responsive to price signals that provide information about the location and type of housing that people demand, and about the available supply."²⁹ In its final chapter the report advocates a greater role for price signals in land use planning decisions³⁰. The essential argument is that a predetermined price trigger for release of additional land would be a more efficient means of timing releases of land and would also be a "credible commitment" particularly signalling owners of undeveloped land seeking capital gains that it is time to sell or further develop their land.

The report cites a 2001 US article on event-driven land release³¹. These authors discuss shifts in the urban boundary based on a stock of developable land reaching a minimum trigger level (although they do mention price triggers in passing). They argue that the minimum level should be (1) sufficiently in advance of when undeveloped land can be brought up to developable status including provision of trunk infrastructure (2) enough for a supply of competitive land big enough to deter monopoly pricing.

For comparison, the Auckland Council's future land strategy envisages

... a pipeline of land supply. This means providing: 20 years forward supply of development capacity at all times; 7 year average (with a minimum of 5 and a maximum of 10 years) of unconstrained, and 'ready to go' land supply.³²

The Commission characterises this strategy as one of "time-driven releases"³³ but it seems to have features of an inventory-driven approach as advocated by the US article. Although the Council provides broad projections of when new land would come on stream it notes that the key parameters in demand "population projections, estimated housing demand and estimated development capacity" are not static and that the programme "will therefore be adjusted – over time – taking account of actual growth, demand and uptake – more so with regard to the timing aspect of the programme."³⁴

Price-triggering is a form of event-driven decision-making on land supply but might differ from volume-driven triggering for a couple of reasons. First, information provided by prices is different from information about stock of developable land. Prices change by moving towards a new equilibrium as a result of some combination of shifts in supply and demand curves. As the inventory of developable land reduces there should be upwards pressure on land prices but there could also be more cyclical movement in prices due to general economic conditions. Second, timing of the trigger may be less predictable in advance than a land inventory trigger because of shifts in market conditions (there may be firmer evidence in advance of when a volume trigger point is likely to be reached than for a price trigger). There are also some practical considerations: how firm a commitment would this be? Would it be enshrined in local government law, Council rules or a statement of principle?

Locking in a land release based on an automatic price trigger, while it may provide a credible commitment and clear signal to land bankers, strikes me as a hostage to fortune

²⁹ New Zealand Productivity Commission 2015, Finding F3.10, p 65 (53).

³⁰ New Zealand Productivity Commission 2015, p 325 (313) et seq

³¹ Knaap and Hopkins 2001

³² Auckland Council 2015, p 1

³³ New Zealand Productivity Commission 2015, p 325 (313).

³⁴ Auckland Council 2015, p 9

for Councils. The US article concludes that any "rule of thumb" (including presumably event triggers) should not be encoded in law:

As in the conduct of monetary policy, decisions regarding the supply of land, like the supply of money, should probably be made after careful review of a variety of price, inventory, and market activity data. Clearly, however, there is little to be gained by codifying rules of thumb in state land use statutes, because these rules do not stand up to critical examination, they preclude adaptation to local situations, and they prevent experimentation.³⁵

Stronger role for central government

Much of what is in this report ultimately depends on a shift in the relationship towards national from local interests, which in turn implies a further shift in relationship between central and local government. A stronger and more directive role for central government seems to be the intent of the current draft resource legislation and the proposed National Policy Statement on urban development. Does this shift presage a greater micro-involvement of central government in monitoring and influencing local government? What would be the forum in which central government plays this more detailed role? Would central government have veto rights on local government plans and policies where they conflicted with national policies?

This raises the further issue of the current capacity of central government organisations in the sector to engage with local government. An LGNZ official agreed that the central premise of the report is more limits on local autonomy and more direction from central government and that this implied more active management from central government. But the problem would be lack of central government capacity to provide continuing input into local government decisions. There was very little policy capability in Wellington and no people "on the ground" with a detailed knowledge of urban planning at a local government level. In its role vis-à-vis the Resource Management Act, the Ministry for Environment has not previously got involved in regional plans. There was "no Minister of Cities".

It follows from these comments that, if the balance of power is shifting somewhat towards more central government rule-setting for local government's role in urban planning, arguably the central government needs more well-informed and experienced advisors in the issues from a local government perspective.

Follow-up on recommendations

The Report contains some 70 recommendations covering a wide range of topics. They respond to all of the specific items in the terms of reference.

The recommendations are directed about half each to central and local government, and it is generally clear who should pick them up for consideration. About two-thirds of the recommendations are for some specific action (e.g. for changes to law, regulations or written policy) and the remainder are for "review" or "consideration".

Although in the previous sections I have discussed some of the potential critiques of the analytical basis for the report, recommendations overall are nearly always supported by findings which generally reflect the evidence and analysis in the text.

The main issue will be probably how decision-makers and their advisors can now respond to the recommendations. Mostly the report provides enough guidance in the supporting

³⁵ Knaap and Hopkins 2001, p 324

text to enable those preparing a response to brief decision-makers on the options for response. (The price triggering recommendations discussed above, which require a lot of further study to make operational, are an exception). In addition, the ongoing discussion on the issues and responses between the Commission and its report team should mean that many of the key central and local government advisors and decision-makers are familiar with the Commission's thinking and reasoning.

In the case of central government, the Treasury is coordinating a response from the relevant agencies for a joint briefing of the Ministers responsible. The Treasury commented that it was an opportunity to consider a coherent overall programme on housing and hopefully get the different agency and Ministerial interests aligned.

It is too early to tell how local government will respond overall. LGNZ and a small number of Councils, including Auckland, made submissions on both issues paper and draft report and also met with the Commission individually. All of the target ten "high growth" Councils contributed on at least one of these three occasions. It seems likely that some organisation needs to take responsibility for following up, particularly with the larger urban Councils, to see how they intend to respond to the recommendations in the report. The Commission itself is not resourced to undertake this role. The most likely candidate is one of the central government agencies in the sector.

Summary: areas for further work

In summary, many of the issues I have raised above are dealt with in the report. This is simply to highlight some where I believe further work is required either to give effect to the Commission's recommendations or for consideration in the next phase of its inquiry:

- Spatial modelling of feasible land development should explicitly consider incremental infrastructure costs and be clear on the relative importance of different drivers and constraints on development.
- Development of a cost-benefit approach to land regulation should take into account distribution as well as net value of national costs and benefits; consideration needs to be given to what role a formal CBA would play in overall political discourse on regulatory change.
- Consideration of targeted rates for new and existing infrastructure needs to consider how a circumscribed group of clear beneficiaries can be identified.
- A larger role for Councils in land development needs to be clearly based on Councils' comparative advantage and take into account the contingent liability is implied for residents and ratepayers.
- Further work may need to be done on the appropriate powers and governance of Urban Development Authorities, particularly in relation to Councils as their residual legatees.
- The rules for including price as a trigger for land release need to consider both how they would be enacted to make a credible commitment but also whether other data such as stock of available land and market activity should be taken into account.
- The future role for central government in local spatial planning requires a careful investigation of the nature of this increased engagement and its required political leadership, administrative capability and coordinating mechanisms.
- Plans for following up on the Commission's recommendations by central government need to consider how local government response to the recommendations directed to it will be monitored.

Conclusion

The report under review here fits squarely within the Productivity Commission's tradition of and reputation for careful and thorough analysis of a major policy issue for New Zealand's future productivity. I am satisfied that it contains the best available evidence and analysis of the questions it addresses and comes up with recommendations that deserve serious consideration at both central and local government levels. Particularly on the question of national versus local interests in urban planning, it raises a basic question about the future of local democracy in New Zealand that should be the subject of widespread debate. It also challenges central government to think carefully about how it should engage with local government in the future.

Wellington

December 2015

Annex A: Extract from Terms of Reference for the Inquiry

To examine and report, in a comparative sense, the by-laws, processes, and practices of local planning and development systems to identify leading practices that enable the timely delivery of housing of the type, location, and quality demanded by purchasers. The Commission should particularly focus on urban growth areas, including any early lessons from the Housing Accords and Special Housing Areas Act 2013, and consider successful international experiences with urban development.

Planning and development systems should be reviewed with respect to how they deliver an adequate effective supply of development capacity for housing. The inquiry should review practices of the larger urban planning and development systems, including but not limited to the authorities of the largest and/or fastest-growing urban areas, and any comparable international urban areas with valuable lessons.

Information on absolute and relative performance, identify leading practices, and make recommendations to improve performance with respect to:

(i) policies, strategies, outcomes and processes for urban land supply, including the provision of infrastructure;

(ii) funding and governance of water and transport infrastructure

(iii) governance, transparency and accountability of the planning system;

(iv) the implication of leading practice for the range of laws governing local authority planning;

(v) involvement and engagement with the community.

Annex B: Terms of Reference for this Report

The review should evaluate (based mainly on the final report) the quality of the Land for Housing inquiry against the following performance measures:

- the right focus the relevance and materiality of the inquiry report;
- good process management the timeliness and quality of the inquiry process;
- high quality work the quality of the analysis and recommendations;
- effective engagement how well the Commission engaged with interested parties;
- clear delivery of messages how well the work is communicated and presented; and
- overall quality the overall quality of the inquiry taking into account all factors.

Note that the Commission's performance framework also contains another dimension:

• Having intended impacts - what happens as the result of the Commission's work

While it is mainly too early to judge this aspect, you should make any observations that you feel you can make.

The review should note any lessons that can be taken and make recommendations for any future improvements.

The report must also contain a 'summary assessment' (or alternate name) that summarises your perspective on each of the performance dimensions (a short paragraph on each) - this is useful for the Commission's Annual Report.

References

013 Expert Group 2015. Residential Developable Capacity: for Auckland: A Report on the 013 Topic Urban Growth, AUP Independent Hearing Panel

Auckland Council 2015. Draft Future Urban Land Supply Strategy.

Demographia 2015. World Urban Areas: 11th Annual Edition.

Glaeser, E. & Gottlieb, J. 2009. The wealth of cities; Agglomeration economies and spatial equilibrium in the United States, National Bureau of Economic Research.

Knaap, G. J. & Hopkins, L. D. 2001. The Inventory Approach to Urban Growth Boundaries. Journal of the American Planning Association, 67, 314-326.

New Zealand Institute of Economic Research 2015. Land use regulation in New Zealand: Improving the evidence base, New Zealand Productivity Commission.

New Zealand Productivity Commission 2015. Using land for housing, Wellington, New Zealand Productivity Commission.

Saiz, A. 2010. The Geographic Determinants of Housing Supply. The Quarterly Journal of Economics, 125, 1253-1296.

Woetzel, J., Ram, S., Mischke, J., Garemo, N. & Sankhe, S. 2014. A blueprint for addressing the global affordable housing challenge, McKinsey Global Institute.

Zheng, G. 2013. The effect of Auckland's Metropolitan Urban Limit on land prices. New Zealand Productivity Commission research note. , New Zealand Productivity Commission.