NEW ZEALAND
PRODUCTIVITY COMMISSION
Te Kōmihana Whai Hua o Aotearoa

Better urban planning

February 2017

The Productivity Commission aims to provide insightful, well-informed and accessible advice that leads to the best possible improvement in the wellbeing of New Zealanders.

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Inquiry contacts

Administration Robyn Sadlier
T: (04) 903 5167
E: info@productivity.govt.nz

Other matters **Steven Bailey**
Inquiry Director
T: (04) 903 5156
E: steven.bailey@productivity.govt.nz

Website www.productivity.govt.nz

Twitter @nzprocom

Linkedin NZ Productivity Commission

[1] The Commission that pursues abundance for New Zealand

Foreword

The Government asked the Commission to take a "first principles" look at New Zealand's urban planning system with the aim of setting out what a high-performing urban planning system would look like. This is a unique opportunity and at the heart of the Commission's mandate. Well-functioning cities and urban areas matter a great deal to the living standards and wellbeing of New Zealanders.

As the inquiry progressed, it became clear that to make the greatest contribution to wellbeing, the planning system needs to deliver on five critical goals. First, it has to be flexible and responsive to changing needs, preferences, technology and information. Second, it has to provide sufficient development capacity to meet demand. The harmful effect of spiraling house prices is indicative of a serious imbalance between supply and demand. Third, planning systems need to allow mobility of residents and goods to and through our cities in order to get to jobs and other activities. Fourth, the system has to be able to fit land-use activities within well-defined environmental limits. And lastly, the planning system needs to recognise and actively protect Māori interests in the built and natural environments arising from the Treaty of Waitangi.

The current system is failing to deliver on these goals. We can see that the system is under stress in failing not only to cope with the challenges of high-growth cities, but also to protect important parts of New Zealand's natural environment. These failures point to weaknesses in the design and operation of New Zealand's planning system. Few of the many participants in the inquiry were happy with the current system, and many were strongly critical, believing the Resource Management Act had not worked out as intended, or needed a substantial overhaul.

We set out what a future planning framework should look like. While some aspects of the proposed new planning architecture will be recognisable, much of it will not. We have taken the "blue skies" mandate from government seriously and offer fundamental and far-reaching recommendations for a future land-use planning and resource management system. We believe that following these recommendations will provide substantial benefits. Getting a planning and resource management system that is fit-for-purpose has the potential to deliver access to affordable housing and well-paying jobs, in vibrant, dynamic and liveable cities, and in a country where the natural environment is cherished and protected.

Professor Sally Davenport, Dr Graham Scott and I oversaw the preparation of this report. We acknowledge the co-operation and support of Local Government New Zealand and the many councils around New Zealand who engaged with us in this inquiry and provided valuable information. The Commissioners would like to acknowledge the work and commitment of the inquiry team: Steven Bailey (inquiry director), Ron Crawford, Nicholas Green, Geoff Lewis, Tim Maddock and James Soligo. Special thanks go to Judy Kavanagh for her analytical support, and to our summer interns Ashleigh Lee and Susan Jacobs.

MURRAY SHERWIN

Chair

February 2017

Terms of reference

NEW ZEALAND PRODUCTIVITY COMMISSION INQUIRY INTO THE SYSTEM OF URBAN PLANNING IN NEW ZEALAND

Issued by the Minister of Finance, the Minister of Local Government, the Minister for Building and Housing, the Minister for the Environment, and the Minister of Transport (the "referring Ministers").

Pursuant to sections 9 and 11 of the New Zealand Productivity Commission Act 2010, we hereby request that the New Zealand Productivity Commission ("the Commission") undertake an inquiry into alternative approaches to the urban planning system.

Context

In its 2012 housing affordability report, the Productivity Commission noted:

Planning must take account of the Resource Management Act (RMA), the Local Government Act (LGA) and the Land Transport Management Act (LTMA). These statutes have different legal purposes, timeframes, processes and criteria. With multiple participants and decision-makers, there is no single mechanism for facilitating engagement, securing agreement among participants and providing information for robust decision-making. The Government should consider the case for reviewing planning-related legislation. (p10)

Development proposals are broken down into economic, infrastructure and environmental components, and examined separately according to relevant legislation. This disconnect can make it difficult to achieve quality integrated urban development. (p121)

The Commission recommended the Government *"consider the case for a review of planning-related legislation to reduce the costs, complexity and uncertainty associated with the interaction of planning processes under the Local Government Act, the Resource Management Act and the Land Transport Management Act."*

These regimes underpin not just planning for housing but the productivity of New Zealand's wider economy. Many parts of the regime have been in existence for considerable time and have evolved in a piecemeal fashion. International best practice has also moved on, and a fundamental review of the urban planning system is due.

Scope and aims

The purpose of this inquiry is to review New Zealand's urban planning system and to identify, from first principles, the most appropriate system for allocating land use through this system to support desirable social, economic, environmental and cultural outcomes.

The review should identify options to align the priorities of actors and institutions within these regimes, where possible; improve economic, environmental and community outcomes through urban planning; and to deliver optimal efficiency in the delivery of these outcomes.

This will include identifying the most effective methods of planning for and providing sufficient urban development capacity including residential, commercial, industrial and place-based amenity uses, supporting infrastructure and linkages with other regions.

The review should look beyond the current resource management and planning paradigm and legislative arrangements to consider fundamentally alternative ways of delivering improved urban planning, and subsequently, development.

It should also consider ways to ensure that the regime is responsive to changing demands in the future, how national priorities and the potential for new entrants can be considered alongside existing local priorities and what different arrangements, if any, might need to be put in place for areas of the country seeing economic contraction rather than growth.

The scope of this review should include, but not be limited to the kinds of interventions and funding/governance frameworks currently delivered through the Local Government Act, the Resource Management Act, the Land Transport Management Act and the elements of Building Act, Reserves Act and Conservation Act relating to land use (as well as the formal and informal processes, institutions and practices around these pieces of legislation).

The review should also consider the interaction of the urban planning system with planning for other regions and identify those areas where broader system-level change is needed to deliver more efficient urban planning.

The inquiry should cover:

- Background, objectives, outcomes and learnings from the current urban planning system in New Zealand, particularly:
    - how environmental and urban development outcomes have changed over the last twenty years
    - explaining the behaviour, role and capability/capacity of councils, planners, central government, the judiciary and private actors under the regime.
    - the tendency for increasing complexity and scope creep of institutions and regulatory frameworks.
- Examination of best practice internationally and in other cases where power is devolved to a local level in New Zealand.
- Alternative approaches to the urban planning system.

The report should deliver a range of alternative models for the urban planning system and set up a framework against which current practices and potential future reforms in resource management, planning and environmental management in urban areas might be judged.

Exclusions

This inquiry should not constitute a critique of previous or ongoing reforms to the systems or legislation which make up the urban planning system. Rather, it is intended to take a 'first principles' approach to the urban planning system.

Consultation

To ensure that the inquiry's findings provide practical and tangible ways to improve the performance of the urban planning system, the Commission should consult with Local Government New Zealand, the Society of Local Government Managers and the wider local government sector.

The Commission should also consult with the Parliamentary Commissioner for the Environment, non-governmental organisations, resource management practitioners and lawyers and affected industry groups; taking note of the significant bodies of work already produced by many of these groups.

Timeframes

The Commission must publish a draft report and/or discussion document, for public comment, followed by a final report that must be presented to referring Ministers by 30 November 2016.

HON BILL ENGLISH, MINISTER OF FINANCE

HON PAULA BENNETT, MINISTER OF LOCAL GOVERNMENT

HON DR NICK SMITH, MINISTER FOR BUILDING AND HOUSING, MINISTER FOR THE ENVIRONMENT

HON SIMON BRIDGES, MINISTER OF TRANSPORT

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Terms in te reo Māori

Te reo Māori is one of New Zealand's three official languages – along with New Zealand English and New Zealand Sign Language. This report uses some terms that may be unfamiliar to some readers.

Term	Description
Ahi kā	Literally "burning fire". An expression for continuous occupation of a defined and recognised area, and a metaphor for those who live there and utilise their lands, forests, waterways and other natural resources.
Aotearoa	Literally "long white cloud". This is a traditional name for the North Island that has been adopted as a generic Māori name for New Zealand.
Awa	River, stream, creek.
Hapū	Kinship group, clan, sub-tribe, collection of related whānau.
Iwi	Kinship group, tribe, collection of related hapū.
Kāinga	Village, settlement, home, residence, dwelling.
Kaitiaki	Trustee, minder, guard, custodian, guardian, caregiver, keeper, steward.
Kaitiakitanga	The exercise of guardianship by the tāngata whenua of an area in accordance with tikanga Māori in relation to natural and physical resources. Kaitiakitanga is a broad notion that encompasses such ideas as stewardship, care and wise management that is directed at ensuring the ongoing wellbeing of local communities through proactive and preventative environmental management.
Kaupapa Māori	Māori ideology – a philosophical doctrine, incorporating the knowledge, skills, attitudes and values of Māori society.
Kotahitanga	Unity, togetherness, solidarity, collective action.
Mahi	Work, practice, operation.
Mahinga kai	Natural resources (including foods), the places where those resources are obtained, and the practices and underlining philosophies associated with their management and procurement. Mahinga kai are not limited to gardens and other domestic cultivations.
Mana	Prestige, authority, control, power, influence, status, standing, charisma, well-being (in a holistic sense).
Mana whenua	The mana held by local whānau/hapū/iwi who have demonstrated and recognised authority over the whenua (land) and associated fresh waterways within a particular area. A metaphor for the people (whānau/hapū/iwi) who hold the mana.
Manaaki	Literally to boost (aki) another's mana. Support, hospitality, kindness, generosity.
Manaakitanga	The process of showing respect, generosity and care for others.
Marae	A communal or sacred place that serves religious and social purposes.
Māori	1. Normal, usual, natural, common, ordinary. 2. Native, indigenous, fresh (of water). 3. Freely, without restraint, without ceremony, clear, unannounced. Māori began using the word during the nineteenth century to describe and differentiate themselves from the "different" European settlers.

Term	Description
Mātauranga Māori	Mātauranga Māori can be defined as "the knowledge, comprehension, or understanding of everything visible and invisible existing in the universe", and is often used synonymously with wisdom. In the contemporary world, the definition is usually extended to include present-day, historic, local, and traditional knowledge; systems of knowledge transfer and storage; and goals, aspirations and issues from an indigenous perspective.
Mātāwaka/mata-a-waka/ mataawaka	A modern term referring to Māori living within the ancestral territory (takiwā) of another hapū or iwi: that is, Māori residents who do not have mana whenua rights and responsibilities (different sources use different orthography).
Maunga	Mountain
Mauri	Special nature, vital essence, source of emotions, life principle, energy which binds and animates all things in the physical world; the essential quality and vitality of a place, being or entity.
Mauritanga	The process of protecting, supporting or enhancing mauri – the life principle or vital essence of a physical object, individual, ecosystem or social group.
Pākehā	New Zealander of fair complexion, usually of British colonial heritage. There are no definitive oral or written records about the exact origins of the term "Pākehā, but it is likely to be derived from "pakepakehā", a mythical human-like being with fair skin and hair.
Papakāinga	"Papa" refers to Papatū-a-nuku the ancestral earth mother. "Kāinga refers to the village communal living environment. Today the term is used to define both an ancestral land base as well as a collection of dwellings occupied by Māori connected by common kinship or kaupapa, located in reasonable proximity to each other and normally relating to a marae or other communal area.
Pouhere Taonga	Heritage New Zealand – formerly the New Zealand Historic Places Trust
Puna	Spring, well, pool
Rangatahi	Youth
Rangatira	Chief (male or female); to be of high rank, become of high rank, noble, esteemed, revered.
Rangatiratanga	The term used in the Māori text of the Treaty of Waitangi to describe the "just rights" (pre-amble) and "exclusive and undisturbed possession" (article 2) of hapū over their territories and assets. Often translated as "chiefly authority" or "autonomy". Akin to notion of "sovereignty".
Rohe	Boundary, district, region, territory, area, border (of land).
Rūnanga	Governing body associated with an iwi.
Taiao	Natural environment.
Takiwā	District, area, territory, vicinity, region; time, period, season, space.
Takutai moana	Coast, foreshore and seabed.
Tāmaki Makaurau	Auckland
Tāngata whenua	Literally "the people of the land". This well-established term refers to local people born of the whenua (placenta; land) where their ancestors lived and buried their placenta. It is a generic term for the local iwi/hapū/whanau, as well as indigenous peoples generally.
Tāonga	That which is precious or treasured.

Term	Description
Tauiwi	Immigrant, person coming from afar, foreigner, alien, stranger.
Taunga hou	Literally "new anchorage". This recently coined term describes people of Māori descent and ethnicity, who through choice or circumstances do not link back to their own iwi/hapū.
Taura here	Literally "binding ropes". This contemporary term refers to iwi/hapū/whānau kinship groups who live in urban areas outside of their tribal takiwā but who retain links back to their ancestral lands, culture and communities.
Te ao Māori	Literally "the Māori world".
Te Tiriti o Waitangi	The Treaty of Waitangi. The treaty signed by representatives of the British Crown and various Māori chiefs at Waitangi on 6 February 1840. The Treaty is one of New Zealand's founding documents. The Treaty has English and Māori versions. The translations do not strictly align.
Te Wai Pounamu	Literally "greenstone waters". This is the traditional name for the South Island.
Tikanga Māori	The body of rules and values developed by Māori to govern themselves; the Māori way of doing things; Māori values and practices that encapsulate Māori ethos and philosophies. "Tika" means "correct, appropriate, right", and thus "tikanga Māori" deal with the "right" way of doing things. They provide an essential framework for regulating social action and interaction. It is also important to note that the application of tikanga differs from group to group.
Tohu	Sign, mark, symbol, emblem, advice, suggestion, guidance.
Ture	Law, rule, statute, act (of parliament).
Urupā	Burial place.
Wāhi taonga	Literally "treasured site". This term refers to sites that are treasured by mana whenua in accordance with their respective local values, rights and interests. For example, wetlands, springs and estuaries are considered to be wāhi taonga by Ngāi Tūāhuriri (Canterbury) as they are essential elements of the local natural environment, without which local mahinga kai values – and life itself – would struggle to survive.
Wāhi tapu	Literally "sacred site". This term refers to sites that have had some form of ritual restriction placed on their access or use (eg burial grounds or sites where someone has died). The notion of tapu (sacred, sacrosanct, restricted, set apart, prohibited) was a means by which traditional Māori society was regulated.
Wairuatanga	Spirituality.
Wānanga	1. To meet and discuss, deliberate, consider. 2. Tribal knowledge, lore, learning. 3. Seminar, conference, forum.
Whaitua	Region, designated area, territory.
Whakapapa	Genealogy, genealogical table, lineage, descent.
Whānau	1. To be born; give birth. 2. Extended family; family group; the primary economic unit of traditional Māori society. 3. A familiar term of address to a number of people.
Whanaungatanga	Broad kinship concept that acknowledges interconnectedness between people and the environment, through whakapapa. It is from this interconnectedness that specific obligations of care arise. These duties are not just to direct kin; they can arise also through the interconnectedness of all people in Māori cosmology.
Whenua	1. Land; ground. 2. Country, nation, state, territory. 3. Placenta, afterbirth.

Source: Based on Moorfield, n.d.; Ryks et al., 2016; Ngā Aho & Papa Pounamu, 2016b.

Overview

The Government has asked the Productivity Commission to undertake an inquiry into the system of urban planning in New Zealand. The main purpose of the inquiry is to "review New Zealand's urban planning system and to identify, from first principles, the most appropriate system for allocating land use through this system to support desirable social, economic, environmental and cultural outcomes". The inquiry looks beyond the current resource management and planning system to consider fundamentally different ways of delivering urban planning. The aim is to set out what a high-performing urban planning system would look like. In doing so, the Commission was asked to consider the background, objectives, outcomes and lessons from the current urban planning system in New Zealand as well as international best practice.

Why this inquiry is important

Well-functioning cities and urban areas matter a great deal to the wellbeing of New Zealanders. When cities function well, they provide greater access to and choices of housing, better protection of our natural environment and cultural values, and quality infrastructure at the right time in the right place. Well-functioning cities also provide many different types of employment and higher wages, a wider pool of labour for firms, and more opportunities for specialisation, innovation and easier transfer of ideas. Working well, cities are engines of economic prosperity.

Successful cities are also attractive locations to live – places where people consume goods and services, play and are creative, all within urban areas that have atmosphere and unrivalled access to a wide range of amenities. Successful New Zealand cities should also acknowledge the special relationship of Māori with the land on which cities are built, and provide "great spaces and places for Māori to be Māori".

But the growth of cities can also create costs as a result of people working and living near each other. Potential costs include pressure on infrastructure, congested roads and long commutes, air pollution and degradation of the natural environment, as well as unavailability of affordable housing. Urban growth can also lead to social exclusion through geographical segregation of people by income and other markers of deprivation. These costs put a premium on good city organisation and planning, where the advantages of urban growth and city living can be enjoyed and the costs and negative impacts of such growth minimised.

What makes a high-performing city?

The "first principles" mandate of this inquiry led the Commission to investigate the nature of cities, and the factors that contribute to their success (Chapter 2). Most benefits from cities are created by the innumerable decisions of people and firms about where best to locate, trade and meet. As urbanist Jane Jacobs observed, the "point of cities is multiplicity of choice". Rising incomes and new technologies mean that these preferences shift over time. Land that was once best employed for manufacturing may now be better placed for new retail, educational, hi-tech or residential uses. As a result of these wider social developments, cities evolve in unexpected and unpredictable ways. In essence, they are complex, adaptive systems (Chapters 2 and 3).

A number of factors stand out as important underlying drivers of high-performing cities (Box 1).

Box 1 **Factors that make a successful city**

- Planning frameworks are responsive and are able to adapt to changing values, preferences, technology, demography, economic trends, and expectations.
- Development capacity is sufficient for housing and other land uses to meet demand. Reasonably priced housing makes it easier for workers to move to locations and jobs where they can best use their skills.

- Infrastructure investments are coordinated effectively with land supply and population growth. This means well-coordinated transport infrastructure that enables residents to get to work at a wide range of locations, at reasonable cost and in a reasonable time. It also means the land for public streets, infrastructure networks and public open spaces being planned and secured well before development begins. In this way infrastructure plays an important "city-shaping" role.
- Effective governance arrangements integrate land use with the provision of infrastructure and public amenities in a complex, rapidly evolving environment. This includes a strong interface between all levels of government.
- The quality of the natural environment in urban areas is managed effectively. This acknowledges that the natural environment plays a major role in the liveability of cities, most notably through the provision of substantial ecosystem services.
- Development supports the social and economic participation of residents from all areas of the city.
- Social, cultural and creative vibrancy.

Planning can contribute to wellbeing

While the choices of people and firms are the major driving force behind how cities grow and evolve, urban planning makes three main contributions to wellbeing.

The first contribution is to ensure that people and firms appropriately consider any negative impacts on others and the natural environment. One implication of people living and working close to each other is that decisions about land use can affect others. Urban planning can help manage conflicts between people, by setting up rules and policies to minimise significant harms on others and by setting up processes to reach decisions on competing interests.

Second, urban planning can create the opportunities and conditions that enable the representative bodies of people (such as councils) to make decisions. This is seen most clearly in the organisation and provision of infrastructure, where the supply of water pipes and roads is needed before development can take place.

Third, urban planning can enable communities to make collective decisions about funding and providing city amenities and facilities such as attractive public spaces that support the wellbeing of people, and the vibrancy of cities.

Even so, how much planning can achieve is limited. Attempts to steer cities in particular directions can be harmful. To make the greatest contribution to wellbeing, planning systems need to be open to city growth, able to respond to unexpected change, and respectful of the property rights and decisions of individuals and firms.

In examining alternative planning approaches and design attributes that could form the basis of a future planning system in New Zealand, the Commission has been guided by how much a new system is likely to achieve the following five goals:

- flexibility and responsiveness – ability to change land uses as required;
- provision of sufficient development capacity to meet demand;
- mobility of residents and goods to and through the city;
- ability to fit land-use activities within well-defined environmental limits; and
- recognition and active protection of Māori Treaty interests in the built and natural environments.

Outcomes from the current system

An important avenue of investigation for this inquiry was getting a sense of whether the urban planning system in New Zealand has delivered the outcomes expected of it. The planning system is governed by three main statutes – the Resource Management Act 1991 (RMA); the Local Government Act 2002 (LGA); and the Land Transport Management Act 2003 (LTMA). The RMA is primarily a regulatory statute, while the LGA and the LTMA govern budgeting, and how services and infrastructure are planned and provided. The purposes of the three principal planning Acts suggest that the main outcomes sought from the planning system are the maintenance of, or improvements in, environmental quality, the supply of local infrastructure and services in a timely and cost-effective manner and to desired standards, and the safe and reasonably easy movement of goods and people.

Given the subject of this inquiry is urban planning, the Commission has focused on those environmental outcomes most closely connected to cities, urban development and land use. These include air quality, and drinking and recreational water quality. Yet many parts of the natural environment are intimately connected with cities, because cities are places where nature continues to exist – waterways, trees, plants, birds, insects and their biodiversity intermingle with offices, houses, roads and other infrastructure.

The system has not been good at resolving competing demands over scarce resources (eg, land, clean air, clean water), or at resolving competing views among citizens about what they most value (eg, development, amenity, environmental protection). That said, the Commission acknowledges the current regime has helped to reduce point-source water pollution and had some success in reducing air pollution (Chapter 6).

The example of Auckland illustrates some central failures of the current system. Auckland, home to a third of New Zealand's people, has been and is still experiencing extremely fast population growth. Aucklanders, armed with the system's planning tools, have struggled to respond to this pressure either by providing greater density in central parts or by expanding outwards at the city's boundaries. While some specific interests have benefited, the resulting scarcity has driven a protracted land and house price spiral that has been socially and economically harmful. It has now adversely affected many parts of New Zealand and many New Zealanders.

Rural areas and small settlements do not suffer the growth pressures of cities like Auckland and Tauranga. In some cases they face the pressures of population decline. Yet similar conflicts arise over land use and competing values – witness the debates over the expansion of dairying and water quality. Although the focus of this inquiry is urban, the Commission has found it makes compelling sense for a new planning system to be capable of treating the built and the natural environments in an integrated way. Built and natural are evident in both urban and rural areas of New Zealand, admittedly with variation in relative proportions.

The Commission has concluded that that current system is failing not only to cope with the challenges of high-growth cities, but also to protect important parts of New Zealand's natural environment (Chapters 5, 6 and 9). These failures point to weaknesses in how New Zealand's planning system is designed and operated. At the same time, the Commission acknowledges that the ability of councils to change or improve outcomes through the planning system very much depends on whether local government is the primary actor. Changes in technology, trade opportunities, consumer preferences, and central government policy, can be more significant factors.

Underlying political dynamics have constrained the effectiveness of the planning system for both built and natural environmental outcomes. For the natural environment, these dynamics include pressure from some sectors not to regulate pollution stringently. In the built environment, the dynamics include pressure from existing residents to introduce restrictive land-use rules and not raise rates or debt to pay for the infrastructure required to enable new development. Any new planning system needs to consider, and manage, these dynamics.

The current planning system – the Commission's diagnosis

So what in New Zealand's urban planning system is causing poor outcomes? The Commission has reviewed the component parts of the planning system and identified a number of institutional, legislative, regulatory and process deficiencies that hamper its performance and achievement of the above-mentioned urban planning goals. The weaknesses of the planning system lie in unclear legislative purposes and environmental limits, too little direction and guidance from central government, difficulties in weighing benefits and costs, and in various barriers that prevent timely and flexible responses to the demand for development capacity.

Planning legislation lacks clarity and focus, and is prone to overreach

The RMA caters poorly for urban development and under-recognises its potential benefits. Combined with its emphasis on avoiding or remedying adverse effects, this has constrained desirable development. In effect, the planning system suffers from risk aversion and a bias towards the status quo.

Ambiguous language and broad language in the RMA and the Local LGA have led to regulatory overreach in urban areas, and a lack of stringency in how the natural environment is regulated. Overreach in urban areas has created unduly restrictive rules, unhelpful exercises of regulatory discretion and unnecessary conflicts and costs.

Debate about the meaning of core concepts within the RMA and LGA has been considerable. This debate has led to rising frustration with how the RMA (particularly in handling growth pressures in urban areas) has performed and to successive legislative amendments. Repeated amendments to the planning statutes have increased their complexity and reduced their coherence.

Too little direction and guidance from central government

Planning decisions have both local and national impacts but, land transport aside, the national interest has not been well represented in the planning system for many years. This has led to decisions that suit some local concentrated interests, but which have had harmful wider effects – most notably rising land and housing costs.

Lack of guidance has seen many plans and planning decisions continue the rule-bound style and mindset of the old Town and Country Planning Act that pre-dated the RMA. This approach stands at odds with the *enabling* intent of the RMA's architects.

Central government currently lacks the capability and systems needed to support well-informed, proportionate, and timely intervention and effective engagement with local authorities on planning issues. This limits the central government's ability to understand local planning issues and engage meaningfully with councils over the impact and suitability of their proposed land use rules and policies.

Prioritisation is difficult

Setting clear priorities within the planning system is difficult. The broad framing of Part 2 of the RMA (which sets out the Act's purpose and principles) and delays in guidance from central government have left participants largely uninformed about how to differentiate important from less-important built and natural environmental issues. The regime also offers little guidance on how to weigh the economic and social benefits of a development against the cost of its adverse impacts on the natural environment.

As the Parliamentary Commissioner for the Environment has observed, the RMA provides little guidance as to which environmental effects councils should focus on when considering resource consent applications: all "are to be avoided, remedied or mitigated – regardless of their importance" (2014, p. 1). For example, the combination of the absence of clear guidance, the large amount of local and regional discretion in the system, and missing or poor data from inadequate monitoring of outcomes, has led to the degradation of some important natural ecosystems (Chapters 6 and 9). It is worth remembering that the quality of fresh water is generally lower in waterways that flow through urban areas. The sources of pollution in urban waterways typically include sewage leaks and stormwater run-off.

The system lacks responsiveness

The planning system is not well set-up to deal with the change and unpredictability inherent in growing cities. Decision-making processes to change land use rules are slow and uncertain, partly due to the multiple avenues open to relitigate them in the courts. Resistance to change from some local residents, an undiscriminating approach to avoiding adverse effects, and inadequate infrastructure funding tools and access to finance also inhibit the system's ability to respond promptly to growth pressures. The absence of mechanisms to ensure the timely release of sufficient development capacity – through increased density centrally and increased developable land at the boundaries of cities – and the absence of a coordinated supply of complementary infrastructure, stand out as serious weaknesses.

Protection of Māori interests is inconsistent

The system has failed to provide consistent, active protection of the Treaty of Waitangi interests of Māori in land use and resource management. Despite some notably successful co-governance arrangements, the extent to which councils work well with Māori to recognise and actively protect Treaty interests in planning varies greatly. This reflects varying capability and willingness to establish productive relationships and little guidance from the centre about best practice.

What changes are needed?

A clearer distinction between the built and natural environments

The natural and built environments require different and distinctive regulatory approaches. The natural environment needs a clear focus on setting standards that must be met, while the built environment requires assessments that recognise the benefits of urban development and allow change. Current statutes and practice blur the two environments, and provide inadequate security about environmental protection and insufficient certainty about the ability to develop within urban areas. Rather than attempting to regulate these different issues through a single set of principles, a future planning system should have separate principles for the natural and built environments, and clearly outline how to manage the interrelationship between the two. Yet, to support an integrated approach, these sets of principles should sit within a single resource management and planning statute.

The distinction between the built and natural environments will enable a future system to be clearer about its priorities, especially at a national level and in regard to land use and infrastructure. Clearer language in a new Act, and better use by central government of National Policy Statements (NPSs) and National Environmental Standards (NESs) will greatly reduce the indeterminacy that has troubled the current system and left the courts to resolve difficult issues. As discussed in Chapters 5 and 8, this problem reflects unresolved tensions within the RMA around the balancing of environmental and socio-economic interests. One area where the current system does adequately identify priorities is land transport management. A future planning system would benefit from applying elements of this model more broadly.

New mechanisms and models to overcome supply failure

A clearer statute and clearer direction and expectations from central government will push councils in high-growth cities to do more to meet the demand for development capacity. The recently published National Policy Statement on Urban Development Capacity is a step in the right direction. But these councils will need more help to meet the challenge of their rapidly growing populations. That help should start with:

- clear legislative purposes and objectives for the natural and built environments;
- principles to guide plan making, planning processes and decision making; and
- systematic, independent and timely reviews of plans.

In line with these objectives, principles and the reviews, plans should:

- have clearer and broader "development envelopes" within which low-risk and mixed development is either permitted or is only subject to minimal controls;

- only apply rules that offer a clear net benefit, where the link to externalities is clear, and where alternative approaches are not feasible;
- put greater reliance on pricing and market-based tools rather than rules;
- constrain attempts to force the creation of economic, social or environmental benefits through restrictive rules (eg, planning policies that attempt to promote density in the expectation that this will necessarily lead to higher productivity);
- recognise inherent limits exist to what land-use planning can achieve, and give greater room and respect to the decisions of individuals and firms;
- have broader zones that allow more uses;
- make less use of subjective and vague aesthetic rules and policies; and
- depend more on local evidence to support land use rules, instead of relying on heuristics generated from overseas studies (eg, assumptions that higher-density urban areas necessarily result in their residents behaving more sustainably).

To complement these improvements, a future planning system should:

- employ price-trigger mechanisms that credibly guarantee that councils will permit enough development capacity to meet demand at reasonable prices;
- deploy, where appropriate, urban development authorities to assemble and develop inner-city land at a scale sufficient to meet business, residential and mobility needs;
- enable councils to auction development rights as a way to achieve increased, but not excessive, inner-city density; and
- create competitive urban land markets that open opportunities for the private sector to invest in out-of-sequence community developments. These can sidestep land bankers' stranglehold on land supply and avoid additional burdens on councils for infrastructure.

More responsive infrastructure provision

A future planning system must enable high-growth councils to be more responsive in providing infrastructure. The Commission has found that shortfalls in infrastructure provision are a binding constraint on the supply of development capacity, and on the ability of councils to respond to growth pressures. Any future planning system should incorporate the following:

- Councils have greater ability and willingness to impose user and congestion charges, so as to encourage efficient use, help recover costs, and manage pressures on existing assets.
- A more extensive taxation toolkit to better recover the cost of growth infrastructure without burdening current residents. As well as existing tools (user charges, general and targeted rates), councils should have the power to capture a portion of the value created by development – via targeted rates on the *increase* in the land values of property owners. The base of all rates on property values should move over time to (unimproved) land value. This will enhance efficiency, generally improve equity, and prompt more banked land to be put on the market.
- A clearer statutory framework for water services, and improved procurement practices (including Public-Private Partnerships (PPPs) and shared-services models), so as to achieve greater scale, innovation and efficiency.
- Earlier recognition of the national spillover benefits of major city infrastructure proposals, and earlier engagement between central and local governments to explore constructive joint approaches (including cost sharing).

- A resolution of Auckland's debt constraint and threat of a credit downgrade. Options include raising more revenue, putting additional debt on the balance sheets of others, and negotiating higher limits with credit-rating agencies in exchange for assurances of creditworthiness and fiscal prudence.

Better planning and better-quality plans through spatial planning and reviews by independent hearings panels

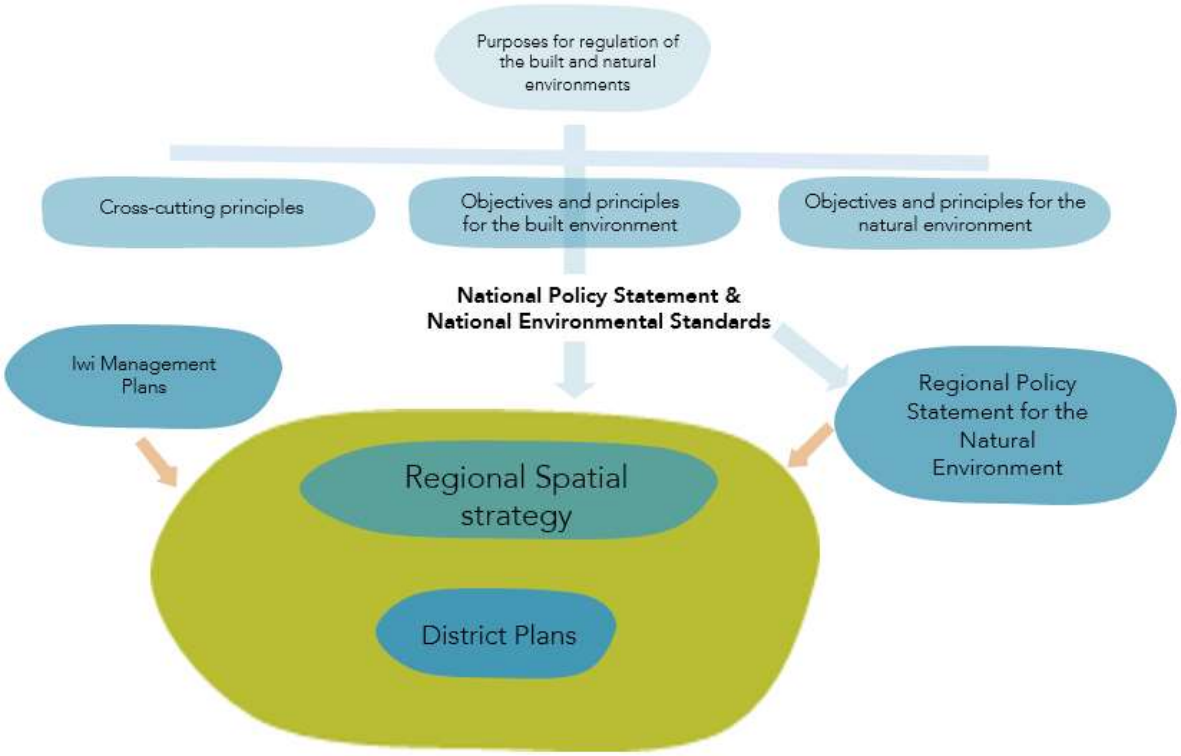
Land-use plans and planning processes under the RMA have frequently demonstrated deficiencies that cause inadequate responses to growth pressures. In a future planning system, plan making, plan review and rights of appeal should be substantially revamped.

Regional councils will lead the production of Regional Spatial Strategies (RSSs) that set out strategic land-use parameters stretching 30 to 50 years ahead in the case of high-growth regions. RSSs will define corridors that provide options for future infrastructure, future public open spaces, and areas of cultural significance and outstanding conservation value. Remaining land will be available for development. Territorial authorities, central government, iwi, developers and infrastructure providers will all participate in the RSS process.

RSSs will have a formal status so that district and unitary plans, transport and other infrastructure plans will be obliged to pay serious attention to them.

In the future system, each region will have a set of regulatory plans for the built and natural environments subject to the overall statute and national policies and standards (Figure 1). The RSS will be the platform for the suite of district plans within a region as well as for transport and other infrastructure investment planning under the LTMA and the LGA.

Figure 1 Land-use and resource-management plans in a future planning system



Alongside RSSs, regional councils will also take the lead in developing Regional Policy Statements for the Natural Environment (RPS-NEs). The RPS-NE will set protective limits for the natural environment in a region. It will have to give effect to any relevant NPSs and NESs and the new planning and resource-management Act. But it could set more stringent limits than called for in these documents, in line with regional needs and preferences.

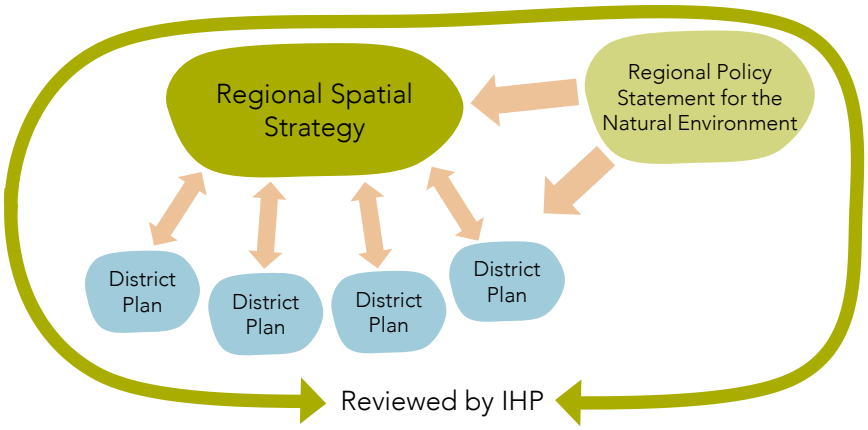
The RSS and district plans will be subject to the limits for protecting the natural environment set in the RPS-NE and higher instruments. Councils in a region will prepare and notify their plans, with inputs from

local communities, experts, iwi, central government and other parties. They will jointly "own" the RSS and jointly have oversight of how well each District Plan fits with the RSS and with neighbouring district plans.

The suite of notified regulatory plans in a region will be subject to a one-step merits review by an Independent Hearings Panel (IHP) that will:

- be appointed by an independent statutory agency;
- reflect the mix of skills, local knowledge and tikanga Māori required in each case;
- review the RSS, the RPS-NE and the district plans as a package (Figure 2); and
- have the final decision on merits of plans, plan variations and private plan changes, with appeals only on points of law to the Environment Court.

Figure 2 Plans subject to review by an Independent Hearings Panel



More representative, less rigid consultation

Consultation processes about land use rules would be less regimented in a future planning system, and councils would face higher expectations. Councils would actively seek to:

- encourage and enable people affected (or likely to be affected) by a decision, to participate; and
- understand the perspectives and interests of the full range of the community, not just those who take part in formal consultation processes.

Instead of having to use the prescriptive and rigid approach set out in Schedule 1 of the RMA, councils would have more flexibility to select the consultation or engagement tool most appropriate to the issue under consideration (Chapters 8 and 13).

Wider recognition and protection of Māori interests

Māori have a broad range of interests in both urban development and the protection of the natural environment (Chapter 7). So a future planning system should continue to include an expectation that councils will engage with Māori/iwi early in the development and review of Plans, and have clear provisions to ensure that engagement is possible. This future planning system should include the tools that currently exist in planning and other related statutes (eg, devolution and joint management arrangements), and in current planning practices (eg, the identification and protection of sites of significance to Māori and the use of cultural impact assessments). All RSSs, RPS-NEs, and district plans should include a chapter that recognises and provides for the active protection of Māori interests in land use and resource management.

To better address Treaty responsibilities and to even up progress across councils on their responsibilities, the Government should:

- give Māori a statutory role in the stewardship of the planning system through a National Māori Advisory Board on Planning and the Treaty of Waitangi; and

- provide clearer guidance (through an NPS on Planning and the Treaty of Waitangi) on the recognition and active protection of Māori Treaty interests in planning and the environment.

Stronger and different capabilities and culture within councils and central government

Changes in the statutory, institutional and governance framework for urban planning in New Zealand, along the lines proposed in this report, provide a basis for assessing what changes in planning culture and capability are possibly needed. Culture and capability issues hampered the successful introduction of the RMA, and are an ongoing constraint. This underlines the importance of aligning and building culture and capability for successful reform.

A future planning system would place greater emphasis on rigorous analysis of policy options and planning proposals. This will require councils to build their technical capability in areas such as environmental science, economic analysis, policy analysis and evaluation. It will also require strengthened understanding of the worldviews of mana whenua and other Māori communities and more effective engagement with these communities. A greater emphasis on critical thinking is needed among those involved in planning, requiring a deeper understanding of notions of substantiality, subsidiarity and negotiability (Chapter 14).

To carry out effectively the core function of planning, practitioners require "access" to a wide range of skills and knowledge, covering numerous professional disciplines and processes. This requires evaluation and mediation skills, a capacity to listen to and understand the knowledge, analysis and opinions of experts, and to articulate trade-offs among issues raised. This will put a premium on well-developed policy analysis skills. A key role of planning is to reconcile competing claims, information, and advice so as to reach a decision by "weighing and balancing".

Central government will also need to substantially improve its understanding of urban planning and knowledge of, and engagement with, the local government sector. It will be under a strong obligation to exercise effective regulatory stewardship of the planning system.

What benefits will a reformed planning system deliver?

The changes to the planning system that the Commission is recommending are substantial and far-reaching. Their impact would exceed the likely collective impact of the constant stream of piecemeal amendments to the RMA and the LGA that have occurred over the last 25 years. Yet, people who know the current system would recognise much in the future planning system (in its broad outline and philosophical intent) that the Commission is recommending.

The terms of reference specifically asked the Commission to take a "first principles" look at the planning system, and did not ask it to look at any transition from the present to a future system. Even so, one important question is whether the benefits would be worth the costs of making large legislative, organisational and operational changes? To help make that assessment, this section outlines the main benefits that the Commission believes a reformed planning system would deliver.

Development will be easier, less costly and the damaging land and house price escalation will end

Development capacity will steadily increase over time to match demand in high-growth cities. As it does, and probably beforehand in anticipation, land and house prices in such cities and across the country will stabilise (part of the correction could be a price drop). The increased capacity will provide a choice of housing types at different price points and densities to cater for a range of income levels and individual preferences. This is of critical importance to the effective functioning of the housing market, the economy and New Zealanders.

Demand-side factors such as net migration and the rules governing foreign buyers will also influence the correction in housing and land markets. The speed in realising these benefits will therefore depend on complementary measures in these areas and in the ability of the construction industry to grow its capacity.

Following correction, speculation in houses and land will no longer be a significant factor driving demand. This in turn will help to "normalise" investment behaviour, saving behaviour, and monetary policy.

Yet evidence is strong (particularly based on cross-city research in the United States) that supply-side restrictions are pivotal to explaining rapid land and house price rises well in excess of construction costs. These big price rises just do not happen in locations where planning rules enable an adequate supply response to rising demand (Glaeser, Gyourko & Saks, 2005)

Cities will develop and function to their full potential

New Zealand cities will develop and function significantly better under the proposed future planning system. When cities function well, they provide greater access to and choices of housing, and better protection of the natural environment and cultural values. They also provide greater choices of employment and higher wages, a wider pool of labour for firms, and more opportunities for specialisation, innovation and easier transfer of ideas – the engine of economic prosperity. Work and commerce aside, well-functioning cities are attractive spaces where people consume goods and services, play, and are creative. Such cities have atmosphere and amenity. They also acknowledge the special relationship of Māori with the land on which cities are built.

New Zealand cities will develop in less predictable and more interesting ways that will be a function of evolving preferences, technologies, and social, economic and cultural opportunities as well as other emergent factors.

Quality infrastructure

A future planning system will better support the supply of quality infrastructure at the right time in the right place. This will be the case particularly for the infrastructure normally supplied by councils – land transport and drinking, waste and storm water. Supply will be more responsive to demand and it will be better coordinated with land-use planning and regulation. This will stop infrastructure delaying the construction and supply of thousands of desperately needed new dwellings. Better transport infrastructure will improve mobility, the decisions of firms and workers about where to locate, and job matching between firms and workers. Better pricing of infrastructure services will mean less congestion, more efficient decisions by developers about where to locate, and less wasteful use of scarce resources. It will also help councils avoid unnecessary investment and debt costs.

A clearer process for central and local government to identify, assess and agree on large-scale "city-shaping" infrastructure works will help projects with wider spillover benefits come to fruition. Local authorities will make more use of innovative procurement methods such as PPPs (Chapters 10 and 11).

Better protection of the natural environment

High-value parts of the natural environment will be better protected through clearer objectives, principles and priorities, the use of a variety of instruments, and better monitoring of outcomes and enforcement of consents. The legislation will make clear that urban development needs to fit within these specified limits.

The clearer principles will help decision makers prioritise environmental issues when faced with scarce resources or conflicting objectives. For example, regulatory principles suggest that many policy levers to successfully *adapt* to climate change involve land use and are best tackled at district and regional levels (with national support and guidance), while effective policy levers to *mitigate* greenhouse gas emissions are likely to sit at the national level.

Better monitoring of the state of the environment, better central-government oversight of how well regional councils are discharging their regulatory responsibilities for the natural environment, as well as the greater use of science, economic instruments, and adaptive-management and real-options approaches will protect the parts of the natural environment most at risk from cumulative effects and other pressures. In contrast, the existing "predict and control" approach struggles to cope with the complexity and uncertainty of natural systems. This greater emphasis on adaptive management will yield clear benefits for the natural environment.

More efficient and effective plan making

Clearer statutory objectives and principles will guide councils to make better plans. The new approach with IHPs conducting a single-stage review of regulatory plans in a region *as a package* will produce better plans faster. Councils will also face the discipline of knowing that the IHP will test the joint coherence of their plans and the quality of each plan. The formal status of the RSS in the planning hierarchy, and the effect of the IHP review as a quality and consistency check across a whole suite of plans in a region, has the potential to reduce duplication, enhance certainty and cut costs across many dimensions and for many players.

The general public will continue to be able to participate in creating and reviewing land-use plans, but the ability to appeal the substance of those plans will be limited. Only appeals to the Environment Court on points of law will be permitted. The benefit of this change is to concentrate the review of plans to a single stage in the hands of a competent IHP. The IHP will make skilful use of experts and run collaborative processes to resolve conflicts.

Yet residents of regions and districts will benefit from improved opportunities to participate in plan making. This is because councils will be obliged to conduct more balanced and representative consultation on plans and understand the perspectives and interests of the full range of the community.

Mutual benefits to Māori and Pākehā from promoting Treaty principles in planning

In some areas of the country, councils and mana whenua work in constructive partnership on matters of the natural and built environments – in line with Treaty principles of partnership and respect between settlers and tangata whenua. It has produced some innovative and mutually beneficial arrangements such as the Waikato River Authority, albeit this emerged from a series of Treaty settlements with iwi associated with the river.

The changes recommended for a future planning system (a new Treaty NPS and a Māori Advisory Board), as well as improved capabilities in councils and iwi, will lead to more benefits of this kind. Māori will feel more understood and respected, and gain opportunities to influence features in the built and natural environments that they value. Pākehā gain from the greater cultural and physical diversity in their environment and from growth in the strengths and achievements of their Treaty partners.

Greater planning capability and skills, and effective regulatory stewardship

Learning from the mistakes of the introduction of the RMA, the implementers of a future planning system will take those involved in planning with them by providing training in:

- the principles of the new Act;
- the hierarchy of plans, including spatial planning; and
- the new processes for plan making, consultation, and partnership.

Planning practitioners will better understand the role of planning, how it can productively orchestrate the variety of other disciplines, business interests and community interests that go into the planning mix. Their skill in knowing which instruments work best in different situations and for different objectives will deliver outcomes closer to those desired and intended.

The better understanding of the planning workforce of how their decisions can make a difference to important problems (such as housing affordability and attracting skilled labour) will help to meet those challenges. In the Commission's survey of councils on the planning system, only about 20% of respondents felt that planning could positively influence either of these objectives.

Benefits will come from having the variety of central government agencies with an interest in planning and the environment organised much more effectively to exercise regulatory stewardship. Clear and capable leadership on the built and natural environments and their interactions will emerge. Stewardship will involve greater data collection, and the monitoring of outcomes and how well councils are performing their regulatory and planning roles. Central government will participate in the planning system in timely and

constructive ways when local opportunities and threats have national impacts. It will keep an eye on what is working and what is not, foster innovation and disseminate guidance on best practice.

Conclusion

Vibrant, high-performing cities change and evolve in unexpected and unpredictable ways. They require an urban planning system that is able to respond and adapt to these changes, rather than attempting to steer cities in particular, or precise, directions. The Commission's proposals for a future planning system are designed to provide this greater responsiveness, adaptability and dynamism in a number of ways, including:

- less prescriptive land use rules, creating more space for development within clear environmental limits and for local innovation and adaptation;
- higher-quality and more cohesive plans better linked to infrastructure supply that permit and prompt the supply of development capacity to keep up with demand;
- more use of market-based tools and infrastructure pricing, which signal to individuals and firms the efficient locations to develop, or times to use, infrastructure; and
- longer-term infrastructure and land-use planning based on adaptive management and real-options analysis, which explicitly factor uncertainty into the development and analysis of options and incorporate flexibility in the investment decision-making process.

The changes proposed in this report are also designed to provide better engagement and institutional alignment between central and local government, where they have common interests or common externalities. The Commission has previously noted difficulties in the relationships between the two levels of government, and called for more effective collaboration. This misalignment can be seen in the last 25 years of urban planning in New Zealand. Councils in many areas have sought to contain growth and infrastructure costs, rather than responding to demand. This has contributed to rising land and housing prices. A number of the current system's poor urban and environmental outcomes stem from long periods of neglect or absence by central government, particularly in the founding years of the RMA.

Under the new planning system proposed in this report, local authorities would continue to be the primary actors, but within a legislative and policy framework that clearly lays out the national interest in the development of cities. Such national interests include openness to change in land use, sufficient development capacity to meet demand, mobility of goods and residents, and development within specified environmental limits. Local authorities will be able to use a wider range of tools (eg, congestion charging, targeted rates that capture value uplift) to pursue these objectives. And local authorities will face fewer delays and less uncertainty that appeals and unduly rigid consultation processes create. In addition, central government will provide councils with closer and more constructive support, including regular participation in the process of making local plans, more effective monitoring, and more effective advice for local authorities considering more sophisticated infrastructure procurement approaches (eg, PPPs).

Reforms to the planning system's structure, legislation and institutions will not eliminate debates and disagreements about the system's operation. Conflict lies at the heart of planning; so differing views about whether or not a use of a particular piece of land is beneficial will continue.

However, reforms can improve how urban planning resolves these conflicts, by:

- being clearer about the system's purposes, objectives, principles and priorities;
- giving regulatory plans a more logical structure, and providing a timely, effective, and independent review of their quality;
- introducing less-regimented consultation processes about land use rules that would bring in the full range of interests and perspectives in the community;
- making sure that decisions taken are implemented with greater confidence, certainty and speed;

- ensuring that the planning system is a "learning system" that is responsive and has strong feedback loops; and
- creating a stronger relationship and interface between central and local governments.

The potential gains from making the substantial and far-reaching changes recommended by the Commission are very large. Few participants in the inquiry were happy with the current system, and many were strongly critical, believing the RMA had not worked as intended, or needed a substantial overhaul. Regulation of the built and natural environments touches all our lives. It affects the places we live and work, the recreational spaces we love to play in, and the special parts of New Zealand's natural environment we wish to protect. Getting a planning and resource management system that is fit for purpose has the potential to deliver access to affordable housing and well-paying jobs, in vibrant, dynamic and liveable cities, and in a country where the natural environment is cherished and protected.

As Harvard economist Ed Glaeser, says in his book *Triumph of the cities* (2011): "[C]ities are humanity's greatest invention, they make us richer, smarter, greener, healthier, and happier". To realise the potential of our greatest invention requires the best urban planning framework that we can devise. This report sets out the Commission's proposals on what such a framework would look like.

Annex: key differences between the current and future planning systems

Table 1.1 Key differences between the current and future planning systems

Current system	Future planning system
Scope of planning legislation	
• Planning legislation is broad in scope and lacks clear prioritisation. Urban issues do not have prominence.	• Planning legislation strikes a balance between the built and natural environments. • Clear statutory objectives and principles guide decision making. • For the built environment, legislation clearly prioritises enabling flexibility in land use, providing sufficient development capacity to meet demand and supporting the mobility of residents. • For the natural environment, legislation clearly prioritises safeguarding it.
Consultation	
• Consultation on land use rules must follow prescriptive, one-size-fits-all requirements of the RMA's Schedule 1. Consultation under the LGA and LTMA is more flexible. Unnecessary duplication exists in consultation requirements.	• Councils have more flexibility to select the consultation and engagement tool that is most appropriate to the issue at hand and to serve more than one purpose. Councils face clearer obligations to encourage and enable people affected, or likely to be affected, by a decision, to participate. And councils understand the perspectives and interests of the full range of the community, not just those who take part in formal consultation processes.
Recognition and protection of Māori/iwi interests	
• Expectation that councils will engage with Māori in developing and reviewing plans. A range of tools is available in statutes and planning practices to support engagement (eg, devolution, joint management arrangements, identification and protection of sites of significance to Māori, and the use of cultural impact assessments).	• The current regulatory framework and engagement tools continue. However, central government guidance on how councils should put legislative Treaty provisions into practice exists. • Plans and Policy Statements recognise and protect Māori Treaty interests in land use and resource management.

Current system	Future planning system
	• Māori participate in stewardship of the planning system through a National Māori Advisory Board on Planning and the Treaty of Waitangi. • Participants have a sound understanding of Māori interests and well-developed engagement tools and techniques. Iwi and councils positively affirm the opportunities and benefits of collaborating in the planning process.
Plan review and appeal rights	
• No systematic review of plans. Broad appeal rights are available through the RMA, including for third parties. Environment Court reviews those rules or provisions in plans that are appealed.	• New Plans and significant Plan changes are reviewed by an Independent Hearings Panel (IHP) that tests for plan quality, consistency with higher requirements and across related plans. IHP changes to plan provisions are final (ie, only appeal is to the Environment Court on points of law).
Participation in planning decisions	
• Public participation in developing new plans and plan changes, including appeal rights, is broad. Resource consent applications with "more than minor" effects are publicly notified.	• Public participation in the preparation of new plans continues, but appeal rights are narrowed (see above). Submitters on draft plans have the right to appear before the IHP. It remains possible to submit on publicly notified resource consents.
Land release	
• Price signals do not inform planning and infrastructure decisions. • Time-driven release of land is based on population projections, rather than market conditions. • Strong inclination to release new land for development only at the immediate margins of cities.	• The commitment to release land and control land price inflation is credible. Central government sets threshold outlining the maximum differential between the price of urban and non-urban land. • Developers are free to initiate out-of-sequence subdivisions anywhere on land projected for future city growth in the RSS, subject to taking care of infrastructure needs and respecting protected areas.
Central government's involvement in planning	
• Central government is largely absent from land-use planning decisions, but very involved (via the New Zealand Transport Agency) in land transport issues.	• Central government is more capable and better organised to steward the planning system, and provide national policy guidance and standards. It is also more involved in planning decisions with national spillovers. As part of stewardship, it monitors the planning system's desired outcomes (ie, flexibility, sufficient development capacity, accessibility, environmental priorities) and helps spread best practice.
Spatial planning	
• Spatial planning is a mostly optional tool, with weak legislative links to other planning processes. Some current plans are very broad in focus.	• Spatial planning is a mandatory and integrated component of the planning hierarchy, focused on issues closely related to land use (ie, the provision of sufficient land for development, public open spaces, areas of high cultural and conservation significance; water, transport and community infrastructure) and natural hazard management. • Spatial planning takes the form of a Regional Spatial Strategy that provides the platform for the suite of land-use and infrastructure plans in a region. The IHP reviews the RSS, land-use and resource-management plans as a package.

Current system	Future planning system
Infrastructure pricing, funding, financing and procurement	
• The supply of infrastructure is rationed, reflecting perceived difficulties in financing, recovering costs, and burdening existing residents. Limited supply is often the binding constraint to meeting demand for development in high-growth cities.	• Councils have increased ability to impose user charges and targeted rates to capture value uplift. Infrastructure pricing better balances efficiency and cost recovery. • Constraints on borrowing are eased. • Sophisticated procurement (eg, public-private partnerships) increases. Processes are in place for central and local government to assess and agree on large-scale "city-shaping" projects with national spillover benefits.
Management of the natural environment	
• Managing the natural environment relies on rules and "command and control" regulation, ad hoc environmental offsetting, poor management of cumulative effects, and uncertainty around adaptation to climate change. Interaction between central and local government is ineffective.	• Clearer protective limits exist within which development can occur. National policy statements and standards stipulate minimum environmental standards and which issues are important. Regional councils issue regional policy statements for the natural environment for the region. • Economic and market-based instruments are used more widely. The approach to cumulative effects is more flexible and adaptive. The data and assumptions on which to base the strategies to adapt to climate change are commonly known and cohesive. • Stronger multi-level governance is in place, based on a productive interaction between central and local government.
Culture and capability	
• Capability gaps exist in technical areas such as economics and environmental science. Critical thinking is weak. Except for a few pockets of knowledge, central government lacks knowledge of both urban planning and the local government sector.	• A greater focus on rigorous analysis of policy options and planning proposals is evident. Councils have greater technical skills in areas such as environmental science, economic analysis, policy analysis and evaluation. • A greater emphasis on critical thinking is evident, with a deeper understanding of notions of substantiality, subsidiarity and negotiability. • People in central government have a greater understanding of planning and the local government sector. • Councils have a strengthened understanding of the worldviews of mana whenua and other Māori communities and more effective engagement with these communities.

1 About this inquiry

Key points

- The Government has asked the Productivity Commission to inquire into the system of urban planning in New Zealand.
  - The main purpose of the inquiry is "to review New Zealand's urban planning system and to identify, from first principles, the most appropriate system for allocating land use through this system to support desirable social, economic, environmental and cultural outcomes".
  - The inquiry looks beyond the current resource management and planning system to consider fundamentally different ways of delivering urban planning and development.
- Many parts of the urban planning regime have existed for a considerable time and have evolved in a piecemeal fashion. International best practice has moved on. The changes taking place in, and the diverse nature of, urbanisation also raise the question of whether planning today remains fit for purpose. A fundamental review of the urban planning system is due.
- Well-functioning cities and urban areas matter a great deal to the living standards and wellbeing of all New Zealanders. As such, the issue of good urban planning is at the core of the Commission's mandate.
- Urban planning has a legitimate and important role in addressing distinct problems of urban development: negative spillover effects (externalities); the provision of local public goods; and coordination of investments in vital infrastructure.
- In examining different planning approaches and design attributes that should underpin a future planning system, the inquiry has assessed to what extent the following urban planning goals are likely to be achieved:
  - flexibility and responsiveness - ability to change land uses as required;
  - provision of sufficient development capacity to meet demand;
  - mobility of residents and goods to and through the city;
  - ability to fit land-use activities within well-defined environmental limits; and
  - recognition and active protection of Māori Treaty interests in the built and natural environments.
- Almost none of the many participants in the inquiry was happy with the current system and many had strong critical views on how the RMA had not worked out as intended, or is in need of a substantial overhaul. The proposals in this report for a future urban planning system collectively represent a significant change from the current arrangements.

Well-functioning cities and urban areas matter a great deal to the wellbeing of New Zealanders. When cities function well, they provide greater access to and choices of housing, better protection of our natural environment and cultural values, and the provision of quality infrastructure at the right time in the right place. Well-functioning cities also provide greater choices of employment and higher wages, a wider pool of labour for firms, and more opportunities for specialisation, innovation and easier transfer of ideas – the engine of economic prosperity. Successful cities are not only places where people work; they are also attractive urban areas where people consume goods and services, play, and are creative. Such cities have areas with atmosphere and amenity. Successful New Zealand cities should also acknowledge the special

relationship that Māori have with the land on which cities are built and provide "great spaces and places for Māori to be Māori" (Ngā Aho & Papa Pounamu, 2016a, p. 31).

But the growth of cities can also creates costs, such as pressure on vital infrastructure, congested roads and long commutes, the unavailability of affordable housing, and degradation of the natural environment. This puts a premium on good city organisation and planning where the advantages of urban growth and city living can be enjoyed and the costs and negative impacts can be effectively managed.

1.1 What the Commission has been asked to do

The Government has asked the Productivity Commission to undertake an inquiry into the system of urban planning in New Zealand. The main purpose of the inquiry is "to review New Zealand's urban planning system and to identify, from first principles, the most appropriate system for allocating land use through this system to support desirable social, economic, environmental and cultural outcomes" (Terms of Reference, p. 1).

The inquiry looks beyond the current resource management and planning system to consider fundamentally different ways of delivering urban planning and development. The aim is not for the Commission to draft new laws, but to set out what a high-performing planning system would look like. The scope of the inquiry includes the types of interventions, the funding arrangements, and the governance frameworks that are currently delivered by:

- the Local Government Act 2002 (LGA);
- the Resource Management Act 1991 (RMA);
- the Land Transport Management Act 2003 (LTMA); and
- elements of the Building Act 2004, the Reserves Act 1977 and the Conservation Act 1987 that relate to land use.

The inquiry should also consider: ways to ensure that the regime is responsive to changing demands in the future; how national priorities can be considered alongside existing local priorities; and what different arrangements, if any, might need to be put in place for areas of the country seeing economic contraction rather than growth.

Box 1.1 **Inquiry Terms of Reference**

The inquiry should cover three aspects.

- Background, objectives, outcomes and learnings from the current urban planning system in New Zealand, focusing particularly on:
  - how environmental and urban development outcomes have changed over the last twenty years;
  - the behaviour, role and capability/capacity of councils, planners, central government, the judiciary and private actors under the regime; and
  - the tendency for increasing complexity and scope creep of institutions and regulatory frameworks.
- Examination of best practice internationally and in other cases where power is devolved to a local level in New Zealand.
- Alternative approaches to the urban planning system.

The Terms of Reference note that many parts of the urban planning regime have existed for considerable time and have evolved in a piecemeal fashion. International best practice has also moved on, and a fundamental review of the urban planning system is due.

The Commission has previously considered urban planning issues in its inquiries into housing affordability (2012a), local government regulatory performance (2013), and using land for housing (2015a) inquiries. More broadly, it has also inquired into what makes for high-performing regulatory institutions and practices (2014b). Another Commission inquiry related to the present mandate is the inquiry into international freight transport services, which provides insights into what makes high-performing transport infrastructure. A large body of knowledge and evidence has therefore been accumulated that has informed the findings and recommendations of this inquiry into better urban planning.

1.2 The current planning system

The planning system is complex. It is governed by three main statutes –the RMA, the LGA; and the LTMA. The RMA is primarily a regulatory statute, while the LGA and the LTMA govern budgeting, service and infrastructure provision and planning. Each statute creates its own set of institutions, policies, processes and rules.

The level of complexity is also increasing. For example, the RMA was 382 pages when introduced in 1991, was 790 pages in the 2011 revision, and 827 pages in a 2013 revision. A host of other statutes also impact on the planning system, including the Building Act 2004, the Public Works Act 1981, the Reserves Act 1977, the Property Law Act 2007, the Unit Titles Act 2010, and the Local Government (Rating) Act 2002.

The purposes of the three principal planning Acts suggest that the main outcomes sought from the planning system are the maintenance of or improvements in environmental quality, the supply of local infrastructure and services in a timely and cost-effective manner and to desired standards, and the safe and reasonably easy movement of goods and people.

Urban areas include both built and natural elements. Given the focus of this inquiry on urban planning, the Commission has looked particularly at those environmental outcomes most closely connected to cities, urban development and land use. These include air quality, and drinking and recreational water quality. Yet many parts of the natural environment are intimately connected with cities because cities are places where nature continues to exist – waterways, trees, plants, birds, insects and their biodiversity intermingle with offices, houses, roads and other infrastructure.

Many people have an interest in good urban planning, including residents, central and local governments, businesses, homeowners, developers, planners, iwi, community representatives and environmentalists. The aspirations of potential future residents are also important. Each participant in the planning system has their own objectives, incentives and behaviours. The incentives may be aligned, but often diverge and conflict. In its 2013 report *Towards better local regulation*, the Commission found that increasing diversity and greater community expectations present difficulties for local authorities in reconciling different community interests and making decisions (NZPC, 2013a).

1.3 The changing nature of urban areas

Societies are increasingly urbanised. At the same time, both urban areas and the expectations of residents are constantly changing. A number of important trends are driving these changes, including:

- increasing international influences through communications, trade and travel;
- greater diversity as a result of increased national and international household and personal mobility (and, with this, a greater range of community and individual values, behaviours and interests);
- increasing disparity among groups within urban communities, marked by increased cultural and material differentiation between different parts of the city;
- higher levels of education and capacity to engage in public affairs through a multiplicity of channels; and

- higher expectations of public services (such as education, health and recreation).

The changes taking place in, and diverse nature of, urbanisation raise questions over whether planning today remains fit-for-purpose. Urban planning still seeks to apply long-held principles of conformity and control despite phenomenal urban transformation occuring.

The "first principles" mandate of this inquiry led the Commission to investigate the nature of cities, and the factors that contribute to their success (Chapter 2). Most of the benefits from cities are created by the innumerable decisions that people and firms make about where best to locate, trade and meet. As urbanist Jane Jacobs observed, the "point of cities is multiplicity of choice." Rising incomes and new technologies mean that these preferences shift over time. Land that was once best employed for manufacturing may now be ideally-placed for new retail, educational, hi-tech or residential uses. As a result of these wider social and technological developments, cities evolve in unexpected and unpredictable ways.

The challenge for this inquiry is articulating an urban planning framework that is not overly directive in regulating land use in New Zealand cities, and therefore is able to respond to a dynamic and unpredictable future and avoid suppressing the diversity, creativity and entrepreneurship that successful cities display. At the same time, such a framework needs to satisfactorily address distinct public policy problems relating to negative spillover effects (externalities), the provision of public goods, and coordinating investments in vital infrastructure (chapter 3).

1.4 Gathering evidence

The Commission's draft findings and recommendations have been informed by a comprehensive engagement process. The inquiry received 124 submissions on its issues paper and draft report from a diverse range of sector participants; including from councils, business groups, developers, planning academics, urban planning consultancies, planning and local government advocacy groups, infrastructure providers, and environment advocates.

The Commission has held more than 100 engagement meetings with a wide variety of interested parties offering a range of perspectives on the performance of New Zealand's urban planning system and how to improve it (appendix A), as well as presenting to a number of relevant conferences, and participating in a number of seminar and roundtable events.

The Commission met with leading urban planning thinkers to ensure that the inquiry is informed by the most up-to-date ideas. A study trip to Australia was undertaken (Brisbane, Sydney and Melbourne). Commissioners and inquiry team members met with State government planning and infrastructure agencies, councils, developers, academics, and leading planning consultancies.

The inquiry acknowledges the special relationship of Māori with the land on which cities are built. The Commission has actively engaged with a diverse set of Māori participants across the country, including benefiting from a Wānanga with Ngā Aho & Papa Pounamu (Māori urban designers and planners) along with follow-up workshops with this group. The Commission obtained a review of its draft report from Ngā Aho & Papa Pounamu. Further advice was also received from Professor Hirini Matunga (Lincoln University) in completing the final report.

The Commission contracted Colmar Brunton to survey councils on local-government perspectives on the urban planning system, key issues and areas in need of reform. This survey built on a similar survey by Colmar Brunton conducted for the Commission's 2013 *Better local regulation* inquiry.

The Commission is grateful to the many experts who provided advice and input on a number of specific policy and institutional design issues. These include Professor Hirini Matunga (Lincoln University), Associate Professor Kenneth Palmer (University of Auckland), Stuart Shepherd (Sapere), Dr Phil McDermott, Associate Professor Caroline Miller (Massey University), Marcus Spiller and Chris Lill (SGS Economics and Planning Pty Ltd, Melbourne) , Robin Oliver and Mike Shaw (OliverShaw), and David Campbell (ACIL-Allen consulting, Sydney).

Finally, the inquiry team reviewed a large volume of literature, including the literature on the economics of urbanisation, economic geography, organisational culture, urban planning and infrastructure, and the theory of complex adaptive systems.

Together, this evidence has provided a rich picture of New Zealand's urban planning system including its deficiencies and how these might be addressed.

1.5 The Commission's approach

Urban planning has a legitimate and important role. The three main rationales for urban planning are to:

- regulate negative external (spillover) effects of individuals' and businesses' land use on others and on the natural environment;
- make fair and efficient collective decisions about the provision of local public goods. The local, non-rival and non-excludable character of local public goods makes their supply by local government a logical option; and
- plan and implement investments in transport and water infrastructure, and coordinate these investments with land use and investments in other infrastructure controlled by other parties. The natural monopoly character of some local infrastructure services makes their supply by local authorities a compelling, but not inevitable, option.

For the purposes of this report, the term "urban planning" refers commonly to the planning institutions, regulations, principles, processes, formalities and tools that constitute the system for addressing these three distinct problems of urban development. These may include, for example, land use regulation, spatial planning, economic instruments, iwi management plans and infrastructure investment plans.

The nature of the institutional and regulatory design features of the urban planning system will, ultimately, determine its success in addressing these three distinct problems. Planning systems can vary in a number of important dimensions, including: 1) whether plans focus more on outcomes than on prescriptive, detailed rules; 2) whether land use regulations use directive, place-specific rules; or rules that simply prohibit types of effects on other property owners; 3) the distribution of responsibilities and powers between the central government and local communities; 4) the balance struck between local and national interests; and 5) the extent that plans are integrated (vertically and horizontally).

In examining different planning approaches and design attributes that should underpin a future planning system, the inquiry has assessed to what extent the following urban planning goals are likely to be achieved:

- flexibility and responsiveness - ability to change land uses as required;
- provision of sufficient development capacity to meet demand;
- mobility of residents and goods to and through the city;
- ability to fit land-use activities within well-defined environmental limits; and
- recognition and active protection of Māori Treaty interests in the built and natural environments.

The law and economics literature also provides helpful guidance as to how to assess the merits of different institutional and regulatory arrangements in achieving the above urban planning goals. Good arrangements minimise the sum of decision and error costs (Sunstein, 2008), and are sustainable over time – that is, able to adapt to changing goals and values over time.

Decision costs can include the time taken to collect and consider evidence, the expenses involved in obtaining expert advice (eg, lawyers) and running any decision-making body or process, and the costs resulting from delays in that process. For individuals, decision costs can also include the opportunity cost of time devoted to considering and weighing different options. Error costs are the social costs created when the decision-making process makes mistakes. Two examples are when the process makes "false positive"

mistakes (eg, regulating land-use activities that do not create significant externalities) and "false negatives" (failing to regulate activities that create major spillovers). Such errors can discourage beneficial activities or fail to adequately control harms (Baker, 2015).

1.6 Guide to this report

Chapter	Description
Chapter 2	*High-performing cities* – identifies the benefits that cities offer residents, firms, and the country. It describes why cities grow and the conditions needed for them to grow successfully. It discusses the contribution of local and national policies to successful city growth.
Chapter 3	*A rationale for planning* – explains what planning is all about – its nature, what problems it is trying to solve, its scope and the different forms it can take. It examines how land use regulation interacts with private property rights and the challenge of planning cities, given their unpredictable evolution and complex, adaptive nature.
Chapter 4	*Urban trends* – examines how the shape of New Zealand urban areas has changed over time, and how local policymakers have responded to population change. It places a particular emphasis on the trends observed in cities and how they differ across the country.
Chapter 5	*The urban planning system in New Zealand* – outlines the key features of New Zealand's urban planning system, assesses at a high level the system's performance against principles of good regulatory practice, and discusses some recent developments in the system's evolution.
Chapter 6	*Outcomes of the current system* – reviews recent developments in key environmental and urban outcomes, and considers the contributions made by the planning system.
Chapter 7	*Urban planning and the Treaty of Waitangi* – reviews how the planning system and its legislative framework recognise and protect Māori interests in urban and environmental planning. It describes evolving engagement of Māori in urban and environmental planning, and considers how Māori interests can be protected in a future system.
Chapter 8	*Regulating land use in the built environment* – discusses the use of regulation as an urban planning tool. It assesses the performance of current land-use regulatory practice against key goals, and discusses options for a future urban planning system.
Chapter 9	*The natural environment* – outlines desirable features of a regulatory regime for managing the impact of the built environment on the natural environment. It finds that adaptive management has the potential to better deal with uncertain future impacts and cumulative effects, and that a mix of approaches, including the use of market-based instruments, could be used to achieve environmental goals more efficiently and effectively than traditional regulatory approaches.
Chapter 10	*Urban planning and infrastructure* – focuses on planning urban infrastructure, and how infrastructure is an essential complement to land, in meeting demand for development. It finds giving spatial planning more formal recognition would lead to better integration between land-use planning and infrastructure supply. It recommends governance changes in water services and ways for central and local government to collaborate on major infrastructure projects with national effects.
Chapter 11	*Infrastructure: funding, financing and procurement* – explores the potential for local governments to achieve net benefits for urban development through better pricing, funding, financing and procurement of infrastructure. It finds scope to improve urban outcomes through these means.
Chapter 12	*Other urban development models* – examines how urban land markets and infrastructure supply can be made more competitive and so relieve constraints on development capacity, explores the role of urban development authorities in enabling urban regeneration and residential development, and discusses auctioning of development rights
Chapter 13	*Statutory framework, institutions and governance* – Sets out the legislative framework for the natural and built environments, the proposed governance arrangements for effective monitoring and enforcement of environmental regulation, including a proposed hierarchy of plans, and identifies what is required for central government to effectively carrying out its stewardship role of the urban planning system.

Chapter	Description
Chapter 14	*Planning capability and culture* – provides an assessment of the key forces that are driving culture and capability in the New Zealand planning system, identifies capability gaps at both central and local government level, and describes the skills and capability needed to support a future urban planning system as proposed in this report.
Chapter 15	*A future planning system: key recommendations and benefits* – indicates the most important changes that should be made in order to achieve a first-rate future planning system and the key benefits that such a planning system would deliver for New Zealanders.

2 High-performing cities

Key points

- Seventy percent of New Zealanders live in cities of over 50 000 people; one third live in Auckland. High-performing cities are essential for the wellbeing of New Zealanders.
- High-performing New Zealand cities contribute to wellbeing by:
  - providing more productive job opportunities and so raising incomes;
  - providing better learning opportunities; a wider range of cultural, recreational and environmental amenities; and a more attractive place to live; and
  - creating great urban spaces and places for Māori to be Māori.
- Cities provide productivity benefits to firms and workers. Some of these benefits emerge from people being in close proximity. Such benefits make a relatively modest, but not negligible, contribution to national productivity.
- Cities increase in size as a result of innumerable decisions that individuals and their families make, and that firms make, about where best to locate. The benefits of growth arise mostly from the complex and unpredictable collective outcomes of these individual decisions, and not from the deliberate choices of planners to promote urban growth and density.
- Factors such as climate, the attractions of an educated workforce and coastal amenities have driven urban growth in developed countries, including New Zealand, in recent decades.
- Changes in technology and consumer preferences and shifts in patterns of trade can cause urban populations to shrink. Undiversified urban areas that produce a narrow range of products are particularly at risk. Many small rural centres in New Zealand face declining populations.
- The growth of cities creates costs, such as pressure on infrastructure and the availability of affordable housing and development capacity. Growth can also bring increased pollution, crime and segregation of people across space by income.
- High-performing, well-governed cities manage the costs of growth while reaping the benefits by:
  - ensuring sufficient development capacity to meet demand;
  - effectively coordinating infrastructure investments with land supply and population growth (without over-investing in infrastructure);
  - managing congestion and pollution; and
  - ensuring development supports social and economic participation of residents from all areas of the city.
- Restrictive land-use regulations limit the ability of people to seek better employment opportunities in cities, are a barrier to potential productivity gains, and may create negative spillovers for the wider economy.

High-performing cities offer many benefits to residents. They provide a vibrant and rewarding place for people to live and work. High-performing cities need to get many things right. Effective land-use planning makes a vital contribution. Effective planning secures the advantages of city living, while managing the costs, all in a complex, evolving and unpredictable setting.

This chapter identifies the drivers and determinants of urban performance. It provides a context for discussing the rationale for planning (Chapter 3) and for identifying the legislative, governance and institutional arrangements that will deliver urban planning (Chapter 13). Later chapters discuss in more detail the issues briefly discussed here, such as the effect of restrictive planning on house prices (Chapter 8), and the provision of infrastructure (Chapter 10 and Chapter 11).

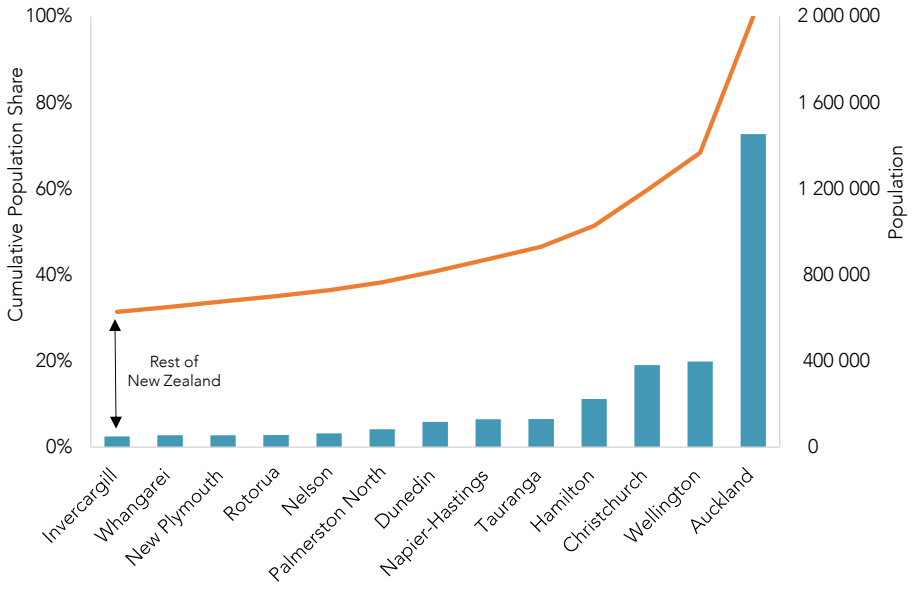
This chapter discusses

- the benefits of cities to their residents;
- the economic advantages of cities to regions and countries;
- why cities grow (and why some decline);
- what makes for high-performing cities that promote wellbeing; and
- interactions between local land-use planning and national policy.

2.1 The benefits of high-performing cities

Most New Zealanders live in cities. Roughly one-third live in Auckland. Some 38% live in cities with between 50 000 and 400 000 residents. The remaining 30% live in smaller centres or rural areas (Figure 2.1).

Figure 2.1 Distribution of New Zealand's population across cities, 2015



Source: Statistics New Zealand.

New Zealand's cities are small from a global perspective. Auckland's population was about 1.42 million people in 2013, a little under three times larger than the population of the greater Wellington region, but still much smaller than either Sydney (4.37 million) or Melbourne (4.18 million). Many of the world's metropolises are far larger still (Angel, 2012; OECD, 2015a).

City performance is important; first simply because a large proportion of the population lives and works in cities. Second, cities offer particular benefits from bringing people together, known as "agglomeration economies".

> Cities exist because there are economic factors that make it beneficial for firms and households to be located close to each other. For example, transport costs are lower if businesses operate within short distances … the incentive for a supplier to move to a particular location increases if there are more manufacturing plants at the location…business might [also] locate close to each other because it makes face-to-face meetings easier. (OECD, 2015a, p. 40)

The economic benefits of cities come from access to a larger supply of goods, people and ideas (Duranton & Puga, 2004; Lewis & Stillman, 2005). Cities provide gains from scale and specialisation; improvements in

the probability and quality of matching between firms and productive inputs; and learning based on the generation, diffusion and accumulation of knowledge.

Cities (in comparison to smaller centres) provide benefits by:

- having both diverse and more specialised labour markets, so that workers and firms find it easier to make matches that best use their skills and capabilities (Bertaud, 2014); and couples, for instance, find it easier to get jobs that suit each partner's skills and preferences;
- providing more scope for firms to specialise in production, and so increasing trade between firms;
- providing larger markets and so more scope for firms to benefit from scale economies;
- exposing firms to more intense competition from alternative producers;
- providing more opportunities for firms and workers to learn from each other about how to make the best use of current technology and the gains from using new technology;
- stimulating the development and spread of new ideas, technologies and ways of doing business;
- sharing the fixed costs of physical and social infrastructure (such as roads, ports, airports, water supply, sewerage, higher education, specialised medical care and local government) over a larger base; and
- supporting larger transport nodes that connect directly with more places.

These benefits also extend to more varied and more specialised cultural and recreational opportunities, and sharing the cost of recreational amenities. High-performing cities are attractive places to live for all these reasons, and because they have a vibrancy arising from past history and a myriad possible interactions among residents and the evolving elements of the cityscape (section 2.2).

Māori, as the indigenous people, have a special relationship with the land on which New Zealand cities are built (Chapter 7). Many Māori aspire to live in cities with "great spaces and places for Māori to be Māori" (Ngā Aho & Papa Pounamu, 2016a, p. 31). Successful New Zealand cities will provide such spaces.

Cities, labour markets and skills

Larger cities provide more employment opportunities and more specialised employment for workers (Bertaud, 2014). For example, larger cities do not just offer jobs for lawyers; they offer jobs for lawyers specialising in, for example, corporate and commercial law, intellectual property law, labour and employment law, environmental law and tax law.

Workers with specialised skills are able to provide greater benefits to the firms and people who use their services. This greater specialisation allows people who work in large cities to be more productive and, as a result, they earn higher wages on average (OECD, 2015a). Workers earn higher wages in large cities, even when they first arrive (though still not as high as workers who have worked in the city long term) (Glaeser & Maré, 2001). At the same time, a greater choice of workers increases the chances of firms finding the right match of skills to meet their needs. This also helps to raise a firm's productivity.

Over time the wage benefits of being in the city increase (Glaeser & Maré, 2001). This is because workers can take advantage of rich opportunities in large cities for training, joining networks and sharing knowledge. Cities speed the spread of ideas and technologies (Glaeser, 1998; Glaeser & Gottlieb, 2009). A vibrant market for skills encourages workers to invest more in their human capital (Rotemberg & Saloner, 1991). Even when workers move from a larger city to a smaller city, their big city experience is still reflected in their earnings (Glaeser & Maré, 2001).

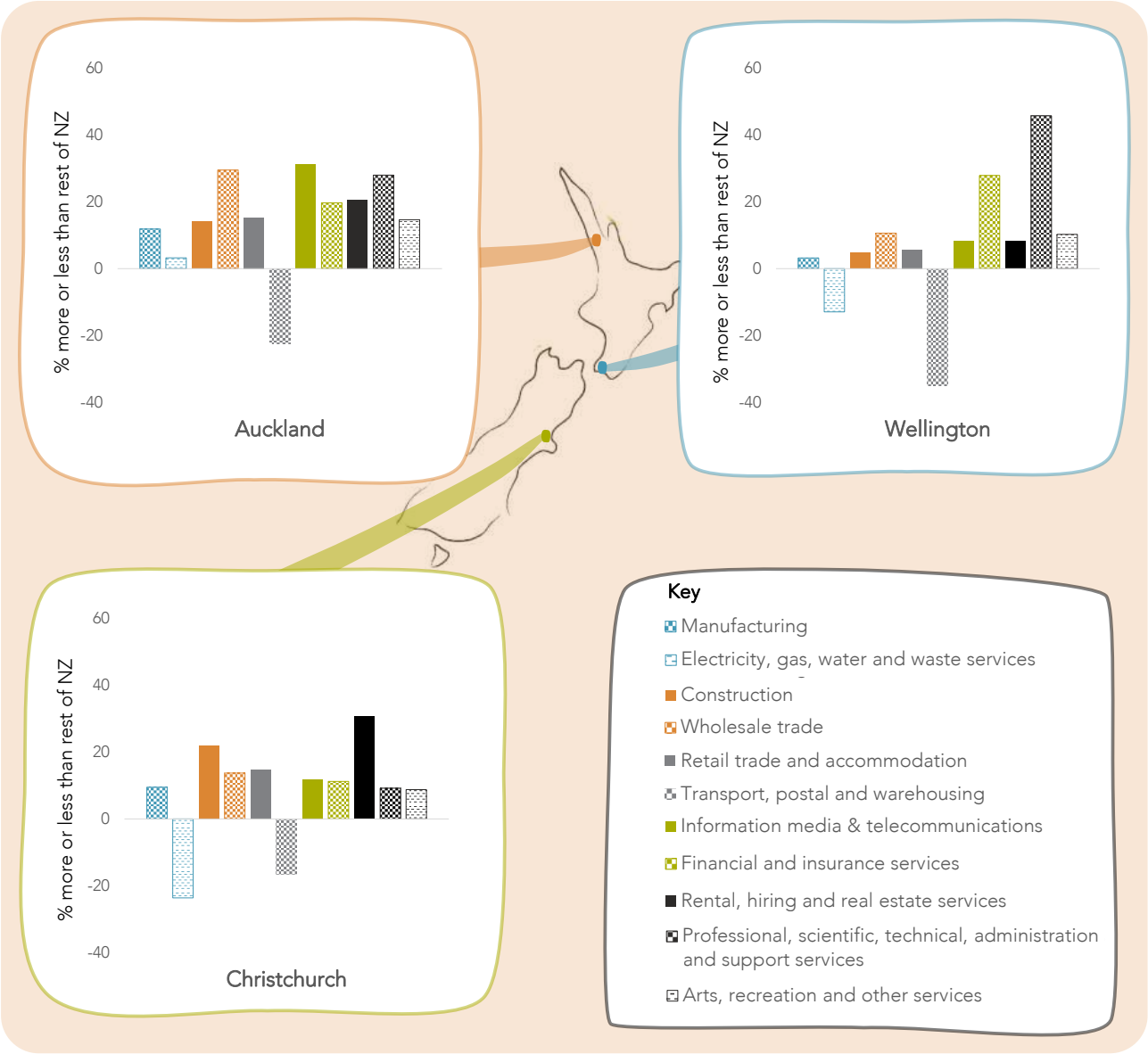
People with low skills may also benefit from locating in cities with many skilled people. Low-skilled people are attracted to cities and earn higher wages as a result, though they also face higher costs (section 2.3) (OECD, 2015a).

Knowledge-intensive services have been growing in importance in New Zealand and elsewhere. By 2014 they generated 20% of New Zealand's GDP (MBIE, 2014a).[2] Most are located in the main cities, particularly Auckland (Conway & Zheng, 2014; Grimes, Le Vaillant & McCann, 2011; Chapter 4).

The productivity advantages of cities

A wide range of research provides evidence on the productivity advantages of cities (Melo, Graham & Noland, 2009). Cities are more productive than other places, and larger cities tend to be more productive than smaller cities, not only because they attract more productive firms and people, but also because firms and people are more productive if they locate in cities.

Figure 2.2 Labour productivity in New Zealand cities, compared to the rest of New Zealand, 2012



Source: Productivity Commission analysis of Statistics New Zealand data.

Notes:

1. The charts show, for each city, the industry by industry percentage deviation in median labour productivity across firms, from that for the rest of New Zealand (ie, excluding Auckland, Wellington and Christchurch).
2. New Zealand has no regional price deflators, so part of the higher measured labour productivity in urban areas is due to higher prices in those areas rather than real productivity margins.
3. The chart does not include mining, agriculture, forestry or fishing, as the number of firms involved in these activities in Auckland, Wellington and Christchurch is small.

[2] MBIE (2014) used OECD definitions of knowledge-intensive services.

Figure 2.2 shows the higher productivity of New Zealand's biggest cities – Auckland, Wellington and Christchurch – compared to the rest of the country. Their higher productivity is due to a combination of:

- the composition of the industries that are located in cities;
- (within these industries) the movement of more productive firms and better skilled workers into cities; and
- the productivity benefits from firms and workers locating together in cities (agglomeration benefits).

Maré and Graham (2013), in a study of agglomeration effects in New Zealand, accounted for industry composition and more productive firms choosing to locate in cities. After allowing for these factors, they found that multi-factor productivity was an average 0.7% higher across industries for every 10% increase in employment density.[3] The productivity increase associated with a 10% rise in density was as high as 1.8% in communication services, finance and insurance, and property and business services.[4] These data compare with a median effect of 0.4% found by Melo, Graham and Noland (2009) in their meta-analysis of 34 studies of agglomeration economies.[5]

Yet the productivity advantages of larger cities should not be exaggerated. The research shows differences in productivity levels, not sustained differences in productivity growth rates. The possible effects on productivity levels of any feasible increase in city size in New Zealand are modest compared to overall national productivity growth rates.

For instance, labour productivity in New Zealand grew at an average rate of 1.9% between 1978 and 2012; while multi-factor productivity grew at an average rate of 0.8% per year. Labour productivity was 89% higher in 2012 than in 1978; multi-factor productivity was 33% higher (Conway & Meehan, 2013). Over the same period, the New Zealand population increased by 42%. Using the Maré and Graham (2013) result, agglomeration may have raised productivity levels by around three percentage points over this entire period, assuming population growth was largely in urban areas.[6] These data suggest that agglomeration will never be a major driver of productivity growth.

Fast population growth can slow productivity growth in cities

While larger cities have an advantage in productivity levels, productivity may, in fact, grow more slowly in a fast-growing city (OECD, 2015a). For instance, it takes time for migrants to settle, adjust to local conditions and get the productivity benefits of locating in a new country (Maani, Dai & Inkson, 2015). National policy that determines the rates and make-up of migrant flows also has an effect on how city population growth translates into effects on productivity.

In addition, it takes time for a city to develop land, provide infrastructure and build houses to accommodate a larger population. A planning system that responds flexibly and quickly will reduce the negative effects of a rapidly growing population on productivity growth.

Agglomeration benefits are the collective result of individual choices

The positive effects of agglomeration do not happen automatically. They are the result of the location choices of individuals and their families, and of firms. They weigh up the benefits and costs of the different locations they could move to, given what they know about these locations. A legal firm might decide to move to (or stay in) the Auckland CBD because it expects the central city will have a good supply of top legal people to draw on. The legal firm also expects it will be near people in other firms, the courts and legal

[3] Increases in multi-factor productivity (MFP) reflect better use of the inputs to production, in turn reflecting improvements in technology, production processes and business organisation. Increases in MFP also reflect the production of new goods and services. Maré and Graham (2013) use employment density as an empirical proxy for agglomeration. Other research uses different proxies, including, for instance, city size.

[4] Maré (2016) produces new estimates of the effects of agglomeration on productivity in New Zealand cities that take account of regional differences in price levels, and differences in competitive intensity.

[5] Melo, Graham and Noland (2009) made the point that the magnitude of agglomeration elasticities is likely to be context specific. There is no reason in theory to expect elasticities to be the same or even similar across different countries or industry mixes, or across cities with different configurations and infrastructure provision.

[6] This also assumes that the effects are proportional across cities of different size.

institutions it needs to meet face-to-face. A firm that is competing to be at the top of its game will be willing to bear the cost of locating in the CBD – just to get and maintain that edge.

A good lawyer might want to live within easy commuting distance of the CBD because it offers a rich choice of legal firms to work for and makes collegial interactions with other legal professionals and academics easier. The lawyer might also think about a location that will work for their spouse and children. Of course they will also weigh up what they can afford and might need to trade off house quality and location with commuting times.

Firms and people will choose locations based on what they believe will give them the best opportunities for success. Lots of different considerations come into play. Every person, family and firm has their own unique mix of preferences, perceived opportunities and means to realise them. In effect, patterns of agglomeration in a city like Auckland result from millions of individual choices, each weighing a range of factors and preferences, and collectively drawing on a vast array of information.

Just as importantly, these location choices are not made only once, or at the same time. They are made successively and are revisited from time to time. Individual choices shape the city, and in turn, the emerging shape of the city – who locates where, the cost and type of housing, where and which firms set up business, commuting times and modes – influences later choices.

The productivity benefits of cities reflect the location decisions of firms and workers. Yet broad measures of those benefits do not shed light on the particular advantages to firms and workers of chosen locations. In most cases, only the individual firms and workers know what motivated their choices. Only they know how their decisions turned out. This points to the importance of policy and planning practices that facilitate, or at least do not unduly hinder, people and firms making their own location choices. Simply increasing a city's population or population density, while ignoring or obstructing locational preferences, is unlikely to be effective in raising productivity.

F2.1 The benefits of agglomeration result from innumerable decisions of people and firms to locate in cities. Planners do not have the information on personal preferences, capabilities, production technologies and business relationships that would enable them to engineer agglomeration benefits. Policy and planning that facilitate people and firms making location choices based on their own information and judgement are likely to produce the greatest benefits.

2.2 Why do cities grow?

A successful city grows while contributing effectively to the wellbeing of residents. This section looks at the sorts of factors that influence a person's choice about where to live, the complex interaction of those factors, and the unpredictability of the outcomes of urban growth processes. This section shows that the main drivers of city growth have changed dramatically over time. Over-specialisation in particular industries and lack of people with skills increase the risk of city decline.

Cities are complex adaptive systems

Cities evolve as the result of millions of individual decisions (section 2.1). The ongoing interactions of individual decisions over time make cities complex adaptive systems. As people make decisions about location, lifestyle and business, the shape and character of a city changes in ways that they may not have anticipated. For instance, small changes in preferred locations catch on and over time lead to large shifts in the style and character of neighbourhoods.

The evolution of the city shape depends on what has come before. The outcomes of past locational decisions determine what is possible in the future. The urban fabric is long-lasting, though it can be put to new uses as tastes and technology change. For instance, New York grew large before the tram car and then the automobile made suburban travel convenient. New York has a very different layout to Los Angeles, which grew large after the advent of cars (Frost, 1991; Glaeser & Gottlieb, 2006). Yet both cities support

lifestyles that make similar use of modern telecommunications, social media, working practices and ways of doing business.

Theorists have used a variety of models to depict cities as complex adaptive systems (Read, 2012). Models include those developed from network theory; from systems dynamics; from theories based on biological forms that economise on the use of energy; and from fractal geometry, where complex patterns are generated from the repeated application of simple rules (Forrester, 1969; Portugali et al., 2012). Some researchers have discerned common broad patterns across cities that reflect efficient transport networks (Batty & Marshall, 2012; Hillier, 2012). Yet layout at the neighbourhood level has significant differences that arise from cultural preferences (Hillier, 2012).

Over the longer run, the collective outcome of the individual choices that shape a city is to a large extent unpredictable (Batty & Marshall, 2012). Previously down-market suburbs near the city centre have become popular choices for urban professionals over recent decades. Tauranga was only a medium-sized town of 2 700 in 1926, but is now New Zealand's fifth largest city with a population of more than 130 000. Dunedin was New Zealand's fourth largest city in 1926, with a population of 85 000. Yet it has grown only modestly since, being overtaken by Tauranga, Hamilton and the combined population of Hastings and Napier (Grimes & Tarrant, 2013). Some New Zealand cities have plans that promote increased density, but developers and their buyers have continued to opt for more traditional suburban layouts. A lesson from complexity theory is that no single agent or group can control outcomes.

F2.2 City form evolves largely as the result of complex interactions of individual choices about where and how to live and conduct business. Over the longer run, the outcome of these choices, in terms of where and how a city will grow, is unpredictable.

As early as the 1960s some urban theorists were viewing cities as complex systems and challenging then current practices, which assumed that planning could, in a straightforward way, determine the optimal shape of a city. For instance, Forrester (1969), one of the founders of modern systems dynamics, built a model of urban dynamics at the urging of the Mayor of Boston.

Alexander (1966) recognised that the complexity of "natural" cities arises from an "inner nature" or "ordering principle" (p. 3). He argued that the units forming a city comprise overlapping and hierarchically ordered sets. Such an arrangement leads to a far more complex set of possibilities than a system where sets are entirely contained within or entirely discrete from other sets. Alexander illustrates the potential complexity with interactions at a particular city street corner (Box 2.1).

Box 2.1 **A microcosm of urban complexity – a street corner in Berkeley, California circa 1960**

> [I]n Berkeley at the corner of Hearst and Euclid, there is a drugstore, and outside the drugstore a traffic light. In the entrance to the drugstore there is a newsrack where the day's papers are displayed. When the light is red, people who are waiting to cross the street stand idly by the light; and since they have nothing to do, they look at the papers displayed on the newsrack which they can see from where they stand. Some of them just read the headlines, others actually buy a paper while they wait.
>
> This effect makes the newsrack and the traffic light interactive; the newsrack, the newspapers on it, the money going from people's pockets to the dime slot, the people who stop at the light and read papers, the traffic light, the electric impulses which make the lights change, and the sidewalk which the people stand on form a system – they all work together.
>
> From the designer's point of view, the physically unchanging part of this system is of special interest. The newsrack, the traffic light and the sidewalk between them, related as they are, form the fixed part of the system. It is the unchanging receptacle in which the changing parts of the system - people, newspapers, money and electrical impulses – can work together. I define this fixed part as a unit of the city. It derives its coherence as a unit both from the forces which hold its own elements together and from the dynamic coherence of the larger living system which includes it as a fixed invariant part. *Source:* Alexander (1966, p. 3).

Writing at the same time as Alexander, Jacobs (eg, 1961, 1969) also recognised the complexity of cities and the advantages to residents arising from this complexity. Such complexity emerged spontaneously and organically from the bottom up. Like Alexander, she strongly opposed prevailing planning theory and practice – which intrinsically operated to reduce complexity.[7] Planning, according to Jacobs, should be the science of "organised complexity".

> …a growing number of people have begun, gradually, to think of cities as problems in organized complexity – organisms that are replete with unexamined, but obviously intricately interconnected, and surely understandable, relationships. (Jacobs, 1961, pp. 438–439)

Jacobs argued that understanding cities as "organised complexity" required:

- thinking about cities in terms of processes, where objects in cities can have radically different effects depending on circumstances and context;
- working from particular circumstances rather than from generalisations to identify the actual forces and processes that are relevant; and
- looking at small-scale examples for clues to understanding (for instance, examining how the differing business hours of branches of a bookstore chain reflect differences in neighbourhood pedestrian traffic).

Complexity brings advantages to cities that no person could plan for: "…lively, diverse, intense cities contain the seeds of their own regeneration, with energy enough to carry over for problems and needs outside themselves" (Jacobs, 1961, p. 448).

Jacobs later wrote of the benefits for innovation and entrepreneurialism that cities offer because of, not in spite of, their apparent inefficiency and impracticality. For Jacobs, the unpredictable cross-fertilisation of ideas across different types of businesses brought together by happenstance drove innovation. Proximity in cities facilitated the subsequent rapid spread of successful innovations. Together these processes underpin the economic benefits of cities (Jacobs, 1961; section 2.1).

The changing drivers of city growth

Over the long run city growth rates are generally independent of initial population levels (Angel, 2012; Glaeser, Ponzetto & Tobio, 2014; Chauvin et al., 2016).[8] Over shorter periods of time, city growth rates can sometimes be correlated with initial size. For instance, in the eastern counties of the eastern states of the United States, population growth in the 1960s was much faster in the counties that were initially more populous. Before the 1860s and after the 1970s, less populous counties grew more quickly than others. Over a 200-year period "few, if any, growth relationships remain[ed] constant" (Glaeser, Ponzetto & Tobio, 2014, p. 7).

The OECD (2015a) similarly reported that, across the developed world, most cities with more than 500 000 residents grew faster after 2000 than the countries in which the cities were located. Yet, in the previous 30 years the share of population living in areas with more than 5 million residents declined (p. 44).

Glaeser (2005a, p. 121) argued "long run urban success does not mean perpetual growth. Long run urban success means successfully responding to challenges." According to Glaeser, Ponzetto and Tobio (2014) "regional and urban change [over the long run] is best understood … as a set of responses by people and firms to large-scale technological change" (p. 33).

The advantages of agglomeration shift over time

While the long-term evolution of cities is unpredictable, location and geographic characteristics often explain the origins of particular cities (OECD, 2015a). Proximity to natural resources such as a harbour (eg, Auckland) or navigable river attracts early settlement.

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[7] Jacobs preferred solutions did not persuade Alexander (1996).

[8] This empirical regularity is known as Gibrat's law. There are exceptions over shorter time periods, and in developing countries where policy distortions and the rapidity of urbanisation may favour growth in smaller cities (as in China and India) (Chauvin et al., 2016).

The advantages of cities as a focus of economic activity have changed over time. The Industrial Revolution, and increasing agricultural productivity, spurred rapid urbanisation during the 19th century in Europe and the United States (Glaeser, 2005a; Glaeser, Ponzetto & Tobio, 2014; OECD, 2015a). Later in the 19th century, manufacturing firms attracted a large pool of labour to particular locations. At the same time, they located production close to consumers in already established cities. Reductions in the cost of transporting goods and the diminished role of manufacturing for economic growth has led to a changing role for most cities since the second half of the 20th century.

Increasingly, service industries drive growth in developed economies. This is certainly the case for New Zealand (NZPC, 2014a). Graham, Gibbons and Martin (2009) (for the United Kingdom) and Maré and Graham (2013) (for New Zealand) showed that the productivity benefits of agglomeration are greater for firms delivering services than for those producing goods. Conway and Zheng (2014) showed that this is particularly the case for services that can be traded at a distance and that firms producing such services are more likely to locate in Auckland than other New Zealand cities. It is the ability of cities to more quickly mix and match people and ideas that is now increasingly important. US cities with more educated workforces have experienced strong growth since the 1950s (Glaeser, Ponzetto & Tobio, 2014).

Glaeser (2005a) argued that skills and diversity make a city resilient in the face of changing economic tides (Box 2.2).

Box 2.2 **How Boston reinvented itself over two centuries**

Boston has "re-invented" itself three times since the start of the 19th century.

First, it redeveloped as the provider of "seafaring human capital for a far flung maritime trading and fishing empire". Then in the late 19th century it became a factory town built on immigrant labour and "Yankee technology". After 30 years of decline, Boston re-merged in the late 20th century as a centre of the information economy (p. 119).

The seeds for each reinvention were already present in the preceding period. As a maritime power, Boston also produced manufacturing goods that its ships carried overseas. Its financial services industry, developed around maritime commerce, helped source the capital required for expanding manufacturing.

Boston has always had strong educational institutions and a relatively well-educated workforce. "Boston's universities … meant that when America became an information economy, Boston would be able to capitalize on that transformation" (p. 147).

Source: Glaeser, 2005a.

Cultural and educational amenities and climate are attracting workers to cities

Cities are successful, not only because they provide good job opportunities, but because they are places that people want to live for other reasons (section 2.1). Glaeser and Gottlieb (2006) noted that cities like New York, Chicago, Boston and London had grown rapidly in the 20 years prior to their study. This was not only because of the increasing importance of cities for the knowledge economy but also because

> the desire of consumers to live in these cities has increased enormously as a result of changes in style of government, improvements in law enforcement technology and rising incomes that have raised demand for high-end urban amenities. (p. 1275)

Glaeser and Gottlieb (2006) noted that over these 20 years, real wages (taking account of living costs) had been falling in larger cities relative to other cities. This highlighted the importance of the other factors in attracting new residents. The authors presented evidence that demand for selected cultural and

entertainment amenities indeed rises with incomes and education. Florida (2003) also popularised the idea that successful cities create cultural and lifestyle opportunities that attract creative, well-educated workers.[9]

Grimes et al. (2014) looked at the drivers of long-term population growth of urban areas in New Zealand since 1926. They found that sunshine hours, human capital and proximity to Auckland drove growth, particularly since 1966. Suitability for agriculture of land surrounding an urban area was also important, given the large number of provincial centres and rural service towns in the sample.

A limited range of products increases the risk of city decline

The forces that drive city growth can unwind. European and US cities based on specialised manufacturing prospered in the late 19th century. Yet many experienced protracted decline in the late 20th century (see eg, Glaeser, 2005a). Detroit, based on car manufacturing and Pittsburgh, based on manufacturing steel, are well-known examples. Over-reliance on manufacturing a limited range of products contributed to the risk of decline. When new manufacturing technologies and business processes arise, or the changing economics of manufacturing favour new providers in different locations, or consumer tastes switch to new products, stagnation and decline can set in. Cities with a limited range of products are more vulnerable to demand and supply shocks (including technology shocks).

The young and educated are the first to leave a declining urban area, as they seek better opportunities in other cities (Chapter 4). The effects are cumulative. As people leave, some of the remaining economic activity becomes unviable, schools close, buildings fall derelict and resources to maintain infrastructure dwindle.

Many smaller provincial centres in New Zealand developed to provide services to farming communities. Over the last half century at least, farming technology and economics have changed. Many smaller holdings have been consolidated and the numbers of people living on farms has declined. At the same time, road transport links have improved and travel times to larger provincial centres have fallen. The reliance on local service centres has fallen as a result. A number of smaller rural service towns and provincial centres in New Zealand face population decline (Chapter 4).

2.3 Agglomeration costs limit the growth of cities

Urban areas with a desirable combination of amenities and earning opportunities relative to alternative locations are likely to grow. Transport links, social infrastructure and the benefits of location in a large population area contribute to earnings opportunities and amenities. As costs of living in a city rise and benefits relative to other cities reduce, growth will slow.

What are the costs of an increasing population?

First, more firms and more people put pressure on a city's transport infrastructure. A dominant advantage of modern cities is the mutually convenient access to jobs and workers they provide for residents and firms (Bertaud, 2014; section 2.1; Chapter 8). Across cities in developed countries a large majority of workers commute to work within one hour, with a median time of 30 minutes (Bertaud, 2014; OECD, 2015a). If prospective commute times are too long, people will choose to live elsewhere, look for another job, or drop out of the workforce (Kelly & Donegan, 2015).

The pressure on transport infrastructure is readily observed, but other infrastructure, such as wastewater treatment and the management of stormwater, can come under significant pressure too. When infrastructure is under pressure, a city's residents bear the costs either as negative effects – traffic congestion or an increased risk of flooding – or in the costs of upgrades or extensions to meet the increased demands on the city's infrastructure systems. Yet investment in infrastructure needs to be commensurate with expected benefits. How decisions are made to invest in new infrastructure is discussed in Chapter 10. The important question of who pays for new infrastructure (or upgrades to existing infrastructure) is discussed in Chapter 11.

[9] Glaeser (2005b) questioned Florida's conclusions about the particular urban form (dense) that would achieve this, or the role of Bohemianism in explaining city growth.

Second, even without regulatory barriers to expansion, increased population pressure and higher productivity raise the real value of land in cities. As a result, only the more productive firms and people who can afford the higher rents (or less productive firms and people who can charge higher prices, or command higher wages) choose to locate in the city. City residents face higher prices on average because of higher input costs (including labour costs and land rents) and their willingness to pay. Low-skilled workers in cities need higher wages than elsewhere to compensate them for the higher costs of living in a city. Even so, they may have a lower quality of housing (OECD, 2015a).

As land prices and other costs and congestion rise, some firms and some people will choose to locate elsewhere (Box 2.3). Over the last 15 years, more New Zealand residents have moved out of Auckland than have moved in, leaving for centres such as Tauranga and Whangarei and further afield (Chapter 4).

Box 2.3 **The challenges of business in Auckland**

Kinetics Group is an IT support and solutions firm based in Auckland and Christchurch. Founded in 1996, Kinetics won the Microsoft Worldwide Small Business Partner of the Year award in 2013, and has won the Microsoft New Zealand Small Business award six times.

Auckland's congestion and high land prices create two challenges for Kinetics – attracting and keeping skilled staff, and lost productive time. As founder Andrew Hunt notes, "when people in Auckland are choosing where to work, part of the decision includes the time and cost of travel". With house prices in central Auckland so high, a large number of employees live at the fringes of the city and face long travel times. Indeed, some Kinetics staff travel more than 40 000 km a year simply getting to and from work. The issue has become more acute for Kinetics in recent months, as the firm has started looking for new premises to accommodate expansion. Moving locations will mean longer travel times for some employees and risks "breaking the informal bargain about where they need to travel to work" made when people accept jobs in Auckland. In moving to offices that will better allow it to grow and serve its clients, Kinetics risks losing valued staff members.

The other challenge is the sheer amount of time involved in getting across the city, and the unpredictability of travel times. Long trips are "hugely impactful" on productivity – a one-hour journey into the city for a meeting and return trip effectively consumes 25% of the working day. Even getting to nearby clients can be a problem, with travel times for sites just down the motorway varying between 15 minutes and 50 minutes. To make allowances for unexpectedly longer trips, Kinetic staff have to block out time ahead of their journey – further contributing to lost productive time.

Source: Andrew Hunt, pers. comm., 23 March 2016.

Other costs arise from pollution (lower air and water quality) and higher rates of some sorts of crime that come with urban living (Kelly & Donegan, 2015).

Within cities, people tend to locate in different neighbourhoods, based on differences in income, education and ethnicity among other factors. (See Maré et al., 2012; and Chapter 4 for spatial segregation trends in Auckland and other New Zealand cities.) Spatial segregation of this sort can create various forms of social exclusion that have negative effects on the wellbeing of a person and their community (OECD, 2015a; section 2.4).

2.4 What makes a high-performing city?

A high-performing city balances the benefits and costs of agglomeration to provide opportunities for current and potential residents to achieve their goals. By doing so, a high-performing city effectively contributes to the wellbeing of its residents. Large and rich labour markets make it easy to match the right jobs to the right workers, and so raising productivity and real earnings. Residents have opportunities to learn both informally "on-the-job" from each other and in educational institutions. They have easy access to the cultural, recreational, and natural amenities they value. Despite variations in economic circumstances, all residents have an opportunity to participate in the collective life of the city in a way that is meaningful to them.

Good urban planning and policy underpin a city's success

According to Bertaud (2014) the fundamental challenge for city authorities, irrespective of city size, is to reduce the negative externalities associated with agglomeration in their cities, without destroying the wealth that agglomeration creates. "To do that, they must plan and design infrastructure and regulations while leaving intact the self-organizing created by land and labor markets" (p. 2).

Poorly organised cities can lead to a loss of potential agglomeration benefits. Firms cannot take advantage of a wider pool of workers available in a big city if the costs and time of getting to work or the lack of coordinated public transport infrastructure limit the areas in which people seek work (section 2.3; Box 2.3).

The OECD (2015a) noted that some large cities are actually just smaller fragmented labour markets. Low-income workers in particular may have effective access to only a small proportion of the suitable jobs in a city. Daley (2015) argued that people living on the fringes of large Australian cities are increasingly unable to access higher-paying jobs concentrated in the CBD as time and distance to work become insurmountable barriers.[10]

The problem is not just about poor transport links from the fringes of a city to the city centre. The high price of housing in Australian cities is due to land-use policies that prevent intensification of the historic suburbs surrounding the city centre. Intensification in these suburbs would increase the supply of housing closer into the CBD, lower prices and provide access to more productive jobs in the CBD.[11] Auckland faces a similar problem. Similarly, the potential solutions involve reducing barriers both to city expansion (with good transport links) and to intensification. If households are given a good choice of locations and housing types, their decisions will provide a useful guide to future development patterns.

These issues are examined further in Chapter 8, Chapter 10 and Chapter 11.

Traffic congestion detracts from the benefits of city life. Roads become congested and commutes are longer. But while commuting time invariably increases with city size, some cities handle their transportation challenges better than others.

F2.3 Well-performing cities provide an effective coordinated transport infrastructure that enables residents to get to work at a wide range of locations, at reasonable cost and in a reasonable time.

Urban planning to support social inclusion

As noted in section 2.3, spatial inequalities increase as cities grow larger. People on low incomes can afford to live only in suburbs far from jobs and the most valued amenities. Such suburbs, especially if public transport is poor, create social isolation and damage wellbeing (Nechyba & Walsh, 2004; Zhao, 2013; Kelly & Donegan, 2015).

The concentration of people with low incomes in particular suburbs harms their wellbeing over and above any individual socio-economic disadvantage they experience. For instance, schools in low-income suburbs bring together many students from disadvantaged social backgrounds. On average, students who are educated together with many disadvantaged peers achieve at a lower level than would otherwise be the case (OECD, 2015a). People growing up in neighbourhoods with many criminals are more likely to engage in crime over the longer term (Topa & Zenou, 2015).

[10] Daley (2015) commented that the difficulties of access to high-paying jobs in the centre of Australian cities by those living on the urban fringe is having an impact on women's participation in the labour market, with a concomitant loss of productive potential. The high price of housing in the inner suburbs has meant that young families are increasingly located on the urban fringe, making a return to the workforce after having children difficult. The problem is compounded by poor transport links and long commutes.

[11] The relationship between restrictions on increasing housing supply in inner-city suburbs and the cost of commuting for households on the city fringe has been analysed by Bertaud and Brueckner (2005). The authors measure the welfare cost of restricting housing supply through building height restrictions in the inner suburbs by measuring the commuting costs of those living on the city fringe. They estimate a welfare loss of about 2% of income, which they describe as a significant distortion, similar to the measured welfare cost of other key distortions in Western economies.

Residents in disadvantaged neighbourhoods are also at risk of greater exposure to polluting or environmentally destructive industries.

> Often this is a function of the availability of cheap land, a cheap and compliant labour force, and proximity of natural resources. The location of waste sites, including landfills, incineration facilities and long-term toxic storage sites can also visit environmental injustice on minorities and low-income communities. (Grinlinton, 2015, p. 43)

At the same time, people living in low-income neighbourhoods often have less access to green space in some countries, though this seems to be a lesser problem in New Zealand (Meurk, Blaschke & Simcock, 2013).

The collective social and economic resources of a low-income neighbourhood with high unemployment are much lower than in well-off suburbs. The options for relocating are also limited. This means that people in such suburbs have fewer effective means than others to make their needs and preferences known, and so to influence city policies (NZPC, 2015a).

The trade-off between house prices and proximity to jobs and amenities is one of the drivers of spatial inequalities and social exclusion. In turn, poor land-use planning practices makes this trade-off more acute. City governments can therefore reduce the severity of spatial inequalities through good planning.

Angel (2012) argued that the expansion of cities is inevitable, and strategies to contain them are both futile and harmful, particularly in terms of housing for the poor. He also argued that city density should be allowed to remain in a sustainable range, and that necessary land for public streets, public infrastructure networks and public open spaces must be secured in advance of development.

Chapter 6 discusses how development capacity has failed to keep pace with demand in major New Zealand cities. This has contributed to a significant deterioration in housing affordability over the past 25 years. The burden of this falls most heavily on low-income households who are much more likely to be spending more than 30% of their income on housing than high-income households. On this important criterion, New Zealand cities, particularly Auckland, have not performed well.

City governments can also ameliorate some of the effects of spatial inequalities by providing public amenities on an equitable basis in low-income neighbourhoods; and by supporting the development of community networks and service organisations.

F2.4 As cities grow bigger, spatial inequalities (the segregation of people across space by income) emerge. Well-performing cities can ameliorate this tendency and its effects, through good planning and infrastructure provision that limit land price increases. Higher land prices force low-income people to live in suburbs with long travel times to available jobs and desirable amenities.

Effective governance

Governance refers to the institutions and processes that a city has for making strategic decisions about the provision of infrastructure, services and public amenities, and land-use planning. Effective governance is a prerequisite for integrating land use with the provision of infrastructure and public amenities in a complex and rapidly evolving environment.

Yet governance arrangements that work well for a rural service centre of 5 000 people would not suit a city of 500 000, let alone a city of 5 million. Even so, governance arrangements across larger OECD cities are very varied (OECD, 2015b). This variety reflects history (eg, many large cities are an amalgam of pre-existing towns or villages), national policy contexts (countries devolve different functions and tax powers to municipal governments), culture and norms.

Despite the institutional differences across cities that make it difficult to undertake statistical analysis, Ahrend et al. (2014) reported, in a study of five OECD countries, that fragmented governance arrangements (the

presence of multiple municipalities) contributed to lower labour productivity in metropolitan areas.[12] The effect was mitigated by about a half if the metropolitan area had a metropolitan-wide governance body, at least for functions such as transport and other infrastructure. These results probably reflected the importance of coordinating land-use planning with infrastructure provision to increase the effective size of labour markets within cities. Cities with governance bodies across their area grew faster and had lower levels of air pollution (OECD, 2015a).

Yet, equally important are the formal and informal institutions that develop at a sub-metropolitan level that enable residents to engage constructively in working through contested development plans and policies (Chapter 3 and Chapter 8). The OECD (2015a) notes that levels of trust tend to decline as cities grow; and that promoting trust in local government through positive interactions with residents can make an important contribution to a well-functioning city. In particular, working through difficult issues requires time and effort and sometime recourse to legal instruments and institutions to resolve. If trust is higher between the parties, it is easier and less costly to arrive at sensible solutions.

F2.5 A well-performing city uses formal and informal institutions at a sub-metropolitan level that build trust and enable residents to engage constructively in working through contested development plans and policies.

Land-use planning and social and economic objectives

New Zealand local governments have a relatively limited range of functions and tax powers compared to their international counterparts. Yet many do take on a role in coordinating government agency and non-government responses to local social issues, or even provide funding to local service organisations (NZPC, 2015b). Social and economic objectives also often feature in long-term plans mandated under the Local Government Act and in other instruments such as the Auckland Plan. Many of the objectives are limited and within the scope of local authorities to influence – for instance through support for cultural events and the provision of recreational amenities. However, in some cases, the stated social objectives are very ambitious and largely the responsibility of central government to pursue. Chapter 3 discusses the appropriate scope of land-use planning.

Commentators sometimes urge local authorities to consider the potential effects of urban land-use planning on outcomes such as reducing obesity rates, carbon emissions or crime. Yet these issues are not central to the purpose of urban land-use planning (Chapter 3). From a national perspective, neither is urban land-use planning the best nor even a very significant policy instrument for improving many of the outcomes across this diverse range of issues (Chapter 5).

2.5 Coordinating local and national government policy

This section looks at how local and national government policies interact and influence the achievement of national and local objectives. A high-performing city requires effective co-ordination of national and local policies.

Most national policies, such as for education, health and policing services, have impacts on the wellbeing of city residents.

> Urban living is the dominant lifestyle in all OECD countries and shapes today's societies. Cities are mirrors of societies and often magnify the problems they face. As a consequence, almost everything that contributes to well-functioning societies also contributes to well-functioning cities. (OECD, 2015a, p. 55)

Yet most of these policies are outside the scope of urban land-use planning. This section instead focuses on the effect that local land-use planning has on the national economy.

[12] The existence of economies of scale and diseconomies of scale in the provision of metropolitan services is a related but separate issue. For a sample of Australian cities and for cities in the Hawke's Bay respectively, Drew, Kortt and Dollery (2015) and Kortt, Dollery and Drew (2016) found that diseconomies of scale in the provision of services set in at a relatively small municipal scale.

Land-use planning involves both central and local government in designing and administering regulation, with potential for misalignment (Chapter 5). How this plays out in planning for the built and natural environments is discussed in Chapter 8 and Chapter 9 respectively. Similar issues can arise in the provision of infrastructure (Chapter 10 and Chapter 11).

Local planning practice can have effects on the national economy

Planning practice that hinders urban growth (for instance, by pushing up land prices or reducing the effectiveness of city labour markets) can have strong effects on the national economy. As a result, the decisions that a city council makes about accommodating growth may be at odds with the interests of central government.

Spillovers from restrictive land-use regulation to the wider economy

The stock of residential housing, valued at about $768 billion, is the largest component of wealth of New Zealanders. Households also spend a significant share of their income on housing. Instability and poor performance in the land supply and development market can be transmitted to wider economic volatility and performance due to the links between house prices, credit availability, and household consumption and indebtedness.

Huang and Tang (2012) in a study of 300 US cities showed that restrictive residential land-use regulations and geographic constraints are linked to larger booms and busts in housing prices. Evans and Guthrie (2012) developed a model to determine what fraction of actual price changes observed in 95 US cities over the period 1995–2010 could be explained solely by observed changes in construction costs, disposable income, interest rates and population. A key question is whether cities with constrained development opportunities due to geography and land-use regulations experience much greater price volatility than less-constrained cities. They found that, for cities with relatively unconstrained development opportunities, housing prices could be predicted by changes in construction costs, disposable income, interest rates and population. Yet changes in these variables could not explain the boom and bust pattern observed in many other cities with constrained development opportunities. Importantly,

> [s]mall reductions in the long-run average level of the short-term interest rate and small increases in the long-run average growth rate in demand during the boom period generate large price swings in cities with constrained development opportunities, while leaving prices in cities with unconstrained development opportunities relatively untouched. (p. 1)

Volatile house prices created by restrictive regulation can affect macroeconomic stability through wealth effects. The owners of rapidly appreciating assets feel wealthier and may decide to spend some of these capital gains in advance. This happened in New Zealand during the house price boom of the past decade, which, in recent years, was driven in part by historically low interest rates. This effect remains a concern for the Reserve Bank as Auckland prices have risen rapidly again over the past few years. As the Deputy Governor of the Reserve Bank commented in 2014,

> house price increases could cause households to increase their spending, reducing savings and putting additional pressure on overall domestic demand. The OCR [Official Cash Rate] increases that commenced in March are aimed at countering emerging inflation pressures in general, but their success, or otherwise, in moderating housing related pressures will be key. (Spencer, 2014, p. 12)

Interest rate rises to offset increased domestic demand increase the cost of borrowing to businesses and may discourage investment. Higher interest rates also put pressure on homeowners with high debt levels relative to their incomes (eg, new owners) and it becomes harder for people to enter the property market. As a result, the wider community can end up bearing the costs of gains created by an unduly restrictive planning system.

In July 2016 the Deputy Governor further commented on the risks to the financial system,

> [w]hile housing demand has been strong, the housing supply response has been constrained by rigid planning and consent processes, community preferences in respect of housing density, inefficiencies in the building industry, and infrastructure development constraints around financing and resource consents. House price pressures have re-emerged in Auckland following an easing in late 2015 and have also strengthened across other regions. The longer the boom continues, the more likely we will see a

> severe correction that could pose real risks to the financial system and broader economy… A dominant feature of the housing resurgence has been an increase in investor activity, which increases the risk inherent in the current housing cycle. (Spencer, 2016)

The Reserve Bank is considering further regulatory measures to address these concerns. Yet, as the Reserve Bank noted, the underlying driver of higher prices is restrictive land-use regulation that prevents housing supply from responding efficiently to demand. Addressing this issue in Auckland is important for the health of the national economy.

Facilitating national labour mobility

Mobility of the labour force within and between regions and work locations helps to avoid labour market shortages and reduces the divergence in income levels between regions (Yates, Randolph & Holloway, 2006). Ganong and Shoag (2012) show that the decline in regional income convergence in the United States is due to a large increase in housing prices and housing regulation in high-income and high-productivity areas. Regulatory barriers indirectly make it harder for people from lower-income areas to move to higher-income areas and enjoy the better employment opportunities available in higher-productivity cities.

Hsieh and Moretti (2015) investigated how land-use regulation in the United States restricts labour market mobility. They argued that constraints to housing supply in high-wage cities price out workers who would be more productive by moving to take up the opportunities available:

> Constraints to housing supply reflect both land availability and deliberate land-use regulations. We estimate that holding constant land availability, but lowering regulatory constraints in New York, San Francisco, and San Jose cities to the level of the median city would expand their work force and increase U.S. GDP by 9.5%. (p. 34)

The authors conclude that restricting housing supply in dynamic labour markets imposes significant externalities on a country's economy. They also conclude that reducing regulatory barriers to increasing the supply of housing could increase a country's GDP.

F2.6 Well-performing cities provide benefits to residents and to the wider economy through the delivery of an adequate supply of development capacity for housing. Reasonably priced housing makes it easier for workers to move to locations and jobs where they can best use their skills; and to access other amenities that make cities attractive.

Chapter 8 discusses the challenges that high-growth councils face in releasing land for housing and providing for denser development of existing urban areas. Chapter 11 discusses the challenges they face in funding infrastructure to accommodate growth, whether through intensification or greenfield development.

2.6 Conclusion

High-performing cities provide sufficient land for development so that housing remains affordable. They provide infrastructure and public transport that allow reasonable commuting times, and other amenities that attract people to live there. High-performing cities have planning arrangements that enable them to succeed in a complex evolving environment with unpredictable long-term outcomes. An urban planning system needs to be open to change and growth, and able to respond flexibly to emerging developments. The rationale for urban planning and how it can respond to complexity is discussed in Chapter 3.

3 A rationale for planning

Key points

- Urban planning involves governments exercising coercive regulatory powers over land use. This is the most important difference between urban planning, and people and businesses making plans.
- The practice of urban planning covers different activities and objectives. The views and definitions on what is the essence of, and best approach to, planning are varied.
- Urban planning is justified if it yields benefits that exceed its costs relative to other options. Urban planning seeks to address three distinct problems of urban development:
  - to regulate external (spillover) effects on others and on the natural environment from the use of land by people and businesses;
  - to make fair and efficient collective decisions about the provision of local public goods; and
  - to plan and implement investments in transport and water infrastructure, and coordinate these investments with land use and investments in other infrastructure controlled by other parties.
- Private bargaining, and taxes or charges to make parties pay for damaging effects they impose on others, are alternatives to direct regulation of land use. They are appropriate in some circumstances, but in most countries and systems land-use regulation does the heavy lifting.
- All three main functions of urban planning interact with private property rights and can therefore create tensions and controversies. The tensions and controversies tend to be greater in regulating land use and investing in infrastructure than in providing local public goods.
- Land-use regulation should conform to the principles and practices of good-quality regulation in the interests of efficiency, effectiveness, innovation and fairness.
- Investment in local public goods and local infrastructure can enhance local economic performance and liveability, as well as raise property values.
- Land-use plans and planning systems vary in the following important dimensions:
  - the extent the plans focus on outcomes versus prescriptive and detailed rules;
  - the extent that regulations use directive, place-specific rules versus general rules that prohibit types of effects on other property owners;
  - the distribution of responsibilities and powers between levels of government and local communities; and
  - how well plans are integrated vertically and horizontally from the point of view of both administering agencies and customers.
- The type of plan and planning process selected should match the rationale for having them – either regulating land use, or facilitating and implementing collective decisions about local public goods and services, and local infrastructure.
- The complexity, diversity and unpredictability of cities raise serious challenges for urban planning beyond a certain point. Two broad responses that have merit are: (1) a few simple, non-directive, relational rules to regulate externalities; and (2) a collaborative, participative approach.

This chapter explains what planning is all about – its nature, what problems it is trying to solve, its scope and the different forms it can take. It examines how land use regulation interacts with private property rights and the challenge of planning cities – given their unpredictable, complex and adaptive nature. These topics are essential building blocks for the Commission's analyses, findings and recommendations about better ways to undertake urban planning in New Zealand.

Individuals and groups commonly make plans. The activity of planning – it could be a project plan, a savings plan, or a vacation plan - has the purpose of setting out a series of sensible steps to achieve a desired goal. The steps likely include actions that are within the control of the planner (the individual or group) and actions that will require cooperation and input from others. However, no coercion is involved; all actions are voluntary. Many actions will involve market transactions.

The plans of individuals and businesses are made in a decentralised and "bottom-up" manner, yet they rely on the coordinating capabilities of markets for their realisation. Markets, working well, have the striking ability to deliver outcomes without any central agent using a top-down grand plan to direct activities.

Urban planning is similar to and different from this sort of everyday planning by individuals and organisations. It is similar because urban areas are led by councils that make plans for how best to, for example, deliver goods and services, and invest in capital assets – just like any other organisation. It is also similar in that delivering on these plans relies on the existence of markets. But an important difference is that urban planning also involves the exercise of regulatory powers that are coercive in setting limits or requirements on how residents use their privately owned land (or conduct other activities such as driving or using public facilities).

This chapter begins by examining the problems that might require the tools of urban planning to generate solutions. One question is what problems provide reasons for the exercise of regulatory or other government powers (eg, setting rates and other charges) by councils? The chapter then examines the interplay and tensions between planning, regulation, property rights and allowing outcomes to emerge spontaneously from individual decisions and their interactions.

As Chapter 2 describes, cities are complex systems that are adaptive and unpredictable in how they evolve and develop. So this chapter also examines the debates among the proponents of different approaches to urban planning in the context of this characteristic of cities. Which approach is more likely to produce successful urban areas? The conclusions will inform future chapters on urban planning and specific topics such as housing, business growth, job growth, environmental management and infrastructure.

3.1 Rationales for planning in an urban setting

The practice of urban planning covers several different activities and objectives. In its issues paper for this inquiry (NZPC, 2015c), the Commission noted that views and definitions of planning vary widely (Box 3.1). The Commission received further views in submissions on the issues paper.

Box 3.1 **What is planning? A range of views and definitions**

A fellow of the UK Royal Town Planning Institute (RTPI), Kelvin MacDonald wrote that he is "unsure about what planning actually is" (2005, p. 25).

MacDonald offered two definitions:

> [Informally, a planner is a] post-modernist, moderator, politician, rationalist, advocate, realist, economist, critic, risk-taker, developer, healer, geographer, sage, critical thinker, environmentalist, urbanist, manager, technocrat, strategist, statistician, negotiator, economist, ruralist, deconstructionist, internationalist, administrator…
>
> [More formally, planning concerns] the better use of land, shaping space, community and safety, improving the quality of the environment, sustainable development, encouraging growth in the economy, housing, improving the historic environment, the best use of resources and quality. (p. 25)

The RTPI summarises the work of planners as "mediation of space – making of place" (2016).

The American Planning Association says:

> Planning means housing choice. Planning means safe communities and a better commute. Planning means communities of lasting value…
>
> When government officials, business leaders, and citizens come together to build communities that enrich people's lives, that's planning…
>
> Planners help government officials, business leaders, and citizens create communities that offer better choices for where and how people work and live. (2016)

Adams and Watkins in *The Value of Planning* (2014) say:

> A useful way to understand planning is to start by thinking about its broad purposes, in other words, to concentrate first on its ends rather than its means. At a high level, planning can be seen as helping to create the kind of places where people want to live, work, relax and invest, while acknowledging that different people will interpret concepts of place differently according to their own particular interests and experiences. … planning is a collective endeavour that is about more than the mere sum of individual interests. (p. 9)

Waikato District Council's stated in its submission:

> As indicated in the Issues Paper, planning should be 'place- and vision-based' in the sense of enabling the creation of places people desire to be in. Like Mayor Brown's vision for Auckland being the 'world's most liveable city'. The starting point should be a community-supported vision for developing great urban places. (sub. 2, p. 2)

While these views throw light on what planning is and what planning is for, they do little to explain the problems it is trying to solve and why some form of planning should be the preferred means. Yet to fulfil the inquiry terms of reference "to review New Zealand's urban planning system and to identify, from first principles, the most appropriate system for allocating land use" there is a need to clearly understand these two questions. The problem definition and how planning might help solve the problem are at the heart of the inquiry because the terms of reference also ask it to "look beyond the current resource management and planning paradigm" and "consider fundamentally alternative ways of delivering urban planning, and subsequently, development".

As noted in the chapter introduction, the exercise of coercive powers through regulation or other means is an important additional feature of urban planning compared to the everyday planning undertaken by individuals, families and businesses. It is appropriate to ask for a justification for the use of regulatory power. A convincing justification would be along the lines that the benefits of regulating outweigh its costs compared to the best alternative that does not involve regulating. Even where regulation may yield a net benefit, much will depend on the quality of its institutional arrangements and practices (see Box 3.3).

This section will examine three distinct problems that urban planning seeks to address, and whether its use, including the use of regulation, is likely to produce benefits that exceed its costs, relative to other options.

- Problem 1: In the course of urban development external (spillover) effects of individuals and businesses on others and on the natural environment are common. How can these best be managed and mitigated?
- Problem 2: How to make fair and efficient collective decisions about the provision of local public goods within urban areas?
- Problem 3: Urban development involves large investments in infrastructure, often by different parties and involving projects that are broader than the jurisdiction of a single local authority. What are the best arrangements to ensure efficient investment, including by reducing uncertainty and improving coordination between the various parties?

Problem 1 – spillover effects

Negative spillover effects occur when the actions of one person or business cause harm to another person or business without any compensation. In an urban context this could be property owner John extending his house to his boundary, and so blocking his neighbour Jill's sunlight and view. Other common nuisances that have local effects in urban areas are noise, fumes or risks of dangerous materials from an industrial activity, or the reduction of water quality in local streams and coastal areas from increased urban stormwater run-off (harming those who value natural amenity).

Economists have long recognised that free-market outcomes in the presence of negative "external effects" are often inefficient and sub-optimal. The root of the problem is that the person or business fails to take into account the harm their actions cause to others. The person whose new large building blocks an existing neighbour's sunlight does not pay for taking it. In contrast, if the person wanted a small strip of the neighbour's land for the edge of a new driveway, a reasonable negotiation including payment, would see both parties emerge feeling better off. This sort of outcome is possible ad likely.

The inefficiency in the sunlight case comes about because a negotiation between the parties (assuming neither could be coerced by the other) could make each better off relative to either the person taking no sunlight or the person taking as much as wanted with no compensation to the neighbour.

As noted by Dr Douglas Fairgray (sub. DR 109, p. 3) the number and intensity of negative spillover effects are likely to increase with greater urban density. Indeed, this is one reason why many people prefer to live in less dense areas.

> One critical issue is that urban economies are characterised by many externalities, which are driven by the co-location of private, business and government activity. In order to avoid negative outcomes, the effects of these externalities need to be examined at both the specific and the aggregate level, into the medium and longer term.

How could urban planning solve or mitigate the problem?

Three different government-led remedies could help offset the negative external effects in an urban setting.

- The first remedy is to instigate or let private bargaining (or a market) develop by clearly defining the relevant property rights (in the example given, either Jill has the property right to the sunlight she currently enjoys, or the right to block the sun belongs to John as owner of the planned extension). According to the well-known result of Coase (1960), either allocation of the property rights is likely to result in an efficient outcome (the taking of a certain amount of sunlight and a certain payment to the holder of the property right).
- The second remedy is to incentivise people's land use through a system of charges that will signal the harm that actions with external effects will have on others. The incentive will be just strong enough to restrain the action to an efficient level. The revenue from the "pollution charge" may or may not be actually paid to those adversely affected.
- The third remedy is to regulate land use by a system of urban planning that specifies permitted and prohibited actions. Effectively, the regulations are development controls that fetter the property rights of owners in the cause of limiting the harmful external effects of development. In practice, planning systems are based on a variety of principles, degrees of prescription, consent processes and appeal rights. The chapter examines this variation below. Yet a big part of almost any variant will focus on mitigating harmful external effects on neighbours, the natural environment or on populations more generally.

All three remedies are standard in the policy maker's toolkit. The first two are used to some extent in urban settings but have significant limitations. The third is used in nearly all urban environments.

The limitations of private bargaining are:

- its high transactions costs;
- the difficulties and controversies in defining just where property rights begin and end;

- possible power imbalances among the parties; and
- the great difficulties in negotiating and striking deals when the external effects harm many people at once.

Charges to reflect external effects are feasible and have been successful in dealing with some types of harmful emissions (eg, greenhouse gases), and to influence drivers to take account of the harm they cause to other road users through increased congestion. Yet, for some urban externalities, the costs of setting up, operating and enforcing a charging regime are likely to outweigh the benefits.[13]

The limitations of private bargaining and "pollution" taxes/charges have left the direct-regulation arm of urban planning to achieve a reasonable balance when the activities of residents cause harm to other residents living in close proximity.

Yet regulation is neither a tension-free nor problem-free solution. Situations in which direct clashes of interests occur between owners of neighbouring properties or between a business and a group of residents are common. Box 3.2 describes a real example. Further, discretion exercised by the regulator (planner) can have large distributional effects through changes in asset values. The discretion not only creates uncertainty, but also opens the door for contest, lobbying and litigation. This is understandable given that much can be at stake depending on the regulator's decision. The resources involved in influencing the decision can be large and would be better put to other more valuable uses if they can be avoided.

Box 3.2 **Mushroom farm odour stops prospective new housing near Havelock North**

Odour from an existing mushroom farm recently forced a rethink on how the Hawke's Bay settlement of Havelock North might expand. Landsdale Developments, a development company, requested Hastings District Council to change the zoning of 3.09 hectares of land on the eastern fringe of Havelock North and adjacent to the farm so the land could be used to develop up to 220 new houses.

A report by council staff said odour from the mushroom farm had always been identified as a potential constraint for the area, but it had been thought the issue could be overcome by using buffers, no-complaints covenants (meaning anyone moving to the area agreed not to complain) and an upgrade of the mushroom plant as required by the Hawke's Bay Regional Council.

However, following an expert report casting doubt on the likely effectiveness of these measures, the staff recommended that the rezoning request be declined. A major fear was the creation of "reverse sensitivity" defined as "the potential for the operation of an existing lawfully established activity to be constrained or curtailed by the more recent establishment of other activities which are sensitive to the effects of the existing activity".

Another potential solution would be to relocate the mushroom farm. This was not something the Council could require given the farm's prior existence and the property rights attached to that. Yet it would be open to Landsdale Developments to pursue private negotiation and come to a deal with the farm to relocate and so remove the source of the problem.

Source: Sharpe, (2015).

A common form of direct regulation in urban planning is zoning that aims to avoid negative external effects among adjacent land users by requiring incompatible activities to locate in separate areas. For example, chemical factories may be required to locate in a heavy industrial zone well away from residential zones. Sections 3.2 and 3.3 further analyse different approaches to planning regulation, including zoning, and how such regulation affects property rights and market-based decisions.

[13] Charges to reflect external effects are an example of "market-based instruments". Chapter 9 covers their use to tackle spillovers that cause adverse effects on the natural environment.

David Caygill, an Environment Canterbury Commissioner, told the Commission that while land use regulation is needed to resolve inevitable clashes of interests and values, it is not the cause of those clashes (pers. comm. 12 February 2016). Even so, it is important that the planning system has efficient and equitable means to address conflicts of interests and values (Chapter 13).

Problem 2 – providing local public goods

"Public goods" are goods or services with two specific characteristics:

1. the good or service is *non-rival*, which means that many people can benefit from it simultaneously (such as well-lit city streets, or sewerage systems that preserve public health); and
2. the good or service is *non-excludable*, which means that it impossible (or at least highly impractical) to exclude people from using and benefiting from it.

Given the second characteristic, it is not practical to charge users and, accordingly, private firms will choose not to supply it (except in rare cases)[14]. Like the problem of external effects, the challenge of producing public goods is a type of "market failure" of a private-enterprise, free-market system.

To be clear, services such as health and education are *not* public goods in the above sense. Both services require resource inputs in proportion to users, and it is entirely possible to disallow entry to school or medical treatment for failing to pay fees. So both services are *rival* and *excludable*. Yet governments may still wish to provide such services for equity reasons and because of wider social benefits.

The geographical reach of public goods varies – at one end of the spectrum, national defence simultaneously benefits all citizens of a country; at the other end, street lights in a suburban cul-de-sac benefit only the street's residents. Accordingly, *local public goods* are those with a relatively local effect across a region, city or town.

Local public goods include a broad spectrum of objects, facilities and endeavours that local governments provide and maintain on behalf of their residents for their enjoyment. Examples include parks, reserves, gardens, squares, public monuments and works of art, waterfront development, and the design and layout of streetscapes and pedestrian areas. These "goods" can contribute much to the social, economic, environmental and cultural character of towns and cities and to the wellbeing of their residents. Some submitters to the inquiry's draft report failed to appreciate that local public goods cover this broad set of amenities and consequently accused the Commission of taking an overly narrow view of the role of planning (subs DR 72, p. 5; DR 78, p. 2; DR 79, p. 2; DR 83, p. 8; DR 88, p. 2).

Local or regional councils are well placed through planning to provide local public goods

Because local public goods benefit many people at once, and are non-excludable, markets struggle to determine how many or how much of them to provide, or to raise the funds to pay for them. In contrast, markets do a good job of providing efficient quantities of private goods and in ensuring they are paid for – individual choice, willingness to pay and competition among firms in free markets are the keys to this.

The optimal quantity of a local public good occurs where the marginal benefit of one more unit of it would be equal to its marginal cost. For example, the marginal benefit of one more streetlight is the additional value it yields to all the people who benefit from it. This could be measured in dollars of "willingness to pay". To illustrate, among 1 000 users, 250 might be willing to pay $2 and 750 might be willing to pay $1. This would add up to $1 250. The streetlight should only be provided if it costs less than this. In addition, people could be "taxed" just enough to pay for it in proportion to their willingness to pay.

If all the users of the streetlight could get together and perform this calculation of marginal benefits and costs, the problem would be solved. Two obstacles stand in the way of this approach. First, the transaction costs of a large number of people getting together to undertake this sort of calculation, make a decision and

[14] Ronald Coase (1974) drew attention to one example that is consequently well-known among economists. Prior to a public lighthouse service, some British private insurance companies built lighthouses. It was in their interests to do so because it reduced shipwrecks among the ships of their clients, even though ships not insured with the companies were able to free-ride and also gain the benefit of the lighthouse service.

implement it are very high (although perhaps modern information and communications technology (ICT) and social media have somewhat lowered these costs).

Second, the tendency of at least some people not to reveal the true benefit they would obtain from the streetlight is likely to undermine a simple process of asking people their willingness to pay. Each individual could reason that their individual, willingness-to-pay (their "vote") is unlikely to make a difference to the decision (being only one person in one thousand). A rational response is to state therefore a zero willingness to pay. If the streetlight goes ahead (a decision out of their control), then they will get the benefit without having to pay. But many people behaving like this will lead to no streetlight being provided even though it may have a large net benefit.

The approach that is typically used to determine a community's investment in local public goods (eg, parks, reserves, streetscapes and sculptures, playgrounds, fireworks displays, foreshore and beach access) is to have the local council make the decisions. Essentially, councillors, often taking advice and informed by local government plans and public consultation, make decisions about the basket of local public goods they will invest in, on behalf of all residents.

Funding the costs of local public goods is also typically managed collectively. This is logical given the impracticality of asking people to honestly reveal their true willingness to pay. Councils typically take collective decisions on local public goods, accepting that the cost will fall on the local authority's budget - funded largely out of local rates and charges. It is accepted that this only imperfectly accords with the "benefit principle" of people paying according to the benefit they receive. It is also partly a system of taxation according to "ability to pay".

Some goods and services provided by councils, such as libraries and swimming pools, are partial public goods in that they are (mostly) non-rival, but their use is excludable. This gives councils the opportunity to require users to pay a charge. However, the revenue collected is mostly insufficient to pay the full cost of the good or service, with the balance coming out of general funds.

Local public goods create external (spillover) effects in the sense that, once they are provided for one person, they benefit many others. The external effects are positive rather than negative. Indeed an architecturally beautiful, privately owned building could provide these sorts of widespread positive effects in the same way as an attractive civic square or fountain. As indicated in Box 3.1, planners often describe their role as "place making" or "city shaping" or fostering high-quality "urban design". It is quite possible to regard each of these, done well, as local public goods – subject to the important caveat that the making, shaping or designing involves only public space and resources.

A planner or urban designer may well wish to require, or at least encourage, private owners to build to a high aesthetic standard because of the positive spillover effects, but they would then have stepped into a regulatory role. This is an important boundary. A related example is where the owners of historic buildings are required to preserve them for the value they represent to the community. An interesting question is whether the community collectively should pay the owners for providing and maintaining the positive spillover effects (or local public goods) arising from the buildings' valuable historical features and significance. This can be considered a reverse instance of "pollution charges" for negative externalities.[15]

Problem 3 – investments in major infrastructure

Infrastructure for essential services

Local councils typically invest in and maintain infrastructure that provides essential services for their residents. The most common are transport, water supply, stormwater and wastewater infrastructure. While it is difficult to generalise, private firms can sometimes fund investments such as these and provide services to customers and do it more efficiently and with more innovation. The existence of debate along these lines points to the need for a clear understanding of the pros and cons of the options for commissioning, funding and managing infrastructure services (Chapters 9 and 10).

[15] For instance, councils and governments sometimes provide such payments to owners of heritage buildings for their repair or earthquake strengthening.

The difficulty with leaving the market to supply infrastructure services is that they are often natural monopolies. Natural monopolies have large, upfront capital costs, low marginal costs of use and have the character of networks.[16] Having several competing road, rail or water networks is likely to be extremely costly and not in the long-term interest of consumers.[17]

The option of a single, private provider of infrastructure that is a natural monopoly is possible, but faces challenges. It would need to be regulated to avoid the inefficiency of monopoly prices and profits. And the regulation of a private monopoly provider is a major and difficult undertaking, and the outcome may be no greater or less efficiency and innovation than under a public provider.

A further challenge for private providers of some infrastructure services is charging individual users. As with public goods, charging directly for use could be impractical because the costs of excluding users who do not pay could be very high. Examples are local roads and stormwater services.

The option most commonly observed is a council or "council controlled organisation" (CCO) directly providing these infrastructure services. Potential problems with public provision are lack of consumer choice, low responsiveness to consumer needs, and poor incentives for productive, allocative and dynamic efficiency.[18] For example, public providers, lacking competitors, may not minimise costs, or invest or innovate in ways that maximise long-term benefits of consumers. Unresolved, these problems could result in poor-quality and expensive services.

CCOs such as Auckland Transport and Watercare are aimed at promoting efficiency through transparent measures of performance, requirements to run the business on commercial lines, and by putting business decisions at arm's length from political influence.

In addition to transport infrastructure and water, stormwater and wastewater infrastructure, residents and firms demand and depend on other essential infrastructure services. These include energy (electricity and gas), communications (fixed and mobile telephony, broadband, television and radio), education, health and social housing. As set out in Table 3.1, local governments (at least in New Zealand) are less involved in providing these types of infrastructure services. Yet, as explained in the next section, local government has a role in coordinating all types of infrastructure investment with land-use planning.

Table 3.1 Essential infrastructure services associated with land use

Infrastructure service	Provided or funded by (in New Zealand)	Natural monopoly?	Funding
Transport – roads, footpaths, cycleways	Local and regional councils; New Zealand Transport Agency (NZTA); construction by private contractors	Yes; strong network effects, low marginal costs when uncongested	Fuel taxes, road user charges, rates, bus fare subsidies, tolls (minor)
Public transport – rail and bus services	Local and regional councils; KiwiRail (owned by central government)	Yes; strong network effects, low marginal costs when uncongested	Passenger fares, central and local government investments and fare subsidies
Fresh water, stormwater and wastewater	Local and regional councils and/or their subsidiaries (known as CCOs - council controlled organisations)	Yes; strong network effects, low marginal costs	Users pay either via fixed water rates, or water metering of actual use

[16] Networks can be many-to-many (eg, road and telephone networks), many to one (eg, a sewerage network) or one-to-many (eg, fresh water supply).

[17] Networks competing side by side may drive prices down and give consumers a choice, but this scenario has significant downsides. The downsides arise because (i) marginal costs tend to be much lower than average costs, and so price competition will cause the individual networks to become commercially unviable, (ii) separate, smaller networks often have less value to consumers than larger ones, and (iii) strong scale economies mean that smaller networks are productively inefficient.

[18] Productive efficiency is achieved when goods or services are produced at the lowest cost of production. Allocative efficiency is achieved when goods or services produced correspond best to what people want. Dynamic efficiency is achieved when optimal decisions are made on investment, innovation and market entry and exit by firms to create productive and allocative efficiency in the longer term.

Infrastructure service	Provided or funded by (in New Zealand)	Natural monopoly?	Funding
Energy (electricity and gas)	Largely private provision, including by state owned enterprises	Pipe and wire networks are natural monopolies. Multiple, competing generators and retailers	Providers charge customers; natural monopoly parts subject to regulation under Part 4 of the Commerce Act 1986.
Communications (voice and data)	Private provision	Fixed network is a natural monopoly, owned by a structurally separate entity (Chorus). Multiple, competing retail and wholesale service providers.	Providers charge customers; natural monopoly part subject to regulation.
Education	Central government; some private provision	No; however specialised and expensive institutions such as universities are subject to economies of scale.	Central government taxation; student fees.
Health	Central government; some private provision	No; however specialised facilities such as hospitals are subject to economies of scale and scope.	Central government taxation; private-patient payments and insurance premiums
Social housing	Central and local government; some not-for-profits	No	Central and local taxes; rents; various not-for-profit funding sources
Ports and airports	Council and private provision via port and airport companies	Substantial degree of natural monopoly; some competition and some regulation under Part 4 of the Commerce Act 1986.	Equity investment by owners; user charges; profits from subsidiary activities (eg, commercial and retail landlord)

Coordinating infrastructure investments

The lumpy and irreversible nature of much infrastructure investment, and complementarities across different sorts of infrastructure and land use create difficult problems for decentralised, individual decision making based on market signals. One problem is the uncertainty created by not knowing if other decision makers are going to invest. For example, the returns to a potential investor in a possible resort complex in an attractive but isolated area may depend on the government co-investing in a large road upgrade and whether other operators decide to invest.

This situation creates a coordination problem. No investor will be keen to proceed without reasonable assurance that others will also invest. If one alone did, they would be at risk of having a "stranded asset" worth little if the others did not invest. They would also risk being in a weak bargaining position with other investors because of having committed a lot of money to an irreversible decision (a variety of hold-up and hold-out scenarios are possible). Government too can be at risk if they invest large amounts on transport and water infrastructure and then private developers do not go ahead.

When hold-up or hold-out situations occur, the delay to infrastructure investments can have significant negative consequences beyond the big players. Other urban actors (firms and households) are continually making their own independent location and investment decisions based on a host of complex factors, including the current and future availability of infrastructure in different areas. Unnecessary delays in infrastructure decisions create costly uncertainty and delay for many others.

Coordination problems of the type described create risks of over-investment and under-investment in infrastructure and the impairment of dynamic efficiency. Urban planning is a common way of attempting to overcome these coordination problems. Different approaches exist, some of which are likely to result in better outcomes than others.

The problems with a full free-market approach have already been noted. At the other end of the spectrum, it is well understood that directive central planning (by central or local governments) gives rise to other problems. For example, a central planner's decisions tend to be based on poor information. The information gaps are compounded by some parties having an interest not to disclose private information, and to indulge in various forms of gaming and rent-seeking.

Planning works best to solve coordination problems with large, complementary investments when it provides a process for "facilitated discussions" among the key public and private parties. Such a process can build relationships, facilitate information sharing and lead to a fuller consideration of different options. Together these are likely to reduce uncertainty, improve confidence and coordination, and the quality of decisions by the different private and public parties involved in major urban infrastructure and land-use investments (NZPC, 2012a, pp. 160–172).

Developing "spatial plans" is increasingly common among councils in growing cities and regions (NZPC, 2015a, pp. 276-282). As a process, it can take the form of "facilitated discussions". The council should lead the process, but not in a heavy-handed, overly directive way. Developers, transport operators, local firms, health and education providers, mana whenua and infrastructure investors, as well as residents, should all participate in developing a high-level picture of the city's future development. Chapter 10 further examines the merits of spatial planning, particularly as a means to better integrate infrastructure investment with land-use planning.

The rationales for urban planning: summary and review

In the Commission's view, there are three main rationales for urban planning.

- The first rationale is to regulate negative spillovers when people build structures and conduct activities while working and living in proximity to one another. Residents can cause negative effects on other residents. Businesses can cause negative effects on residents (and vice versa). Either residents or businesses can cause adverse effects on the natural environment.
- The second rationale is to make decisions about funding and providing local public goods to best meet the needs of residents. The local, non-rival and non-excludable character of local public goods makes their supply by local governments a logical option.
- The third rationale is to invest in and operate local and regional infrastructure to provide essential services for residents and businesses. The natural-monopoly character of some local infrastructure services makes their supply by local authorities a logical, but not inevitable, option. Where, in addition, some types of infrastructure are provided by others (private or public), local authorities also play an important role, through planning processes, to coordinate infrastructure investments with land-use development.

Each of the three rationales is distinct and important. Each is mentioned as part of the purpose of local government in the Local Government Act 2002 (as amended in 2012). Alongside enabling "democratic local decision-making and action by, and on behalf of, communities", the purpose of local government is "to meet the current and future needs of communities for good-quality local infrastructure, local public services, and performance of regulatory functions in a way that is most cost-effective for households and businesses." (Section 10 (1)).

Some participants in the inquiry have argued that the urban planning has broader purposes than the three rationales put forward by the Commission, namely promoting wider social, economic, cultural and environmental wellbeing (the "four wellbeings"). Ngā Aho & Papa Pounamu argue from a Māori perspective against an "effects-based" approach to planning, and for a "values and outcomes based approach".

They note (Ngā Aho and Papa Pounamu, 2016x, p. 45) that:

- Māori worldviews are holistic;
- it is entirely artificial, and therefore unreal, to separate people and economics from the natural world and environmental, social and cultural well-beings; and
- any such 'separation' will elevate private property rights above the right to exercise kaitiakitanga;

The Commission notes these views and acknowledges that others see a broader role for planning. Later in the report it recommends several significant ways in which a future planning system could better incorporate Māori perspectives and meet Treaty obligations (Chapter 7).

In addition, the Commission emphasises that the three of rationales for planning it sets out are each of fundamental importance to enhancing the four wellbeings. This was noted above in relation to the broad compass of local public goods. Dealing effectively with externalities is critical to protecting the natural environment, while infrastructure provides essential services that underpin economic and social wellbeing. After all, one of the original rationales for urban planning was resolving public health and hygiene problems created by people living closely together. The solution lay in new forms of urban infrastructure.

Yet several submissions argued that the planning system can and should do more to resolve social problems such as obesity, climate change, and inequality (Hill Young Cooper, sub. 6; Canterbury District Health Board, sub 11; Toi Te Ora Public Health Service, sub. 15; Auckland Regional Public Health Service, sub. 30; Regional Public Health and the New Zealand Centre for Sustainable Cities, sub. 35). For example, Brenna Waghorn commented that:

> [l]ocal land use planning can support the delivery of government policy objectives e.g. health, recreation, alcohol, obesity. Rather than being concerned that the scope of the planning system is expanding, the role that local government can play in joined-up policy and delivery should not be underestimated. For example while the council is not responsible for health policy, its local land use, transport and recreational planning can make a significant impact on the health of communities. (sub. 9, p. 2)

Councils can play a role in achieving a number of social, environmental and economic goals. However, as noted by Waghorn, this is best done in a coordinated and considered manner, alongside central government. The problem with current practice is that some councils appear to be taking on these roles in the absence of discussion with central government about relative responsibilities and the most efficient and effective allocation of them. Moreover, making these wider social, environmental or economic objectives formal priorities or responsibilities of the planning system – such as by including them in planning legislation – would risk creating inefficiencies and lack of focus in relation to the three rationales.

The Commission has previously noted the need to improve the coordination of local government and central government in developing policy, and provided a framework for considering how to allocate roles and responsibilities of local and central governments (NZPC, 2013 and section 3.3). To the extent that councils wish to play a more active role in resolving social and other problems, both central and local government should work through each issue by issue.

F3.1

The three main and well-founded rationales for urban planning are to:

- regulate negative spillovers when people build structures, work and live near each other;
- make decisions about the provision and funding of local public goods to best enhance the wellbeing of residents; and
- invest in and run local and regional infrastructure to provide essential services for local residents and businesses; and to coordinate different infrastructure investments with land development.

Local authorities in New Zealand and other countries very commonly address all three rationales through their planning activities. In the Commission's view a central focus of this inquiry is to examine *how* an urban planning system (in its legislation, regulations, institutions, culture and practice) can best address these rationales.

The next section examines tensions that can arise when using planning to address the three key rationales. Notable examples are the tension between land-use regulation and private property rights, and the risk that planning fails to strike the right balance with market processes and so suppresses market dynamism.

3.2 Planning, property rights, regulation and markets

Plan making, granting consents and resource management more generally are often marked by clashes of interests, disputes, and the need for processes (including the courts) to settle these. Major battles may rage for many years (eg, over residential densification). These clashes are mostly about the property rights of landowners or others. The parties can include business owners and groups representing specific or wider public interests. Clashes of rights or interests, but also enhancements to them, can occur in relation to all three rationales for planning: regulating external effects, providing local public goods, and the provision of infrastructure.

Property rights and the regulation of negative spillovers

All regulations involve the exercise of the state's coercive powers and set limits on the rights and freedoms of individuals, businesses and property owners. Pluralist democracies that place a high value on individual rights and freedoms avoid regulation limiting these rights and freedoms, except where less intrusive options yield lower net benefits.

Almost no property rights are absolute. For example landowners are not limited in what they can do, even strictly within their property boundaries. Farmers cannot mistreat their animals, use certain chemicals/sprays, discharge run-offs into local waterways, or perhaps allow their animals to wander in or near these waterways.

Landowners in cities and towns are subject to planning rules about plot coverage, building heights, access to services, and the use of their land and the buildings on it. The rationale for planning rules and regulations is to limit negative external effects on others while giving property owners certainty about what they can and cannot do on their properties.

The Commission in its 2014 report on *Regulatory institutions and practices* (NZPC, 2014b) developed a set of principles of good regulatory institutions and practices (Box 3.3). In this inquiry the Commission will assess the extent that land use regulation in New Zealand conforms to these principles and practices of successful regulation. It will ask what this regulation is trying to achieve, the extent it is needed (as opposed to more effective or less intrusive options), whether the regulation is efficient and proportionate (or is overreaching in its scope), and whether it is subject to appropriate consultation, monitoring, review and appeal procedures.

Unnecessary, overly prescriptive or overbearing regulation not only intrudes on individual rights and freedoms; it also risks adverse effects on the efficient workings of the economy.

- Regulatory systems that prescribe in detail the means that firms must use to reduce harmful emissions undermine the incentive for businesses to innovate to discover lower-cost and, potentially, more effective solutions.
- Land use regulations typically require businesses to apply for consents to develop land or operate businesses in certain places. These processes can be extremely time-consuming and costly. If so, they will prompt some investors and entrepreneurs to decide not to invest, or invest in another jurisdiction.

These potential costs point to the need for planning regulations and institutions to balance the objectives of regulation against respect for individual rights and freedoms, and with the objective of an efficient and vibrant local economy. A lot of value can be at stake. For instance, decisions about land use regulation can increase or decrease the value of land, such as when councils rezone areas from rural to residential or commercial use.

These decisions can lead to rising house prices if councils fail to ensure sufficient development capacity for new housing in the face of strong demand. Rising house prices have distributional effects because they benefit existing homeowners and disadvantage those who do not own their home.

Resolving clashes of interests is not easy. The trick is to have an urban planning and resource management system that eases rather than exacerbates those clashes without being any more complex or intrusive than necessary to achieve the outcomes sought.

Box 3.3 **Principles of successful regulation**

The Productivity Commission (NZPC, 2014b) reviewed much research and experience to identify the features of regulatory architecture, institutional design and practice that need to be present, and working well, for regulation to be effective and achieve its objectives.

Regulatory institutions need to be designed to provide:

- clarity of role – clear regulatory roles and objectives are critical to regulator accountability and focus, for compliance by regulated parties, and the legitimacy of the regulatory regime;
- an appropriate institutional form and degree of independence to enable the regulator to function as intended;
- good governance and decision-making arrangements, appropriate allocation of decision rights, including where and how discretion is exercised;
- appropriate mechanisms for the review of regulatory decisions;
- adequate funding; recovery of the costs of regulatory activities according to good principles; and funding mechanisms that do not create perverse incentives for either the regulator or regulated parties; and
- strong monitoring and oversight arrangements to ensure that regulatory agencies are effective, efficient and accountable and that regimes are working as intended.

To be successful, regulators need to have:

- regulatory practices based on a sophisticated understanding of risks, the regulated parties and changes in the regulated environment;
- organisational leaders that foster a culture of operational flexibility, adaptation to changes in the regulatory environment, continuous learning, and willingness to challenge and "speak up";
- capability across all levels of the organisation and a purposeful, structured and integrated approach to achieving a professional workforce;
- communication and engagement processes that promote the legitimacy of the regulatory regime; and
- the ability to fulfil regulatory objectives within constitutional and statutory requirements – such as appropriately considering in regulatory practice the principles of the Treaty of Waitangi.

Management of the overall regulatory system needs to have:

- systematic and cost-effective approaches to keeping the stock of regulation up to date, so ensuring that outcomes are still achieved, and unnecessary or inefficient rules are removed;
- information and tools to enable the centre to understand and better manage the whole system; and

- strong institutions and leadership, particularly from government but also from the legislature and the judiciary.

Source: NZPC (2014b), p. 3.

Local public goods, property rights and the market

The provision of local public goods may not directly impact private property rights or the success of the local economy. Yet, indirect effects are important and should be considered.

- Meeting the cost of local public goods usually requires the use of the coercive power of local government to raise local taxes. In New Zealand, this is the power to levy rates on local property owners. An excessive rate burden to fund high spending on local public goods could sap business resources, and drive away businesses and residents. Each business or individual will make decisions based on many factors, including the value they receive from the local public goods provided.
- Local public goods, because they provide desirable amenities in a specific location, typically raise the value of nearby properties (although sometimes they can decrease them because of crowds, noise and traffic congestion).
- Local public goods can provide indirect value to local businesses by making a city or town a more attractive place for people to live and work. Businesses benefit by having a greater choice of potential employees. This raises productivity because of better matches between firms and workers. A well-chosen set of local public goods might also help trigger agglomeration economies within a city, leading to a virtuous, productivity-enhancing circle of growth of high-value businesses, research activities and skilled people (Chapter 2).

Provision of infrastructure, property rights and the market

Central and local governments can impair property rights when they compulsorily acquire land for transport, water and other infrastructure. Western democracies and other countries heavily circumscribe such powers to limit the encroachment on property rights. Typically, laws require just compensation and the demonstration of a net public benefit in the exercise of such powers.[19]

Even where compulsory purchase is not in the frame, some types of infrastructure investments can have large negative spillover effects on neighbouring properties (eg vehicle, train or aircraft noise and fumes). At the least, affected property owners are important stakeholders in collective decisions about where and what infrastructure investments should go ahead. Mitigating the spillovers from infrastructure investments is a special case of regulating the negative spillovers from land use.

In contrast, properties served with good transport and communication services increase in value because this infrastructure has positive effects on productivity, incomes and economic growth (Grimes, 2014; Grimes & Liang, 2010; Serven, 2010). The resulting "value uplift" to property owners can be a legitimate source of funding for infrastructure (Chapter 11).

Section summary

All three planning functions (section 3.1) operate alongside and within a market economy. Planning does not replace markets, but complements and modifies them in areas where they are relatively weak (eg, collective goods and externalities). All three functions interact with private property rights and so create tensions and controversies.

In particular, land use regulation involves use of the coercive power of the state and so impinges on property rights. These rights are the basis of private investment decisions in a market economy and are intimately

[19] Well before a compulsory purchase of land, a planning authority may place "designations" or easements on land corridors to protect the option to purchase at a later date.

connected to its vitality and performance. A challenge for planning is to perform its functions without sapping entrepreneurship, innovation or the dynamism of markets in general.

Yet planning can also create and reinvigorate markets. For example, urban planning can open up areas for regeneration by the private sector, and it can reduce risks for capital markets by creating greater certainty (Adams & Watkins, 2014).

Planning may also protect people's collective interests in important ways. These include protecting ecosystem services (Chapter 9); the interests of residents who do not own property in living in attractive, convenient surroundings; and national interests that stem from the effects on the country as a whole of what happens in individual cities, towns and regions (Chapter 2).

The next section examines different types of plans and approaches to urban planning.

3.3 Types of plans

Urban planners at different times and places use different types of plans. This section describes some of the main dimensions in which plans can vary – creating a broad plan typology. Such a scheme can provide clarity about which types of plans are suitable to which tasks and rationales, and promote awareness of different planning philosophies that can lie behind – consciously or unconsciously – different approaches to planning. Differences of view about urban planning have a long history (Box 3.4). The dimensions covered are:

- Outcome / performance-based plans versus prescriptive plans
- "Rules for a made order" versus "rules for a spontaneous order"
- Top-down versus bottom-up planning
- Levels of plans and links between them.

Box 3.4 **Competing views about what is an ideal urban plan**

The earliest ideas of urban planning go back to the Greeks, and to Hippodamus (498–408 BC) who is widely credited as the inventor of formal city planning, and the system of dividing up cities into different parts for different purposes. The Hippodamian plan – a rectangular grid – called for a neatly arranged, ordered, organised city of lined-up wide streets. Indeed, Hippodamus is credited with creating the division of public, sacred, and private land. That division is the earliest example of the practice we now know as zoning. But, as is the case today, opinions differ fiercely about how to conceive and evolve urban forms. For example, even Aristotle was a strong critic of Hippodamus' idea of straight streets and a gridded layout. Aristotle preferred a city of curves, twists, dead ends and unorganised streets. Such a layout makes it much harder for a stranger to navigate, and so serves as a protective measure. In Aristotle's words:

The arrangement of private houses is generally considered to be more sightly, and more convenient for peacetime activities, when it is regularly planned in the modern style introduced by Hippodamus. For reasons of military security, however, the very reverse is preferable — they should follow the old-fashioned manner, which made it difficult for strangers to make their way out and for assailants to find their way in.

Source: Aristotle, *Politics*, n.d.

Outcome/performance-based plans versus prescriptive plans

Plans vary in the extent they specify the effects or outcomes they seek versus the detail of what needs to be done, where, when, how and by whom to get there. *Outcome-based* or *performance-based* plans do not

need detail on the intermediate steps to achieve the desired outcome or level of performance. *Prescriptive* plans specify the detailed steps.

Both approaches to planning have strengths and weaknesses. Their advantages depend on:

- the ease in defining and measuring desired outcomes;
- the degree to which planners/regulators and those regulated trust each other;
- the diversity within the sector or industry;
- the capabilities of regulators and those regulated; and
- the extent that standardisation is desired or required.

In practice, *outcome-based or performance-based plans* will include some prescription or guidance, and prescriptive plans will be based on some underlying desired outcomes.

In the context of land-use planning, outcome-based plans give greater freedom and flexibility to the parties – council staff, developers, entrepreneurs and residents – to find their own way to achieve the outcomes. This is important in a complex, shifting environment. Outcome-based planning has economic-efficiency benefits because the regulated party will have the incentive and the opportunity to choose the least-cost means to achieve the outcome. This includes innovative approaches that others could then adopt. Participants may also achieve a greater sense of ownership and control that can drive better performance and outcomes.

Prescriptive plans are perhaps easier to administer, monitor and enforce, and create greater certainty, particularly when outcomes are difficult to observe and measure. For example, a zoning plan defines in detail the permitted and prohibited land-use activities of private agents in those zones. Prescriptive plans can be more practical when levels of trust between the regulator and regulated parties are low or capabilities are weak.

Even when plans vary in their prescriptiveness regarding means, they should be clear on their objectives. A city engineer's plan to build a new sewage treatment plant to meet the needs of population growth has a specific objective, but will also require the detailed spreadsheets and workflow tools of project management. An outcome-based plan to achieve specific noise-level or air-pollution outcomes also has a very specific goal but no detail on how to achieve them.

A high-level, strategic and aspirational plan could aim to get the agreement and cooperation of various parties that have an interest in the medium-term future development of a city or region. The parties could be a mix of local and national government agencies as well as residents, private developers and other businesses. A *spatial plan* is the solution that some cities and regions use to promote transparency about what the future might look like. It reflects what the various parties have in mind given the interdependence between their individual plans and actions, the need for confidence to invest, and the risks of coordination failures. The Ministry for the Environment has described spatial planning in the following terms:

> A 20–30 year strategy that sets the strategic direction for a community and which serves as the basis for the coordination of decision-making, infrastructure, services and investment. It is a means of aligning other council plans. A spatial plan provides a visual illustration of the intended future location and mix of residential, rural and business areas, along with the critical infrastructure required to service those areas and any relevant environmental constraints (for example, hazards or areas that need to be protected from development). (MfE, 2010, p. 72)

Spatial plans are a mix of high-level, strategic directions and desired outcomes, and concrete plans for key pieces of infrastructure (particularly for transport connections). In New Zealand, spatial plans do not have regulatory force (except in Auckland under the special Auckland legislation). The regulatory implications of a spatial plan will typically be picked up in a lower-level "rule book" consisting (in New Zealand) of regional, district or unitary plans under the Resource Management Act 1991 (RMA). Chapters 10 and 13 further discuss spatial plans.

Rules for a made order versus rules for a spontaneous order

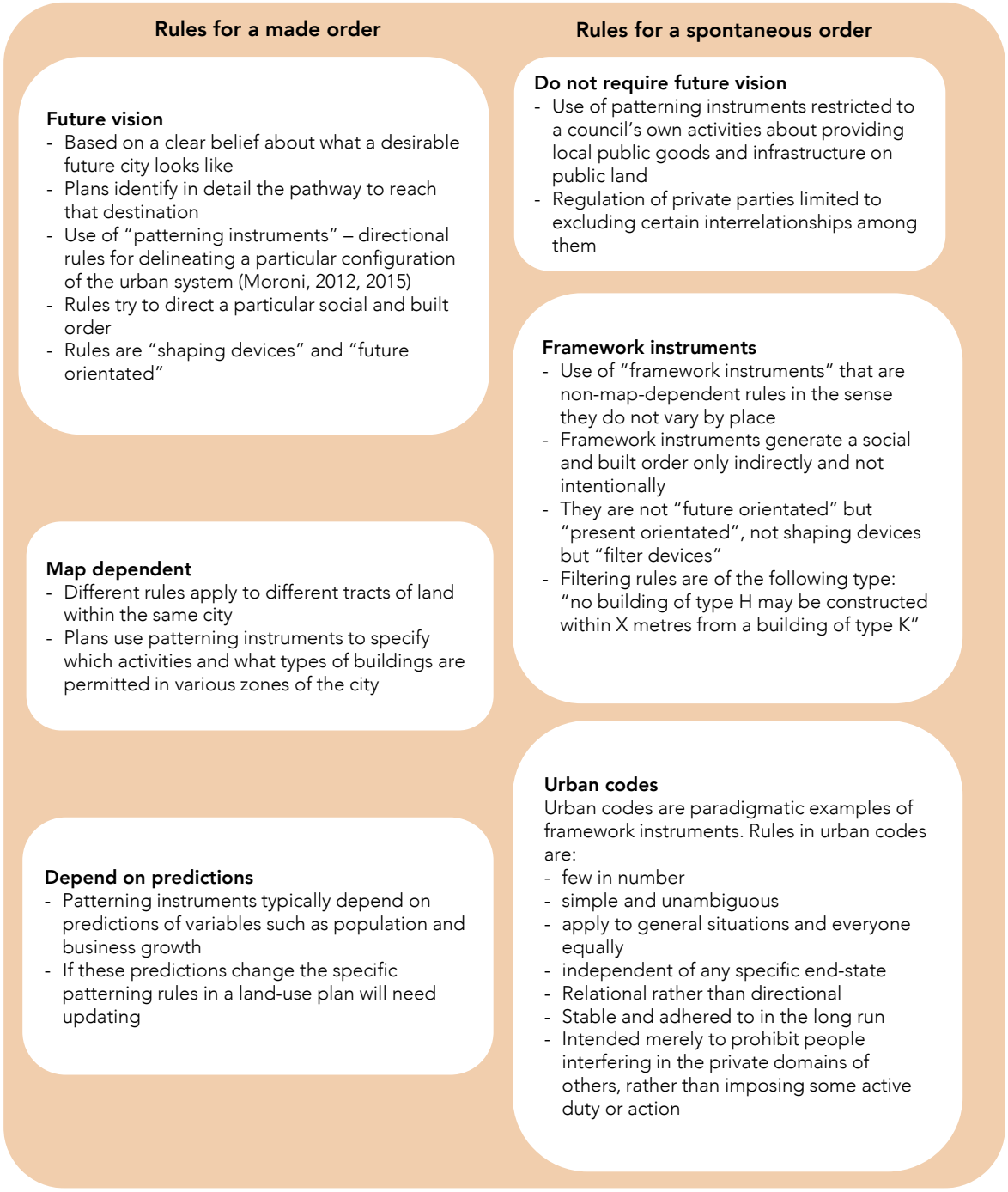
In its research and engagement meetings the Commission has been struck by two contrasting planning philosophies based on quite different assumptions about the role and mission of planners. On the one hand, "activist" planners have a vision of what a good city looks like, how it should function and, to a certain extent, how its residents should live their lives. Urban form and design, place making and city shaping are the currency of this school of planners. On the other hand, other planners and planning scholars resist being activist in this way. They view cities as complex, adaptive systems, whose evolution cannot be predicted (Chapter 2). As a result, they believe cities are more successful when planners largely allow the independent plans of individuals and businesses to take their course.

A famous example of this clash of philosophies occurred in the 1960s between the urbanist Jane Jacobs and Robert Moses, a powerful figure in the planning establishment in New York City. Jacobs was a passionate advocate for allowing people spontaneously through their lives to create a diverse city of bustling, pedestrian-friendly streets. Moses used his power to implement his vision of city refurbishment through major road, bridge, park and housing projects, often involving the destruction or isolation of poor but vibrant neighbourhoods in the old city (Paletta,2016).

More recently, Moroni has written on this philosophical dichotomy. He distinguished between plans based on rules for a made order from plans based on rules for a spontaneous order (Figure 3.1).

Moroni does not oppose regulation as such and accepts that governments sometimes need to limit private property rights. But he argues against using patterning instruments to regulate private agents by directing them down a concrete path to a specified end-state. Patterning instruments, sometimes evident in ambitious and prescriptive urban plans, run counter to Moroni's preference for clear limits on state powers and respect for private property rights. They also risk suppressing the diversity, adaptability and dynamism of cities (section 3.4).

Figure 3.1 Approaches to planning: rules for a made order vs rules for a spontaneous order



Top-down versus bottom-up planning

The distinction between top-down planning and bottom-up planning raises the important questions of who owns plans and what is the allocation of decision rights to make plans and act under them? These are questions about the political and social organisation of a country.

- What are the relative powers and roles of central and local government?
- Which parties have the best information to make decisions?
- Which parties will be most affected by plans and decisions (ie, where do the benefits and costs fall)?
- Where does capability exist to create, implement and administer plans?
- Should the source of funding be national, regional or local?

- Who is best held accountable for plan outcomes?
- What are the economies of scale in providing certain goods and services versus customisation to suit local preferences and conditions?
- What is the sense of ownership of plans, and buy-in to them that flows from involvement in making them, versus resentment to plans imposed from above?

Central and local governments in New Zealand are partners in planning and land use regulation. Central government – Parliament and the Executive together – are sovereign and therefore the senior partner determining the legal framework within which local authorities operate. The framework recognises the dual roles of local authorities as enablers of local democracy and providers of local public services. The purposes of local authorities, defined in legislation, are to:

- enable democratic local decision making and action by, and on behalf of, communities; and
- meet the current and future needs of communities for good-quality local infrastructure, local public services, and performance of regulatory functions in a way that is most cost effective for households and businesses (NZPC, 2013).

In this system, as in many other countries, the relative roles and planning responsibilities of central and local governments are governed by the *principle of subsidiarity*: Unless there are good reasons not to do so, decisions should be taken at lower levels of government close to the people affected. Reasons for taking decisions as close as possible to local communities include:

- it is more democratic;
- decisions will be based on local (and therefore usually better) information;
- decisions can be better customised to local preferences; and
- people most affected by decisions gain greater power to make those decisions, which is not only more just but also more conducive to better decisions (because they have more at stake).

A number of economics scholars have depicted the allocation of responsibilities and decision rights between central and local governments as a trade-off between the benefits of centralisation and the benefits of decentralisation. The benefits of centralisation include:

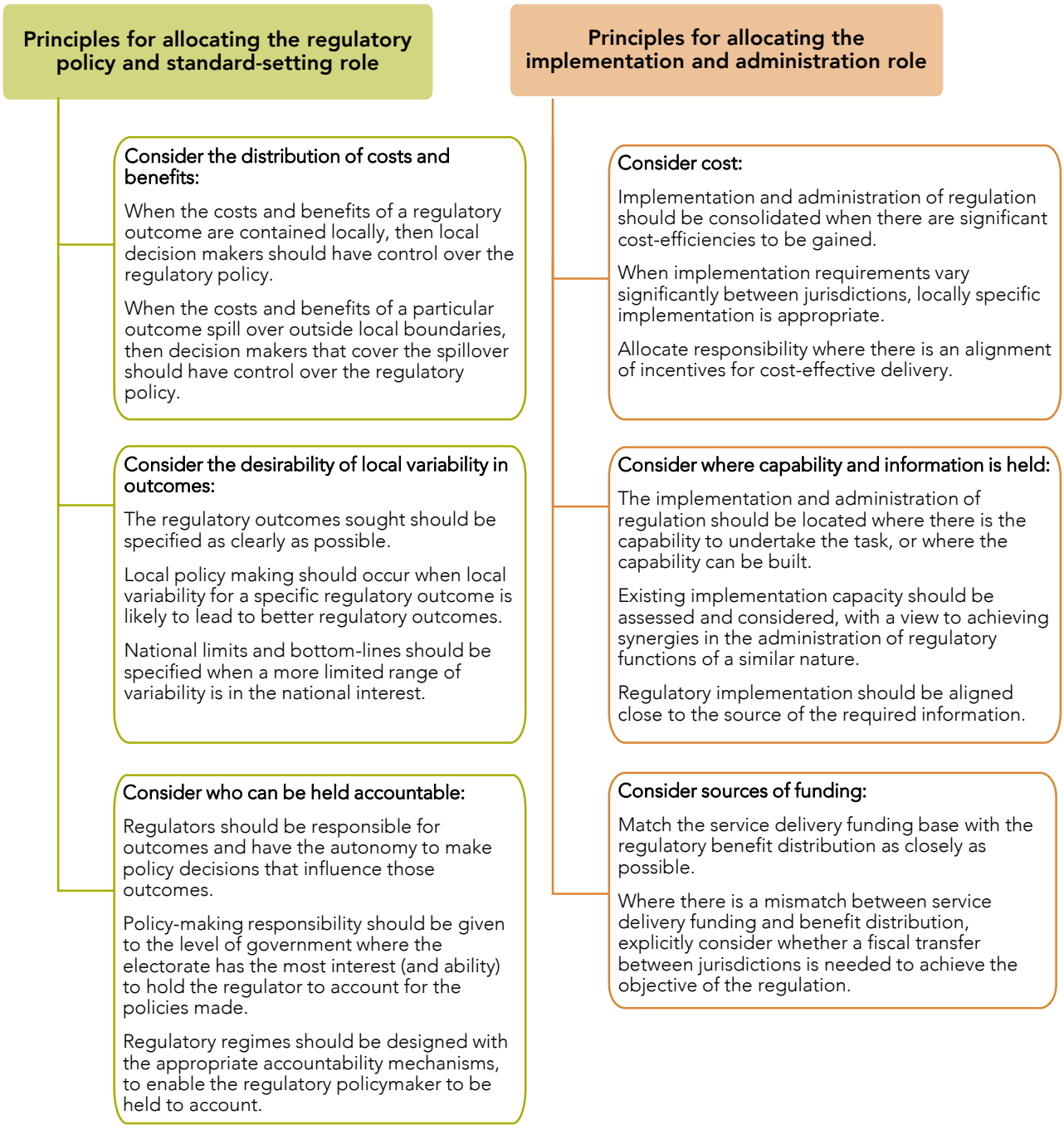
- dealing with externalities or spillovers that extend beyond local boundaries;
- achieving scale economies in the provision of public goods such as national defence and public health; and
- providing an integrated regulatory environment and equal access to standard levels of service;

The benefits of decentralisation, as noted above, include:

- local autonomy; and
- the ability to tailor public services and policies to the specific needs, characteristics and preferences of local communities (Oates,1999; Besley & Coate, 2003; Alesina & Spolaore, 2003).

The Commission's inquiry into better local regulation identified a framework for allocating regulatory roles between central and local government (Figure 3.2).

Figure 3.2 Summary of principles for allocating regulatory roles



Source: NZPC, 2013.

Translated to plans, central governments will usually reserve powers to plan or impose limitations on lower levels of planning when national interests are at stake, or when economies of scale dictate it would be costly to risk fragmentation flowing from many different local choices. In contrast, it makes sense to delegate planning powers and responsibilities to lower levels of government:

- on matters that affect those areas and communities the most;
- on matters that do not significantly affect people outside those areas and communities; and
- where local preferences vary across areas and communities.

For a successful partnership between central and local government within the overall planning system, the senior partner needs to be careful to act reasonably and within a well-articulated and stable framework. As Wellman and Spiller (2012, p. 111) describe for state and local governments in Australia:

> If State interests are not reasonably well articulated in advance (in principle if not in detail), and if State Governments are seen to intervene on a whim, either in the introduction of overriding policies or by calling in particular development applications, local governments and the community generally can lose confidence in the integrity of the planning system.

And facilitating the involvement of the community at the grass-roots level is also important:

> Genuine public involvement in the plan making process is critical to an efficient and effective planning system. Where there is substantial public involvement, better outcomes for both local communities and the planning system can be secured through a mutual understanding of needs, interests, and priorities. Community involvement is often particularly important to reinforce local communities' sense of ownership of, and identification with, their local area. (Wellman & Spiller, 2012, p. 112)

Interest in community involvement in local resource management led Elinor and Vincent Ostrom to research the governance of water provision in US cities (Ostrom, 2007; McGinnis & Ostrom, 2012). They found that the most effective and resilient arrangements seem to occur under overlapping and multi-level layers of governance, with both government and non-government players involved in taking collective action to manage water as a "common-pool resource".

The use of limited urban space could, like the use of water sources, be regarded as a "common-pool resource" – a good whose use by one person subtracts from the use available to others, but which is difficult to exclude potential beneficiaries from enjoying (Ostrom, 2010). Such research is relevant to the governance of communities and cities.

Elinor and Vincent Ostrom analysed the conditions that help collective-action institutions succeed in dealing with common-pool resource use (Ostrom, 2010; McGinnis & Ostrom, 2012). To isolate these, they focused on the rules (implicit or explicit) and design principles "that characterized the long sustained regimes as contrasted to the cases of failure" (Ostrom, 2010, p. 13). They found that local, non-government governance arrangements for taking collective actions were often (but not invariably) more successful in improving outcomes than top-down approaches. In addition, top-down regulation could, at times, crowd out "voluntary behavior to cooperate" (p. 16).

Elinor Ostrom (2010) also emphasised that a diverse range of institutions can work in practice, so long as they are "well matched to local settings and involve the active participation of local users" (p. 24):

> We need to ask how diverse polycentric institutions help or hinder the innovativeness, learning, adapting, trustworthiness, levels of cooperation of participants, and the achievement of more effective, equitable, and sustainable outcomes at multiple scales… (p. 25)

While the Ostroms looked behind the veil of formal to informal institutions and practices (where things happen at the coalface), it is also instructive to examine formal planning laws, how they relate to each other, and how well they work from the perspective of regulators and customers.

Levels of plans and links between them

Most countries and most land-use planning systems have many plans and pieces of legislation that mandate and govern those plans. The terms of reference for this inquiry explicitly request the Commission to examine the relationships between different planning laws, whether lack of integration across them and the plans they generate is a problem and, if so, how this could be fixed.

New Zealand's RMA mandates a three-tier hierarchy of planning documents relating to the sustainable use, development and protection of natural and physical resources nationally, regionally and locally. This hierarchy is detailed in Chapter 5. Briefly, under the RMA each regional council has to prepare a regional policy statement and a regional coastal plan. It can voluntarily also prepare regional plans.

Each district and city council must prepare a district plan setting out its objectives, policies and rules governing land use.

Each plan must give effect to those further up the hierarchy. The RMA also authorises the central government (represented by the Minister for the Environment) to set out and issue *national policy*

statements and *national environmental standards*[20] which also must be given effect to by the plans lower in the hierarchy. The point to note is that a whole system of plans exists with the overall objective to manage the physical and natural environment, and regulate land use, that is consistent and ordered across levels of government. This minimises the risk of conflict and confusion. The authors of the RMA and other commentators have noted this integration as one of the RMA's most notable achievements (G. Palmer, 2013a).

District and city councils sit at the base of this neat, integrated hierarchy and actually possess considerable power and discretion to manage their local natural and physical resources because the system is relatively decentralised. Yet local councils do not find their planning process neat and orderly. As set out in Chapter 5, this is because they are also caught up in planning processes and requirements under the LGA and the Land Transport Management Act 2013, together with elements of the Building Act, Reserves Act and Conservation Act. Many provisions, timelines, requirements for consultation, and other aspects included in these statutes are not particularly well integrated with the RMA system.

Several submitters – with councils prominent among them – noted another difficulty. It is increasingly common for various players with an interest in land development and the associated infrastructure needs of an area to work together to produce a spatial plan. This is because infrastructure needs may encompass several local-authority jurisdictions. While this plan is potentially a valuable signalling and integrating device, it may well have little or no status under any of the statutory regimes. This means that opportunities to reduce duplication and inconsistencies, and achieve important planning goals, are not realised.

The integration of plans and processes needs to be looked at from the point of view not only of plan administrators but also the customers – the people or businesses who require authorisation for a land use development. A customer-unfriendly planning system would force applicants to "do the rounds" of multiple agencies and go through their separate yet often similar processes.[21] The development can only proceed when all agencies have "ticked off" and consented to each stage. Empirical research demonstrates that these sorts of processes incur costs in time and project delays from dealing with large but fragmented organisations. Internally, teams within such organisations can hold different viewpoints and coordinate poorly (Grimes & Mitchell, 2015).

In a streamlined and integrated planning system, the customer should experience a single application process. While behind the scenes, several agencies may be involved, the applicant has an efficient "one-stop shop" experience. This may sound simple and sensible, but achieving it involves complex inter-agency cooperation and systems – both horizontally and vertically - that elude many government bureaucracies.

[20] Technically, the head of state – the Governor General – issues national policy statements and national environmental standards. The Minister for the Environment makes the New Zealand Coastal Policy Statement.

[21] This sort of complexity and frustrating experience can and does exist elsewhere – even within the "integrated" RMA system.

F3.2

Land-use plans and planning systems vary on dimensions such as:

- whether plans focus more on outcomes than on prescriptive, detailed rules;
- whether land-use regulations use directive, place-specific rules; or rules that simply prohibit types of effects on other property owners;
- the distribution of responsibilities and powers between the central government and local communities;
- the balance struck between local and national interests; and
- the extent that plans are integrated (vertically and horizontally).

3.4 Planning for cities as complex, adaptive systems

Chapter 2, describes how cities are composed of a large number of diverse and connected elements that adapt and rearrange themselves in unpredictable ways over time. The complexity, diversity and adaptability of cities are sources of strength, not least the ability of cities to seed creativity and innovation. At the same time, complexity and unpredictability raise serious challenges for urban planning. This section examines which types of planning, if any, are appropriate for cities as complex, adaptive systems.

Complex systems and prediction

Formal analytic models of complex systems are not tractable because of a combination of adaptive behaviour that responds to system-level features as they emerge, non-linear relationships between the variables, and the difficulties in fully specifying initial conditions. Adaptive behaviour means that system parameters are not stable (Moroni, 2012). As a result, deductive approaches do not work well as a way of understanding complex systems.[22]

Researchers in complexity have shown that models in which agents interact using simple rules can generate complex patterns (Colander & Kupers, 2014, p. 127). The patterns indicate the sorts of outcomes possible or likely as a result of particular changes; they do not predict detailed outcomes. As Moroni (2015) states: "[W]hen we are dealing with structures of essential complexity (such as social phenomena), it is not feasible to provide *explanations of detail*, but only an *explanation of the principle*…" (p. 250). Explanations of principles deal with typical kinds of events "that arise when certain general conditions are satisfied" (p. 250).

The history of Petone, Wellington from 1847 to the present illustrates the impossibility of predicting the twists and turns in the future course of a complex mix of social, economic and geographical factors (Box 3.5).

Box 3.5 **The evolution of Petone**

Before European settlement in New Zealand, Pito-one was the site of a large Te Ātiawa Pa. The New Zealand Company's surveyor, Captain William Mein Smith chose the Heretaunga (Hutt) river valley for the site of its planned settlement "Britannia", and the company's ships began arriving in January 1840. Relations between Māori and the settlers were positive in large part due to the hospitality and mana of local chief Te Puni. The grid street plan drawn up in England was soon abandoned. In March the river flooded the settlement, and a fire and earthquake followed in May. Britannia was largely abandoned by the end of 1840. Most settlers had moved to Pipitea/Thorndon, which Colonel William Wakefield had long favoured for the settlement.

[22] As an observation, the RMA is arguably based on a deductive model in which councils identify objectives, consider options to achieve them and apply policies and rules.

By 1847 probably no more than 20 settler households were living in Britannia, and it remained almost wholly deserted until 1875. The land was poor quality for grazing, and the Hutt River flooded at least once a year. Pito-one Pa, with a population of 136, remained the largest and best-fortified pa in the Wellington area. In 1855 a major earthquake lifted the area, draining a portion of the lower valley.

In 1874 the train line between Wellington and Wairarapa opened. A large railway workshop was built in Petone. That same year James Gear, a butcher, began to buy and lease land around the Petone foreshore to establish a slaughterhouse. The land was attractive because it was cheap and flat, near to the harbour and railway line, and there was only a small local population to be offended by the waste and smell of the facility. In 1883 the Gear meat company built a 380m long wharf, which was demolished in 1901. The Petone Woollen Mill was established at the base of Korokoro hill in 1886. It operated on the site until 1968.

Petone grew rapidly, and was gazetted as a town in 1881. A series of factories and breweries were built. Schools, churches, newspapers, sports and social clubs were established in the 1880s, many of which survive today.

Edwin Jackson, a local farmer, sold portions of his land piecemeal with unsurveyed rights-of-way. The result was that by 1885 locals were concerned that Jackson Street was an embarrassing series of dog-legs, of varying width along its length. Jackson Street was extended when the borough solicitor bought the land on behalf of the Crown in 1888. As blood and offal went straight into the harbour, attracting sharks, Jackson built a swimming pool near the waterfront. Plans for a gasworks were abandoned in 1897, with the council buying the land to create a recreation ground. But the council declined to buy Jackson's pool, and a ratepayers poll in 1901 also decided against a purchase. The pool closed.

By the early 1900s Jackson Street was the hub of Hutt Valley commercial activity, with notable stores such as McKenzies, McDuffs and Liebezeits. The Grand Theatre opened in 1916. But Jackson Street's haphazard alignment was still a problem and between 1927 and 1938 the council widened and straightened Jackson Street, with buildings shifted back on rails or demolished. Meanwhile the Pito-one Pā had been abandoned. The associated cemetery in Te Puni Street is still there.

The Government built New Zealand's earliest state houses in Patrick Street from 1906, although it sold them in the 1930s. Council chambers were built in 1903 and a town clock erected in 1913. A new wharf was constructed in 1907. Industrialisation continued: the Lever Brothers factory opened in 1919, the Sunlight Factory in 1924, and a number of car plants in the 1920s and 1930s. Three of every four cars in New Zealand were said to come from Petone until the 1950s. The town produced many successful sportspeople and the Petone Rugby Club numerous All Blacks:

> Petone, by local standards, was densely populated and heavily industrialised, ugly, grimy, lively and close-knit, more like an English industrial town than a New Zealand one. (Butterworth, 1988, p. 13)

But from the 1950s the area began to decline, as some industries closed and residents moved to the new suburbs of the Hutt Valley. A number of state housing flats were built from the 1950s to the 1970s on the eastern part of Jackson Street. The Borough Council designated an area north of Jackson Street as an industrial zone, and

> [t]he result of this was that no one was allowed to improve their properties, which meant many fell into disrepair and were sold off to developers. It was impossible for young Petone people to get a loan to buy property in their hometown so many left for Wainuiomata or Upper Hutt. The town become a place of rented properties owned by absentee landlords. By the mid-seventies and eighties Jackson Street was pretty much derelict. (Johnston, 2015, pp. 93–95)

The Council proposed building a ring road around central Jackson Street, to create a mall in the centre of town at a cost of $10 million and the demolition of 80 houses. But significant local opposition stopped the project, and many councillors were voted out.

Petone wharf took its last cargo in 1976. The Gear meatworks closed in 1981. Long-established stores closed and the council chambers were demolished in 1986. Deregulation of the New Zealand economy resulted in many of the remaining factories closing. Developers who were demolishing and rebuilding in Wellington regarded Jackson Street as a place of little commercial potential, so its old buildings were left untended. In turn, "this stagnation ironically preserved the historic CBD as a desirable social and economic centre" (Johnston, 2015, p. 177). Petone recovered in the 1990s as industrial land uses gave way to big box retailing in the west of Jackson Street. Petone again became a retail destination, and this benefited the smaller shops along Jackson Street. A burgeoning bar, café, gallery, and retail sector followed. In 1996 the Historic Places Trust recognised Jackson Street as an Historic Area, but this had no regulatory force. A number of battles between local heritage groups, developers and the council took place over the next decade.

The Wellington Tenths Trust was established in 1977 to represent the interests of Te Ātiawa and other Taranaki tribes as beneficiaries of land reserves set up at the time of the New Zealand Company's purchases. The Trust now has offices in Hīkoikoi on the Petone waterfront. Among other activities, Ngā Tekau Health Services provides alcohol and drug services from the site.

The "character homes" of Petone and its proximity and transport links to Wellington made Petone a desirable residential neighbourhood. A number of apartments were built or converted, consistent with council design guidelines. In 2014 it was announced that many of the state housing flats on the eastern part of Jackson Street were to be demolished, but the Patrick Street cottages survive and are protected. The Grand Theatre, which closed in 1964, was used as an electrical shop, furniture business, and in the 1990s was converted to an apartment complex with boutique shops below. Today, the site of the Gear meatworks is a supermarket, and the Petone wharf is a popular fishing location, with fewer sharks than in the past. Te Ātiawa again launch their waka ama (outrigger canoes) from Hīkoikoi – now as part of a national sport. A weekly weaving group (Te Roopu Raranga o Manaia) make a wide range of designs from harakeke (flax) at Hīkoikoi. The weavers source their own flax, which is abundant in the region.

Source: Butterworth, 1988; Johnston, 1999, 2009, 2015; Love, 2015; MoH, 2016a; Wellington Tenths Trust, 2015; Te Roopu Raranga o Manaia, 2016.

A wide range of factors shaped Petone, including:

- its geography, and natural forces;
- the ongoing commercial, cultural and social interaction between Māori and later settlers;
- infrastructure investment;
- planning action;
- benign neglect;
- private entrepreneurship;
- wider economic conditions; and
- community action.

Together such influences produce path dependence in how urban areas evolve, yet the significant changes are not foreseeable.

The inherent complexity of urban areas and the diverse factors that shape them are central to understanding the role of planning and land use regulation in restricting or enabling those influences on an urban area. Batty and Marshall (2012) and, more broadly, Colander and Kupers (2014, p. 154) called for an eclectic, multi-disciplinary approach to understanding such systems, based on "educated common sense".

The implications of complexity for plans and planning

Complexity has significant implications for the practice of planning. In particular, the difficulty with predicting the detailed effects of interventions raises questions about the purpose and scope of planning, and what approaches achieve the best outcomes:

> The idea of the planned city as a knowable utopia is a chimera. Nevertheless, we continue to try to plan in the belief that the world will be a better place if we intervene to identify and solve issues that are widely regarded as problematic. But this must be tempered with an awareness of the limitations of planning, not least through an awareness of the evolutionary nature of urban change. (Batty & Marshall, 2012, p. 44)

The types of planning and plans that define and seek a future end-state are at the most risk of tripping over the reality of urban complexity and its unpredictability. Indeed, trying to direct land use, building design and infrastructure networks along a specific, detailed path to a destination defined as desirable and optimal is likely to do harm. In particular, harm is likely from suppressing the adaptive and diverse character of cities as well as from the risks of an over-enthusiastic use of coercive regulatory power.

The types of planning most likely to be useful in the face of complexity and unpredictability are those that do not overreach. These types recognise that government and planning are themselves elements among the many others that make up the dynamic, evolving environment of a city that itself sits within a broader natural ecosystem.

Two broad approaches to planning in complex urban systems

While urban theorists agree that complexity poses a problem for planning, they split into two broad approaches in response.

A few simple, universal rules to guide city development

The first approach is typified by Moroni (2015) (section 3.3). This approach proposes that the government sets a few simple, universal, spatial rules to regulate city land use and guide urban agents who then, within the rules, are free to realise their own plans as they think best. It leads Moroni (2015) to prefer plans using "urban codes" rather than zoning:

> The urban code is thus concerned solely with the impersonal and impartial framework of social activities, not with their concrete trajectory. It accommodates the unforeseen, giving ample space to the city's adaptive and self-organizing capacities, to its emerging features and potentialities.
>
> …. The recognition of complexity in a radical way therefore seems to suggest a shift from patterning-instruments used as whole-coordinating devices – such as 'urban plans' centred on some form of zoning and differentiated land-use regulations – to framework-instruments used as filter devices – and, in particular, to what I call 'urban codes' based on uniform and impartial rules of conduct. (pp. 258–59)

Yet one aspect of Moroni's approach – the uniformity and universality of the rules across entire cities – may be too extreme. For example, it might be efficient to have different rules for high-density urban areas in the CBD than in less-dense urban areas further out.

Moroni (2015) explicitly argued against a "participative, communicative, collaborative process" as a way to solve the problem of planning in complex systems:

> [I]f explanations of detail and specific predictions are intrinsically impossible in the case of a complex system like a city, any participative, communicative, collaborative process – no matter how extensive, transparent and shared it may be – cannot solve the root problem. (p. 260)

Yet a second broad approach to the problem of planning in complex systems is indeed to use a participative, collaborative, iterative approach to engage urban actors in the development of a city.

A participative, collaborative approach to city development

A participative, collaborative approach to city development would engage a diversity of urban actors – private and public, business and residential, property owners and non-property owners – in the evolutionary development of a city. Planning is essentially provisional and adjusts, through collective action, to emerging city form and behaviour.

This approach recognises that no one actor (including government) can control system outcomes. Because actors together shape outcomes, they need to develop a shared understanding of, and commitment to, the planning objectives and the trade-offs across those objectives. The system needs feedback loops so that, through shared understanding of what is happening, actors can adjust plans as the system evolves.

Recognising that actors within the system play an important part in shaping outcomes means that planners cannot rely on general and broad approaches alone. They will often need to look at particular circumstances and engage with actors in a fine-grained way to find the best (or even just feasible) solutions. Colander and Kupers (2014) describe how this worked for the French post office in designing postal routes (Box 3.6). A collaborative, participative approach to planning might well follow an analogous process.

Box 3.6 **Designing new postal routes – the French experience**

The French post office engaged Icosystem (a data analytics company specialising in complex systems) to help design postal routes for its tens of thousands of mail deliverers. Designers have standard techniques to optimise the routing if the mail deliverers have no relevant information in addition to that held by the designers, and the goal is solely efficiency. "Unfortunately for the standard techniques, neither assumption holds" (Colander & Kupers, 2014, p. 210).

To overcome this problem, Icosystem used a computer algorithm to design an initial set of routes, based on minimising the time spent delivering mail. Each mail deliverer was asked to rate their preferences across an initial set, and these, in turn, were analysed by another algorithm to produce a new set of routes. The algorithm worked by recombining "successful" bits of a solution and dropping less successful bits. The new routes deviated from the efficiency optimum, but took account of the local knowledge and preferences of each mail deliverer. The process was repeated several times, to produce the final routes:

> The result is that this process generated an evolving set of routes that were optimized not from a classic cost efficiency perspective, but from a perspective that reflected the desires of the individual postal workers, as well as the interaction between individual and collective choice. (p. 211)

Colander and Kuper point out that

> optimality in a complex environment requires bottom-up feedback into the design of the system to use the local information available only to the agents on the ground. Any attempt to collect that will fail since the preferences of the individual postal workers are not fixed and are affected by the relative routings as well. (p. 212)

De Roo & Rauws (2012) also emphasised the importance of accounting for local circumstances in planning in complex spatial systems:

> [A]rea-specific characteristics and local stakeholders have been increasingly integrated in planning processes…Here we see the increasing need for an open planning process in which actors work together to reach consensus on an area-oriented strategy, and share responsibility for the system. (p. 209)

They identified a spectrum of complexity that spatial planning faces. At the more complex end of the spectrum (where the outcomes of interventions are uncertain) "values and opinion play an important role and … making agreements is an important part of constructive planning action" (p. 211).

Yet participation and collaboration are not a simple panacea for solving urban planning problems. Collective action institutions need careful design to succeed in overcoming entrenched differences in values and inherent conflicts of interest.

For instance, urban planning has many examples of diffuse costs and concentrated benefits, or concentrated costs and diffuse benefits. Parties with diffuse costs or benefits have lower incentives to be involved than those with concentrated costs and benefits. Some people with an interest in effective planning in a particular

urban area – such as potential residents kept out by price barriers – are much less likely to be represented in local decision making (NZPC, 2015a; Chapter 8). Dealing with these issues requires leadership and vision, as well as well-defined performance objectives relating to such things as the availability of land for development.

According to Colander and Kupers (2014), government has an important role in building consensus in policy and planning for a complex system:

> In the complexity frame engaging widely is not only logical but also essential. [This involves] a continuous exploration of evolving goals and the means to achieve those goals. (p. 254)

It also involves

> careful and creative consensus building, with only a general specification of the goals, lest the discussions get bogged down in frozen polarization. (p. 255)

Colander and Kupers argued that defining the role of government (in policy and planning) must start with perceiving government as just one of the many adaptive/evolving elements in the complex system:

> Government is simply an institution built by people to help solve collective choice problems. If current government structures are not reflecting people's will as well as they should, then they will evolve and become better able to do that. (p. 179)

It is worth noting that the participative, collaborative approach to "making agreements" in complex systems relies on a genuine devolution of some decision rights. It is very different to using consultation as a means to bolster planning decisions, where the decision rights rest largely or solely with a planning authority.

Spatial scale is relevant to thinking about the scope of collective action. For instance, Brisbane has processes that allow neighbourhoods to work through and make trade-offs about how broader city-wide decisions on densification will apply. In a similar vein, Kelly and Donegan (2015) argue for planning to start with engagement on citywide scenarios and the need to allocate responsibility for managing population growth and new housing across the city. To distribute growth fairly, each local district would have realistic housing targets as its share. Each district would then work out how it will meet its housing target. Higher tiers of government play roles in keeping districts to their targets (using a "carrot and stick" approach) and contributing needed new transport infrastructure.

Auckland has no neighbourhood-level mechanisms of this type and has struggled to build consensus on planning issues. Copenhagen has institutions and processes that support planning trade-offs between competing interest groups, both citywide and in neighbourhoods or suburbs (Guy Salmon, pers. comm. 5 April 2016).

Understanding relevant norms and values (such as those underlying NIMBYism), and how they might shift in response to the planning environment and the co-evolution of new collective-action institutions, are likely to yield important insights for developing a more effective urban planning system.

A hybrid approach to urban planning

The two approaches to urban planning – universal rules versus participative-collaborative – to deal with the uncertainties and complexities of urban systems are not mutually exclusive – but the proper ambit of each needs to be understood and agreed (NZPI, sub. 27).

A key point of this chapter is that planning has several distinct rationales. Planning as land use regulation (sometimes termed "development control") aims to stop harmful spillover effects of land users on each other and the natural environment. The dangers of planning overreach and hubris are greatest in this sphere. For this reason Moroni (2015) advocates limiting regulatory planning to simple, universal, non-place-dependent rules that are independent of place. Such rules instead define the types of external effects that land users must avoid everywhere (Figure 3.1; section 3.3). Beyond that, each land user acts autonomously, responding as they see fit to the many other complex elements in the city environment.

The other main rationales of planning are two types of collective decision problems that sit in the public domain:

- planning (and funding, building and managing) widely used infrastructure, such as transport and water; and
- planning (and funding, building and managing) local public goods, such as parks, foreshores and street amenities.

In these cases, making plans does require conceiving outcomes for the location of urban activity, land-use densities and types of use. Detailed planning over quite long time horizons – perhaps 30 to 50 years in the case of large transport investments – is likely to be needed. Moroni (2015) readily concedes this important point:

> This does not mean that patterning-instruments (such as land-use plans) should be discarded in their entirety, rather, that they should only be used to control circumscribed public sector activity, and the general working of the city and the activities of the private urban actors … Land-use plans may be used only to constrain the public parties to creating infrastructure (e.g. roads) and services (e.g. school buildings) on public soil with public resources.
>
> In short, I think that local governments must *regulate* the actions for the private actors (allowing landowners, developers and so on to make free use of their lands and buildings within a framework of relational rules that apply equally to everyone, and as long as such use does not create negative externalities), and *plan* their own actions (trying to coordinate the use of public resources at their disposal in a responsible and efficient manner, to guarantee infrastructures and services). (p. 260)

A participative, collaborative approach may well be best for long-lived infrastructure, local public goods and other developments that have large effects on multiple parties. Here the optimal timing of infrastructure development and the option value of waiting are important considerations. Yet much of the planning system could rely on simple, common-sense rules guiding the actions of private parties.

Marshall (2012) also argued for such a mixed system:

> [A] system of planning that involves not only design (master-planning) but coding and development control (involving increments of generation and selective feedback) … more like evolution than design. (p. 192)

Under a rules-based approach of the type advocated by Moroni (2015,), the issue of who would determine the few, simple and universal rules, and how, would arise. Moroni suggests introducing or changing these rules "only through some kind of super-majority" (p. 258). Yet such rules can also arise through negotiation during planning processes – though it is likely that the rules that emerge reflect culturally based norms and values. Participative, collaborative processes might assist in identifying a minimum effective set of rules. However, careful design of processes would be needed to lean against any tendency towards a very large rather than modest number of rules.

F3.3

Cities present a challenge for urban planning, given that it is not possible to predict or control in a fine-grained manner their development paths. An overly directive approach to regulating land use in cities risks suppressing the diversity, creativity and entrepreneurship that successful cities display.

One response to the complex, adaptive nature of cities, is for planners to use a relatively few, simple rules that prohibit certain types of harmful spillover effects. Planners would otherwise leave households and businesses free to develop private land as they wish.

Another logical response is a collaborative, participative approach to city development in which local communities, within envelopes set by higher levels of government, work out their own provisional and adaptive solutions to emergent opportunities and threats that arise as cities develop.

Hybrids of these approaches are possible and may be optimal.

3.5 Conclusion

The three main rationales for urban planning are regulating negative spillovers from the use of land by people and businesses; providing for local public goods; and providing for infrastructure. All three planning functions interact with property rights and can create tensions and controversies. The three purposes of planning are closely linked, and need to be considered together. Yet the types of planning process that best suit each of the purposes differ. Planning for infrastructure and local public goods likely requires a view about outcomes for the location of urban activity, likely land use-densities and types of use. Particularly for trunk infrastructure, plans need to provide for a time horizon of 30 to 50 years (Chapter 10).

Decisions on regulating spillovers from land use are particularly likely to be contested. On the one hand, local groups may use the design of regulation to pursue their interests; on the other hand, people and firms may challenge regulatory decisions that restrict their ability to use their land as they please (Chapter 8).

The dangers of planning overreach are greatest in regulating spillovers. There is a risk that overly intrusive and restrictive planning will sap the dynamism of cities that are continually evolving in complex and unpredictable ways. As a result, some theorists propose restricting the regulation of spillovers to a relatively few rules that prohibit types of effects on the environment and on other property owners. These rules would not be place specific.

Other theorists propose a participative approach to planning, that helps urban actors to develop a shared understanding of, and commitment to, the planning objectives and the trade-offs across objectives. Plans would be updated as the form and function of the city evolves. A participative approach may well be best for long-lived infrastructure, local public goods and other developments that have large effects on multiple parties. The right combination of approaches will depend in part on history; and the development of institutions and processes that help address conflicts of interests and values.

Another important issue is the relative interests and responsibilities of central and local governments and how they interact through the urban planning system. Central governments may reserve powers to plan or place limitations on lower levels of planning when national interests are at stake, or to take advantage of economies of scale (Chapter 8; Chapter 13). Yet in most cases local governments are in a better position to take account of local preferences and circumstances, especially where the effects of planning are also local.

4 Urban trends

Key points

- New Zealand is a largely urbanised country; yet the extent is highly dependent on how an "urban area" is defined. The commonly cited figure that 86% of New Zealanders live in urban areas is based on a New Zealand-specific definition that includes cities as well as small towns. Other definitions give lower percentages.
- Population growth has been unequally distributed, with high growth concentrated in or near Auckland while a majority of other main urban areas have grown either modestly or not at all. A significant number of smaller urban areas have experienced population decline. Projections indicate these trends will continue.
- Low-growth and declining areas have older populations and tend to lose a greater share of their younger population. The consequent decline of the working-age population is likely to have a negative impact on the average income growth of these areas.
- Auckland's population is unique in that it is larger, younger, denser, faster growing and more ethnically diverse than most other New Zealand cities. Strong natural population increase and international migration have driven its growth.
- Patterns of employment growth vary considerably between cities. Most growth in Wellington is focused in the centre; in other cities, growth is much more dispersed. Employment-growth patterns and development patterns share similar trends, suggesting the link between the location of jobs and where people choose to live is strong.
- New Zealand cities face spatial inequalities as people who earn more and are more educated cluster in inner suburbs and suburbs with natural amenities, while those who earn less and who are less educated tend to live in the outer suburbs.
- Many New Zealand councils have policies aimed at creating a compact urban form for their cities; yet most have struggled to achieve this goal. While cities have become denser, growth tends to be accommodated largely through developing land in outer suburbs. Barriers to densification include a lack of development capacity and community support for inner-city living.
- Declining areas tend to respond with policies aimed at revitalising the local economy by creating jobs and attracting migrants, rather than adapting to decline. Yet evidence suggests that the effectiveness of these policies is limited.

New Zealand is a largely urbanised country. Chapter 2 highlighted that urban areas are attractive because they offer numerous benefits, including greater job opportunities and higher wages. Over the past century, the attractiveness of urban areas has brought about a worldwide trend of migration from rural areas to cities and towns. New Zealand urban areas range in size from large cities like Auckland to townships as small as Leeston.

Although urbanisation is linked with economic prosperity, population growth in cities creates significant challenges. As cities grow, they face pressures to accommodate residents by developing housing, providing infrastructure and growing the number of jobs. They must achieve this while ensuring that the natural environment and existing amenities are protected.

While many urban areas experience population growth, others face stagnating or declining populations. This chapter examines how the shape of New Zealand urban areas has changed over time, and how local

policymakers have responded to urban issues including managing growth and decline. It places a particular emphasis on the trends observed in larger cities and discusses how these differ across the country.

4.1 How urbanised is New Zealand?

New Zealand is often described as one of the most highly urbanised countries in the world. However, it is hard to make reliable "apples with apples" comparisons of urbanisation across countries (Box 4.1). The United Nations (2014a) estimates that more than 86% of New Zealanders live in urban areas. That said, New Zealand has only one city of international size (Chapter 2), and is home to a large number of small towns that are defined as urban.

Box 4.1 **Defining "urban"**

The primary challenge in measuring urbanisation is obtaining comparable data. The most common measure is the share of the national population living in urban areas, yet what constitutes an urban area has no standard definition. As a result, global databases frequently compile information based on country-specific definitions.

Statistics New Zealand's official classification system separates urban areas into three subcategories:

- Main Urban Areas – large urban areas centred on a city or major urban centre, with a minimum population of 30 000;
- Secondary Urban Areas – areas with populations between 10 000 and 29 999 people and which are centred on the larger regional centres; and
- Minor Urban Areas – towns with a population of 1 000 or more, not already classified as a main or secondary urban area.

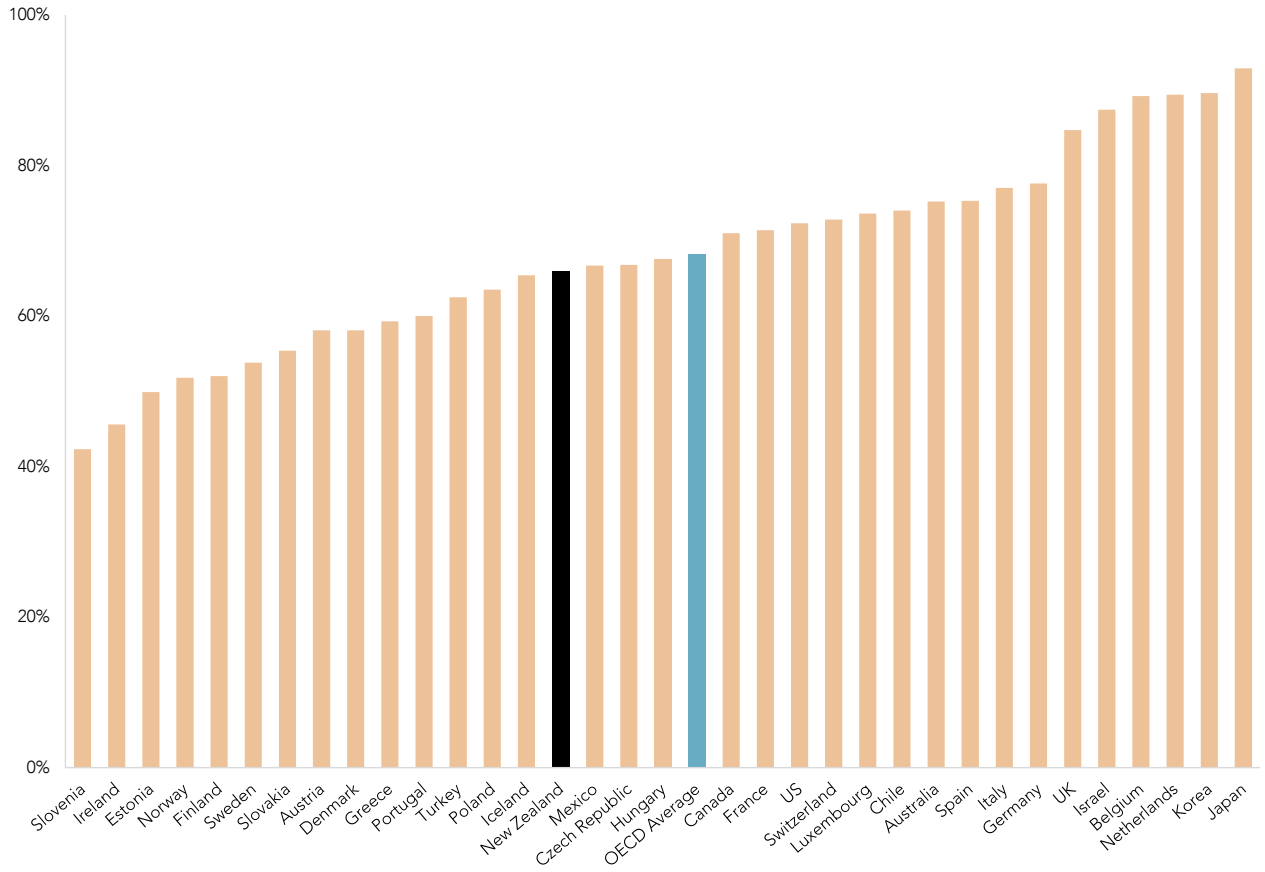
Other country definitions vary considerably, leading to unreliable comparisons. For example, in Japan, urban areas include any area with more than 50 000 people, while Iceland defines an urban area as any locality with more than 200 people. Countries also use different methods to define urban area boundaries such as population density thresholds and political and administrative boundaries.

Source: Statistics New Zealand (n.d); United Nations (2014b).

Uchida and Nelson (2008) developed the Agglomeration Index to make more reliable and robust comparisons of urbanisation across countries. The index characterises an urban area by a minimum threshold of 150 people in each square kilometre, a maximum travel time of 60 minutes to the centre, and a minimum population of 50 000. This contrasts with the Statistics New Zealand definition (Box 4.1) as well as those of numerous other national statistical offices, which tend to set the minimum population of urban areas at much lower levels. Figure 4.1 shows Agglomeration Index estimates for all OECD countries for 2008.

The Agglomeration Index gives lower results than the United Nations estimates, suggesting that New Zealand's urbanisation is overstated. Result comparisons indicate that a large number of New Zealanders live in urban areas that international standards consider are towns and rural centres rather than cities. The Agglomeration Index estimates that only 66% of New Zealanders lived in urban areas in 2008, compared with the OECD average of 68%. By comparison, the United Nations estimates that 86% of New Zealanders lived in urban areas in 2008, compared with their OECD average of 77%. The Agglomeration Index is more reliable as it uses a consistent methodology across all countries.

Figure 4.1 Agglomeration Index for OECD countries, 2008



Source: Uchida & Nelson, 2008.

Note: The Agglomeration Index represents the percentage of a country's population who live in urban areas.

F4.1 The extent of New Zealand's urbanisation depends very much on the definition used. The commonly cited figure that 86% of New Zealanders live in urban areas is based on a New Zealand-specific definition. Other definitions indicate lower levels of urbanisation.

4.2 Population growth and decline

Population growth is unequally distributed

Population growth has been unequally distributed across the country over the last two decades, with high growth mostly concentrated in or near Auckland (Figure 4.2). Auckland alone contributed close to half of national growth between 1996 and 2015. During the same period, Tauranga was the fastest growing main urban area in New Zealand, growing yearly on average by about 2.3%, followed by Auckland and Hamilton. These three areas are often collectively referred to as the Golden Triangle due to their recent rapid growth and how close they are to each other.

Outside the Golden Triangle, levels of growth have been relatively low. Wellington and Christchurch experienced modest yearly growth below 1% between 1996 and 2015. However, Christchurch's lack of growth is likely attributed to the impact of the Christchurch earthquakes on internal migration. Population levels barely grew in Gisborne, Dunedin and Rotorua; were unchanged in Invercargill, and declined in Whanganui.

Figure 4.2 Average yearly population growth of New Zealand main urban areas, 1996–2015

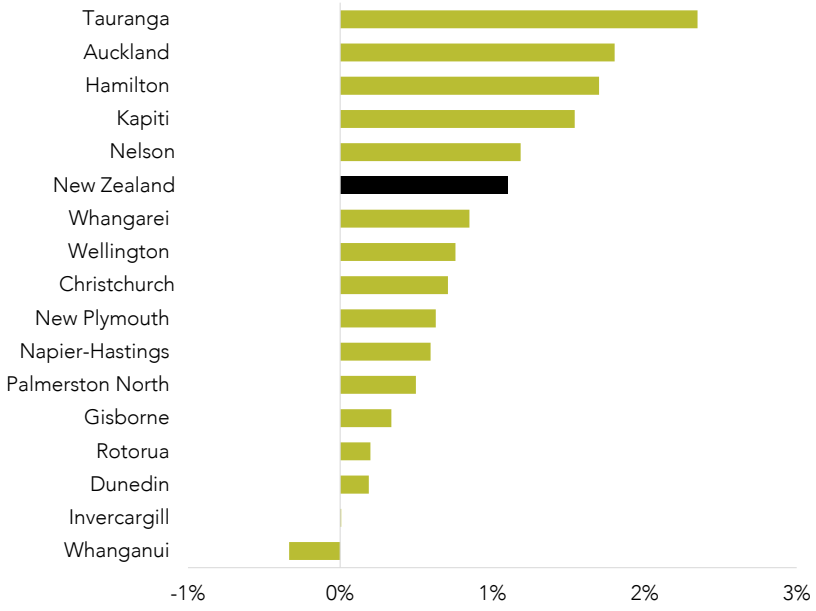
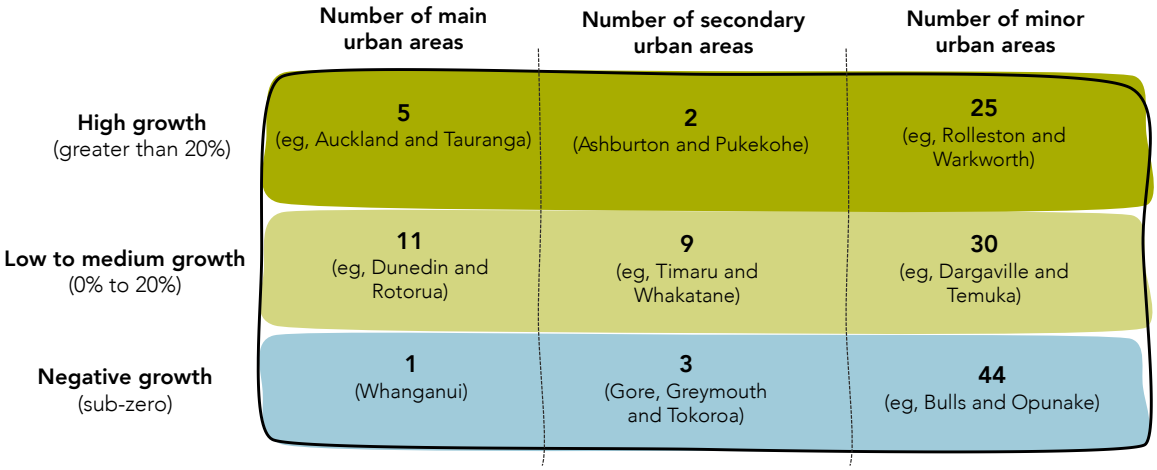


Figure 4.3 Population change of urban areas, 1996–2015



Source: Productivity Commission analysis of Statistics New Zealand data.

Notes:

1. Main, secondary and minor urban areas are based on Statistics New Zealand classifications as outlined in Box 4.1.
2. Auckland, Hamilton, Wellington and Napier-Hastings urban areas are made up of smaller urban zones.

A large number of New Zealand urban areas have experienced population decline, however most decline is focused in minor urban areas (Figure 4.3). Close to 45% of minor urban areas declined between 1996 and 2015, while other towns such as Rolleston and Kerikeri experienced rapid growth. New Zealand is not alone in having declining urban areas, but in countries such as Japan, Germany and South Korea decline has affected cities as well as smaller towns.

Recent trends are projected to continue

Population projections reinforce recent trends of unequal growth among New Zealand cities and the emergence of the Golden Triangle (Figure 4.4).[23] Auckland, Hamilton and Tauranga are projected to continue to drive national population growth, and are expected to hold close to 45% of New Zealand's population by 2043. Christchurch is projected to experience faster growth compared to the period between 1996 and 2015, while populations in Invercargill and Dunedin are projected to remain stable.

[23] Projections are purely based on recent demographic trends and patterns, as well as international experiences. This means they are vulnerable to the assumptions made and so may not provide a good basis for future planning.

An increasing number of urban areas are projected to decline in population compared with recent trends, but with most decline in smaller towns (Figure 4.5). Approximately 9% of New Zealanders live in urban areas that are projected to decline. Most main urban areas are not projected to decline, although 8 of the 14 secondary urban areas (populations between 10 000 and 29 999) are projected to do so. By comparison, only three secondary urban areas experienced population decline between 1996 and 2015.

Figure 4.4 Population growth projections for New Zealand main urban areas, 2013–2043

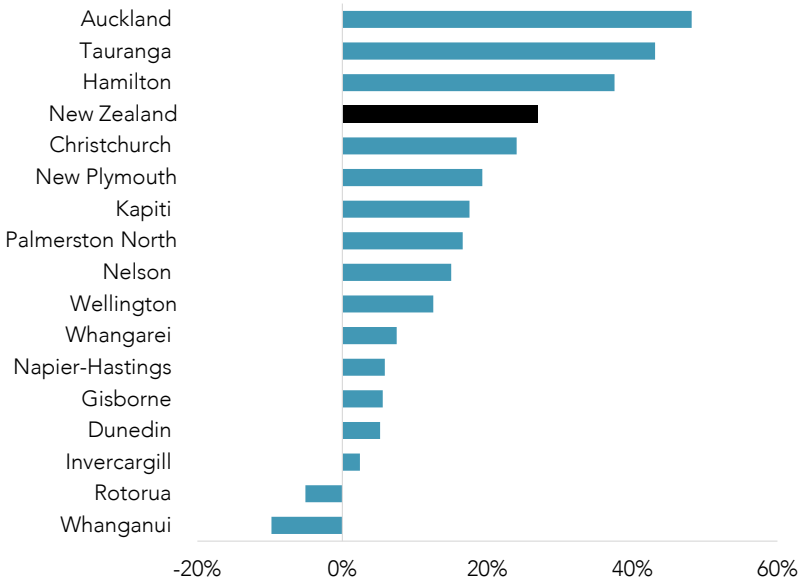
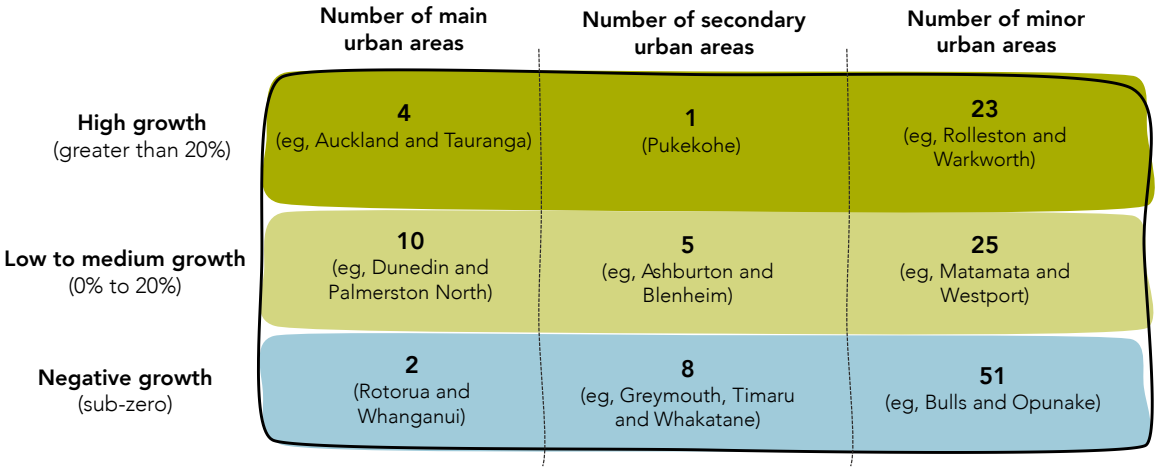


Figure 4.5 Projected population change of urban areas, 2013–2043



Source: Productivity Commission analysis of Statistics New Zealand data.

Notes:

1. Main, secondary and minor urban areas are based on Statistics New Zealand classifications as outlined in Box 4.1.
2. Auckland, Hamilton, Wellington and Napier-Hastings urban areas are made up of smaller urban zones.

The impact of internal migration for urban areas

People moving between cities and towns are major contributors to the growth or decline of those cities and towns. A combination of natural increase, internal migration and international migration drive population growth. Populations in smaller towns tend to suffer more in regions where growth is mainly driven by internal migration, because people are often attracted to larger towns and cities with greater job opportunities and more amenities. Yet recent internal migration patterns in New Zealand reveal that the trend of migration away from these smaller low-growth areas does not alone explain the growth of fast-growing cities (Table 4.1).

Table 4.1 Net internal migration across New Zealand's fast growing cities, 2008–2013

	Auckland	Hamilton City	Tauranga City
Whangarei District	(558)	225	138
Auckland	-	(222)	825
Thames-Coromandel District	(768)	195	189
Waikato District	(2 229)	(972)	15
Hamilton City	222	-	15
Tauranga City	(825)	(15)	-
Kawerau District	(6)	54	54
Rotorua District	75	486	402
Wellington City	1104	(288)	(144)
Christchurch City	3 282	249	258
Net Internal Migration	(4 575)	2 505	3 618
Total Population Change	87 700	11 500	8 500

Source: Statistics New Zealand, Census.

Notes:

1. Table 4.1 shows the net inflow of domestic migrants between Auckland, Hamilton and Tauranga and a selection of other territorial authorities. For example, Auckland's internal migration estimate with Christchurch of 3 282 indicates that 3 282 more people migrated from Christchurch to Auckland than from Auckland to Christchurch.
2. Numbers in brackets indicate a net outflow of domestic migrants. For example, Auckland's internal migration estimate with Waikato District of (2 229) indicates that 2 229 more people migrated from Auckland to the Waikato District than from the Waikato District to Auckland.

More New Zealanders migrated from Auckland than moved there between 2008 and 2013. Many of those who left the region moved to nearby areas including Whangarei District, Tauranga and the Waikato District. Even so, Auckland was a net recipient of migrants from Wellington and Christchurch. Indeed, a large number of residents left Christchurch permanently after the 2010 and 2011 earthquakes.

High levels of internal migration into Tauranga and Hamilton may help to explain low levels of growth and decline in nearby urban areas such as Rotorua, Whangamata, and Kawerau. Both Tauranga and Hamilton attracted a net inflow of residents from Rotorua District, Thames-Coromandel District and Kawerau District, with Rotorua District losing almost 900 residents. Notably, just under a quarter of Tauranga's positive internal migration between 2008 and 2013 were migrants from Auckland. By contrast, Hamilton suffered a net loss of migrants to Auckland.

Internal migration patterns indicate that the rapid growth of cities in New Zealand may result in people moving into neighbouring districts. Waikato District gained more than 3 000 residents from Auckland and Hamilton between 2008 and 2013, despite only having a population of about 60 000 in 2008. People may often choose to migrate to small towns outside cities, where they are still able to commute to work in city centres but where houses are more affordable. For example, the town of Pokeno is located in Waikato District but is within commuting distance of Auckland. As a result, Pokeno has seen significant development in recent years.

How much internal migration, natural increase or international migration drives the growth of larger cities varies. Internal migration contributed to nearly 40% of population growth in Tauranga and about 20% of growth in Hamilton. Hamilton's growth is a large result of strong natural increase. This is because Hamilton's population has the lowest median age in the country. Despite losing many residents to cities and towns nearby, Auckland's population has grown rapidly due to strong natural increase and international migration. This is discussed in more detail later in this chapter.

4.3 Demographic trends

Demographic characteristics such as the age structure of a city are hugely important for determining the rate of long-term population growth. The previous section analysed the distribution of population growth across New Zealand. Similar to patterns of growth, New Zealand cities are varied in their demographic profiles.

Low-growth cities lose their younger population

Age structures differ markedly between high-growth cities and low-growth cities across the country, particularly in terms of population ageing. An ageing population reduces the share of people at reproductive age. This in turn can lead to a smaller natural increase and, for some areas, the onset of a falling population.

In towns and cities facing decline, the younger demographic often are the first to leave. This causes a net loss of the young adult population (Local Government New Zealand (LGNZ), 2015b; Jackson & James, 2015). Figure 1.6 shows that low-growth cities Whanganui, Invercargill and Dunedin experienced a greater decline in the share of young adult population compared with high-growth areas. As this age group makes up a large proportion of the younger and more productive demographic, the result highlights the potential negative impact on income growth for low-growth urban areas.

The age structures of high-growth cities in New Zealand are younger compared with low-growth cities. The median age of Auckland and Hamilton's populations in 2013 were 35 and 32 respectively, compared with the national median age of 38. Further, Hamilton experienced little change to its age structure between 1996 and 2013 while Auckland maintained a large share of population aged 20 to 29. Surprisingly, the share of young adults in Tauranga fell quite considerably despite it being the fastest-growing main urban area. This may reflect a trend of older people migrating to the area to retire.

Large student populations in Dunedin and Hamilton help to explain their large numbers of people aged 20 to 24. However, the effect of Auckland's large student population on its age structure is less marked. This is most likely because students make up a much smaller proportion of Auckland's total population.

F4.2 Low-growth cities have older populations and tend to experience a greater decline in the share of their young adult population compared with faster-growing cities. As this age group makes up a large proportion of a city's working age population, population decline is likely to have a negative impact on average income growth.

Auckland's demographic profile is unique

While a number of factors have contributed to strong population growth in Auckland, its younger age structure has been a primary driver through natural increase. Figure 4.7 shows that Auckland's population growth would remain strong, even with zero migration, due to steady levels of natural increase. The city has one of the youngest regional populations in New Zealand. This means that it has larger numbers of Aucklanders at a reproductive age. This contributes to population growth.

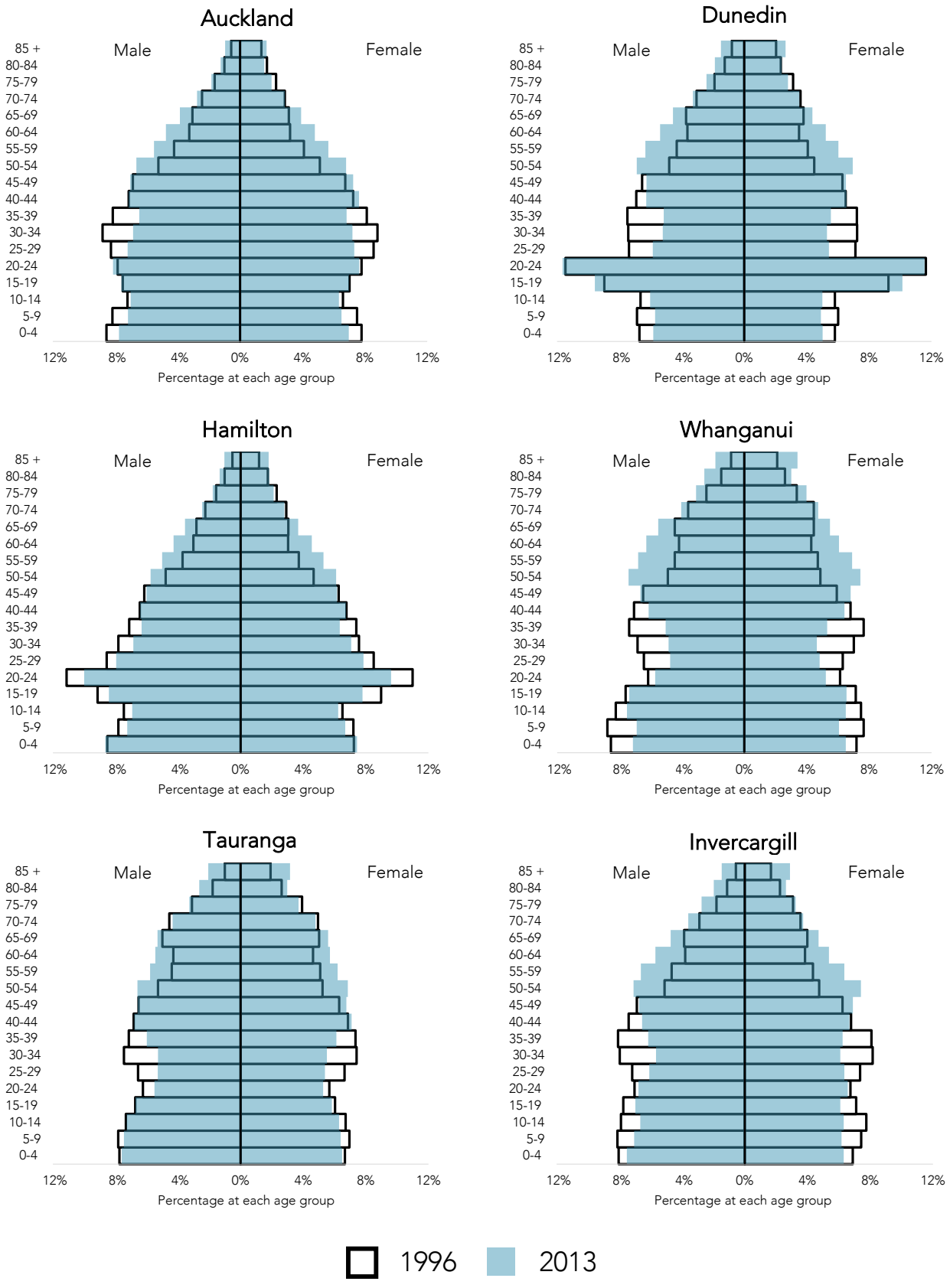
Net migration has played a cyclical role in influencing growth in Auckland.[24] Over 42% of Auckland's growth since 1996 is due to migration, compared with 15% for the rest of New Zealand. Net migration levels were highest between 2002 and 2006, and during 2014 and 2015, while most other periods saw lower levels.

Incoming international migrants have driven periods of strong net migration in Auckland and contributed to its unique diversity. Between 2002 and 2006, Auckland experienced a net migration boom. This occurred despite the number of residents leaving Auckland well exceeding the number of New Zealanders moving to Auckland during the same period (NZPC, 2012a). Partly as a result, its population is more ethnically diverse than most other New Zealand cities (Figure 4.9). In particular, shares of Asian and Pacific populations in

[24] Net migration estimates include international migrants and New Zealanders who have migrated to or from Auckland.

Auckland are considerably higher than the rest of the country, making up nearly 40% of Auckland's population.

Figure 4.6 Age structure of selected New Zealand territorial authorities, 1996 and 2013



Source: Statistics New Zealand, Census.

Figure 4.7 Components of population change in Auckland, 1997–2015

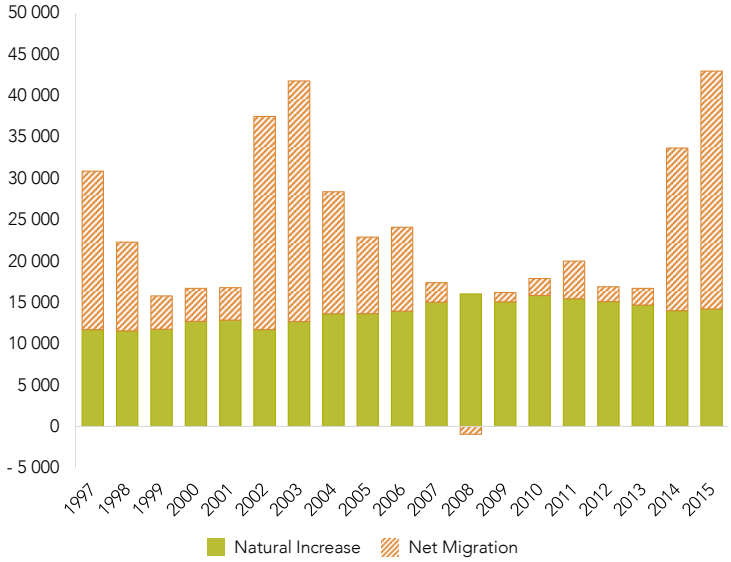


Figure 4.8 Age structure of Auckland vs rest of New Zealand, 2013

Figure 4.9 Ethnic structure of Auckland vs rest of New Zealand, 2013

Source: Productivity Commission analysis of Statistics New Zealand data.

4.4 Location of people, houses and jobs

It matters where a city's people, houses and jobs are located. Where people live in cities affects their access to jobs, commuting costs, proximity to amenities and general quality of living. People are limited in their choice of location by the available housing. Alternatively, where jobs are located across a city influences a firm's choice of employees. Large labour markets make it easier for firms to find the right match of skills to meet their needs. This raises both their productivity and the earnings of their employees (Chapter 2).

As cities grow, they face pressures to accommodate residents through housing development and job growth and choices about how and where to do so. The next section discusses spatial trends observed across New Zealand cities, relating to where people live in cities, and the locations of employment and new development.

New Zealanders in cities are living closer together

Population density estimates show that New Zealand cities have become denser. Population density is an important concept in urban planning, as it captures whether and how much a city is making use of its available land. Various approaches to measuring urban population density lead to different results (Box 4.2). However, certain approaches can produce misleading estimates.

Box 4.2 **Measuring density**

Population density is traditionally estimated using an average density measure. This method uses the following formula:

$$\text{Average density} = \frac{\text{Population}}{\text{Urban Area}}$$

The approach is often used for international comparisons because it is straightforward to calculate.

However, this method can lead to counter-intuitive results. Results tend to underestimate the density of cities with large expanses of lightly populated fringe suburbs. The Demographia *World Urban Areas* report (2016) states that Melbourne has a density of 1 500 people/km^2, Christchurch has a density of 2 000 people/km^2 and Hamilton has a density of 2 200 people/km^2. These results stem largely from the fact that Melbourne's urban area has many peripheral suburbs with fewer people living in them, despite the city having a densely populated centre and a much larger overall population.

An alternative approach is to measure population-weighted density. This method estimates individual densities for smaller areas across a city, and assigns a weight for each area based on its share of the city's population before summing these weighted densities together. This measure better reflects the density of the neighbourhood in which the city's average resident lives. As a result, it is especially useful for capturing the agglomeration benefits of proximity that a city experiences. The following example applies the above approach.

Consider a city made up of three areas, each of 10 hectares. The three areas have 50, 50 and 200 people. Under average density measures, density = 300/30= 10 people/hectare. This hides the fact that two-thirds of the population live in a region with a density of 20 people a hectare. Under population-weighted density measures, density = 15 people/hectare. This is a better reflection of true residential density.

Source: Nunns (2014); Demographia (2016).

The Commission has used the population-weighted density methodology to calculate densities for six New Zealand cities over three census periods (2001, 2006 and 2013), as well as densities for the five largest Australian cities for the 2011 census period. Results are presented in Figure 4.10 and Figure 4.11.

Auckland and Wellington densified significantly between 2001 and 2013. The neighbourhood in which the average resident in Auckland lives was approximately 33% denser in 2013 than in 2001. Both Auckland and Wellington experienced their greatest increase in density between 2001 and 2006. This likely reflects a rapid rise in apartment development in the central business districts (CBDs) of Auckland and Wellington.

Despite experiencing significant population growth, Hamilton and Tauranga experienced only modest increases in density. This suggests that populating lower density suburbs rather than the central city has accommodated their growth. Like Auckland and Wellington, both cities saw a larger increase in density between 2001 and 2006.

The decrease in Christchurch's density between 2006 and 2013 reflects the 2010 and 2011 earthquakes, which resulted in a large outflow of residents.

Although smaller in population, Auckland and Wellington are among the densest cities in Australasia. Even though Auckland has a reputation as a relatively low-density city, Figure 4.11 indicates that Auckland is the second densest city in Australasia behind Sydney. Also, Wellington is the fourth densest Australasian city. Even so, Australian and New Zealand cities are mostly not very dense by international standards.

Figure 4.10 Percentage change in population-weighted density for New Zealand cities

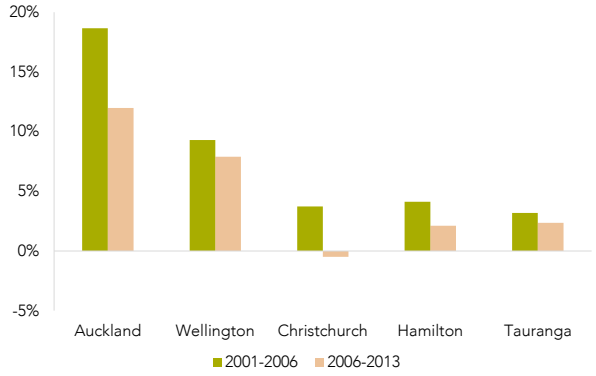
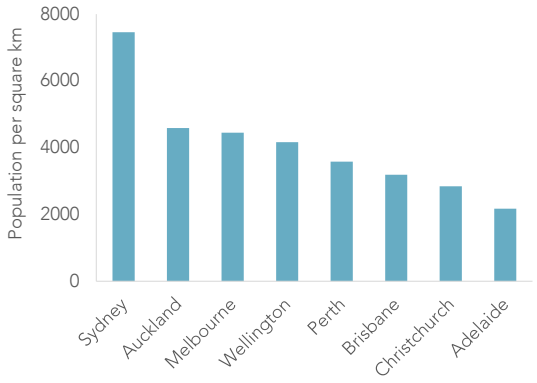


Figure 4.11 Population-weighted densities of Australasian cities, 2011 and 2013



Source: Productivity Commission analysis of Statistics New Zealand and Australian Bureau of Statistics data.

Notes:

1. New Zealand cities are defined at meshblock level, using the Statistics New Zealand urban area definition. Their density estimates are for 2013.
2. Australian cities are defined at meshblock level, using the Australian Bureau of Statistics significant urban area definition. Their density estimates are for 2011.
3. Density is measured by the number of people per square kilometre.
4. Population-weighted density is calculated using the following formula: $Density_t = \sum_i \left(\frac{pop_{it}}{\sum pop_{it}}\right)\left(\frac{pop_{it}}{area_i}\right)$ where *i* and *t* indicate meshblock and time.

F4.3 The populations of Auckland and Wellington have become significantly denser over the last fifteen years. Both cities are among the densest in Australasia, although they are not very dense by international standards.

Growing out rather than growing up

Growing cities need to provide for more housing. Broadly speaking, cities can 'grow out' (enabling construction at the edge of the city), 'grow up' (permitting more intensive development within established areas), or combine the two approaches. While becoming denser, most large New Zealand cities have tended to grow at their fringe rather than in their inner suburbs.

To observe patterns of residential development in New Zealand, the Commission has analysed absolute changes in occupied dwellings for four New Zealand cities over three census periods (2001, 2006 and 2013). The results of the analysis are presented in Figure 4.12. The figures show the relative contribution to dwelling growth of a city's suburbs by their distance from the city centre.

Figure 4.12 The contribution to dwelling growth by distance from centre of four cities

Source: Productivity Commission analysis of Statistics New Zealand data.

Notes:

1. Distance to the centre of each city studied is measured as a linear distance between centres and each area unit.

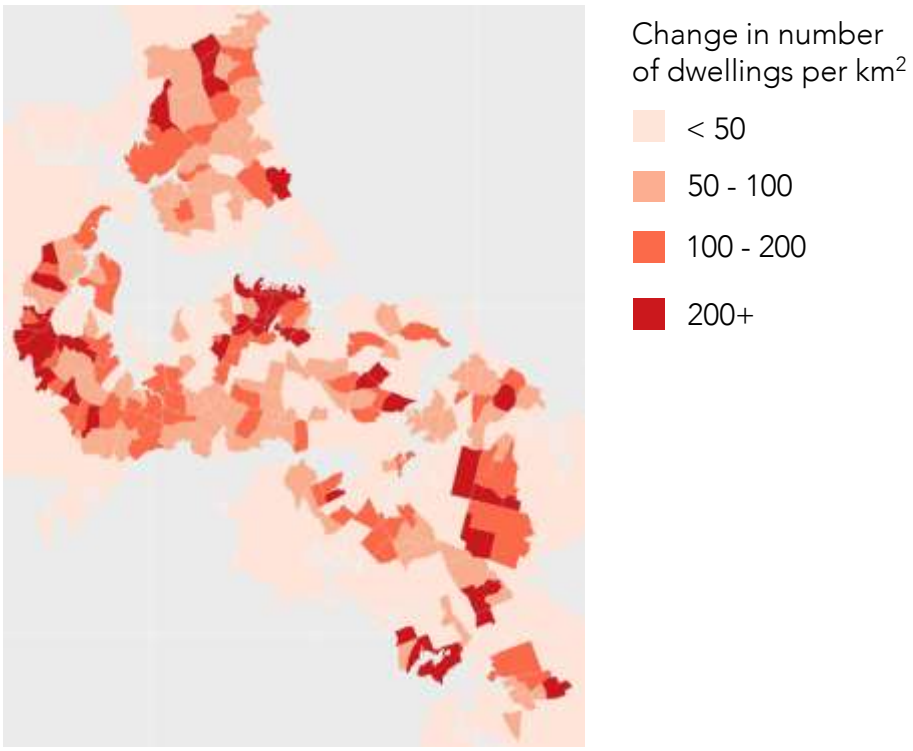
In Wellington, a large share of development occurred in the inner-city. Over half of all new dwellings in Wellington between 2001 and 2006 were within 5 km of the city centre. Between 2006 and 2013, development was more evenly distributed across the city.

Dwelling growth in Tauranga was heavily concentrated in suburbs outside the city centre, while Hamilton saw a slightly more even distribution of development. Over 60% of development in Tauranga occurred between 5 km and 10 km from the city centre. In Hamilton, areas within 5 km of the city centre contributed to close to a third of dwelling growth between 2001 and 2006. Those areas had a smaller contribution to dwelling growth between 2006 and 2013.

While Auckland's dwelling density increased significantly between 2001 and 2013, the majority of development was focused in the outer suburbs. Close to 70% of dwelling development in Auckland was located in areas further than 10 km from the city centre. In contrast, inner suburbs have made a relatively subdued contribution towards development.[25] Figure 4.13 highlights this point, but also reveals the high level of development in Auckland's CBD. That level reflects the rapid construction of residential apartments during the early 2000s (Goodyear & Fabian, 2014).

[25] Due to the scale of Auckland, the Commission considers suburbs within 10 km of Auckland's city centre to be "inner suburbs". For other New Zealand cities, the Commission considers inner suburbs to be within 5 km of the city centre.

Figure 4.13 Absolute change in the dwelling density of Auckland, 2001–2013



Source: Productivity Commission analysis of Statistics New Zealand data.

Development trends indicate that most New Zealand cities tend to grow at the fringes rather than grow up. Urban limits in Auckland have helped to encourage the containment of development. Yet outside the central city, development has tended to intensify closer to the urban fringe. Similarly, dwelling growth in Hamilton and Tauranga tends to be located in areas outside the inner-city.

Much of the literature on global urban development indicates that urban areas around the world have experienced similar trends. OECD (2012a) finds that more population growth in OECD cities has occurred close to the urban boundary compared to in the urban centre. Similarly, Angel et al. (2011) note that a long-term trend of low-density development has occurred in many urban areas worldwide. Bruegman (2005) argues that sprawl is the natural pattern of development in places with a high level of wealth and where people can choose where they live.

Conversely, Ehrenhalt (2012) suggests that wealthier residents in the United States are now choosing to live in city centres close to amenities, rather than relying on cars to live in sprawling suburbs. He proposes that these trends could occur in other metropolitan centres. Fishman (2005) makes a stronger claim that a preference shift is occurring in cities away from suburban living and towards denser inner-city living.

F4.4 New Zealand cities tend to grow out rather than up. Except in Wellington, recent urban growth has largely occurred in outer suburbs.

Knowledge-intensive services are concentrated in cities

Knowledge-intensive services in New Zealand are concentrated in cities. Close to 70% of employment in knowledge-intensive services is located in the three largest cities (Auckland, Wellington and Christchurch) (Figure 4.14). These services typically require technical or professional skills and qualifications and include industries such as finance and insurance, scientific research and software publishing.[26]

[26] Knowledge Intensive Services are defined by the Ministry of Business, Innovation and Employment (2014) using the ANZSIC06.

The Commission's inquiry into *Using land for housing* (2015a) noted that service industries tend to congregate in the centre of cities to take advantage of agglomeration benefits. As Chapter 2 discusses, knowledge-intensive services gain especially from knowledge spillovers when firms cluster together.

Employment in knowledge-intensive services grew by about 43% between 2000 and 2015, contributing to strong growth in the services sector. Nearly a third of all jobs in the services sector in New Zealand are in knowledge-intensive industries.

Figure 4.14 Location of jobs in knowledge-intensive services, 2015

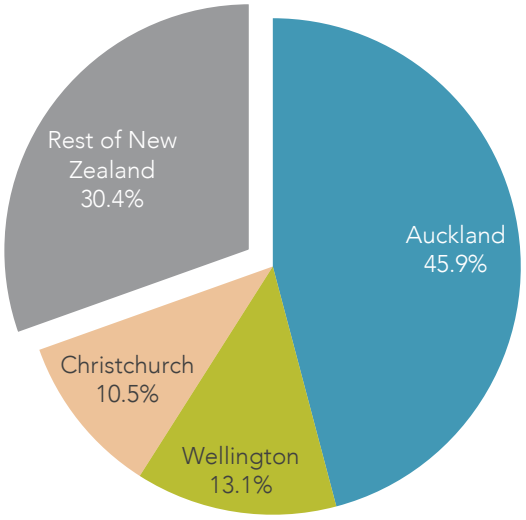
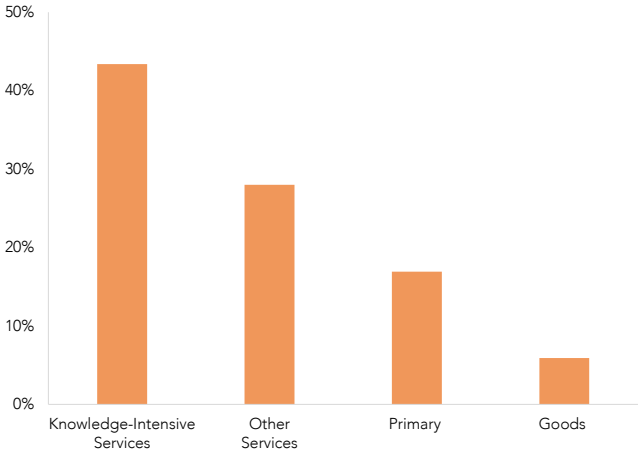


Figure 4.15 Job growth by sector in New Zealand, 2000–2015



Source: Statistics New Zealand, Business demography statistics.

Notes:

1. The data are in employment counts, not hours. This means that different changes in part-time work and full-time work in different sectors may influence the data.
2. Sectors are classified using the Australian and New Zealand Standard Industrial Classification ANZSIC06.

Employment growth patterns vary across cities

Patterns of employment growth in New Zealand, and in particular how much city centres have contributed to employment growth, vary considerably across large cities (Figure 4.16). The job structure of New Zealand cities – in terms of where jobs are concentrated – and strong growth in the services sector have played important roles in driving employment growth patterns. These patterns follow similar trends to housing development patterns, suggesting the link between the location of jobs and where people choose to live is strong.

Employment growth in Wellington is heavily concentrated in the CBD. Strong growth in knowledge intensive services has likely driven this growth. Wellington is a mono-centric city, where employment is concentrated in the city centre. Approximately one third of jobs in Wellington's city centre are in knowledge-intensive services that benefit from knowledge spillovers, among firms clustered together. More than 60% of job growth in Wellington between 2000 and 2015 was located within 2 km of the city centre. Strong job growth in the CBD also helps to explain the strong trend of inner-city residential development.

In greater Christchurch, the centre of the city experienced a decrease in jobs, while employment grew in suburban areas. This reflects the 2010 and 2011 earthquakes, which forced many firms previously located in the CBD to relocate to suburbs outside the central city. The largest contribution to job growth occurred in suburbs further than 10 km from the city centre, reflecting the rapid population and economic growth in the Selwyn and Waimakariri districts.

Figure 4.16 Share of employment growth by distance from the centre of four cities, 2000–2015

Source: Statistics New Zealand, Business demography survey.

Notes:

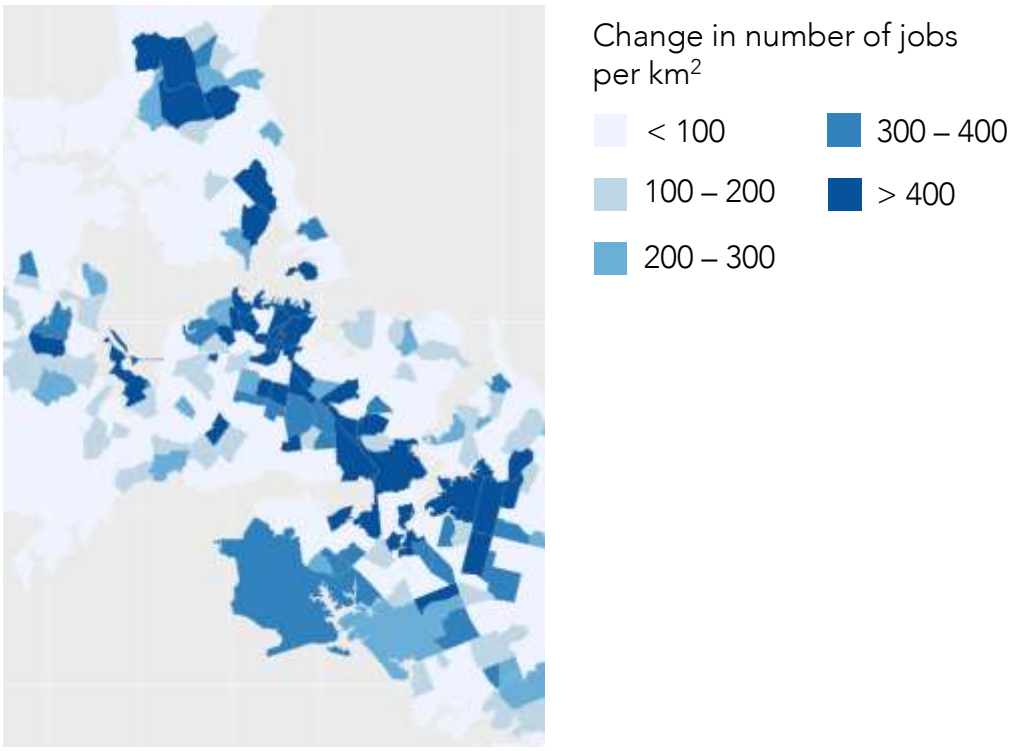
1. Distance to centre of each city studied is measured as a linear distance between centres and each area unit.
2. The intervals on the x axis for Auckland increase in increments of 4 km, rather than 2 km for other cities, to reflect its larger size.

In Hamilton, employment growth in the inner-city was low compared to Auckland and Wellington, while around a third of job growth was located in areas between 4 km and 6 km from the CBD.

Unlike many other Australasian cities, including Wellington and Melbourne, Auckland has a poly-centric structure. Cities that are poly-centric have more than one centre where jobs are concentrated, and therefore where workers commute to. Several employment nodes are located across Auckland, including the Auckland CBD, Newmarket, Takapuna, Pakuranga and Manuwera (Grimes & Liang, 2007).

Employment growth trends in Auckland are consistent with its poly-centric urban form and with recent patterns of housing development. Outer suburbs between 12 km and 16 km from the city centre and inner suburbs (within 4 km of the city centre) experienced the greatest employment growth (Figure 4.16). These suburbs include several of Auckland's employment nodes such as the Auckland CBD, Pakuranga, Otahuhu and Takapuna. Outer suburbs in north Auckland and southeast Auckland saw significant dwelling development between 2001 and 2013 (Figure 4.13), and strong employment growth between 2000 and 2015 (Figure 4.17). As with Wellington, strong employment growth in service industries has likely grown the centre of the city. (NZPC, 2015a).

Figure 4.17 Absolute changes in employment density in Auckland, 2000-2015



Source: Productivity Commission analysis of Statistics New Zealand data.

Patterns of employment growth for New Zealand cities are largely consistent with patterns of housing development, following the notions that "people follow jobs" and "jobs follow people". Whether people primarily move to be near jobs, or businesses move to be near workers, is one of the leading debates in urban economics. A large volume of research exists on the interrelationship between employment growth and population growth.

Academic literature generally supports the finding that population growth has a greater pull on jobs than job growth does on population. Carlino and Mills (1987) found that population growth and employment growth are interrelated in counties in US states, but that the effect of population growth is greater. Similarly, Hicks and Faulk (2016) found that jobs tended to relocate to be near people in Indiana in the 2000s, while the movement of workers to jobs was insignificant. Hoogstra, Florax and Van Dijk (2005) reviewed relevant literature and noted that little support exists for the hypothesis that employment growth drives population growth. However, they also noted that conclusions strongly depend on the particular emphasis of each study.

Preference for large, standalone houses outside the city centre

People make a number of trade-offs when they decide where to live. Trade-offs may include whether to live in the CBD or in the suburbs, in a standalone house or in an apartment, and whether to be closer to schools or to shopping centres. The preferences of residents shape the priorities and actions of decision makers, and in turn can influence the way in which cities develop. Naturally, as cities change over time so do preferences.

Howden-Chapman et al.'s (2015) survey of housing preferences reveal a strong preference of New Zealanders for large, standalone houses, although the results depended on each person's age (Figure 4.18 and Figure 4.19). More than 80% of respondents would most prefer to live in a stand-alone home, while close to 64% of respondents would least prefer to live in an apartment. Over half of respondents felt that having space is more important than having a shorter commuting time. Yet those aged 18 to 24 and over 55 were less averse to living in a smaller residence in the city. This indicates that the age of a person (their stage of life) is an important driver of the type of housing the person chooses. A survey by Preval, Chapman and Howden-Chapman (2009) shared similar findings.

Figure 4.18 Most and least preferred dwelling type to live in, 2015

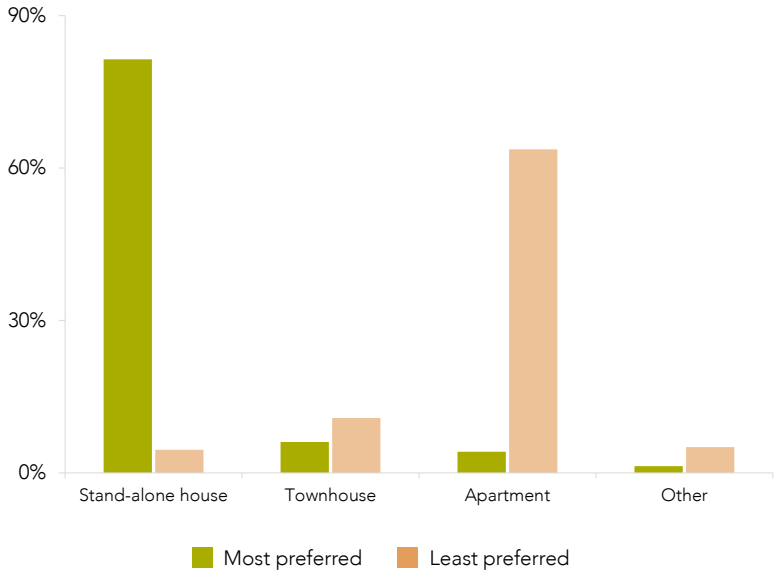
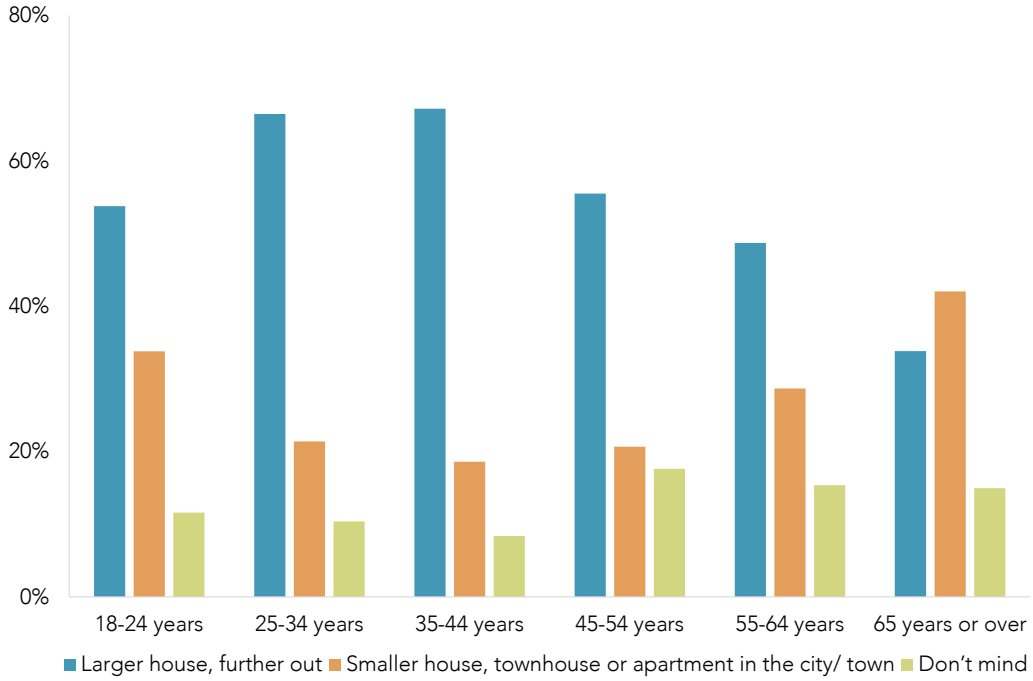


Figure 4.19 Preference between size and proximity to urban centre by age, 2015



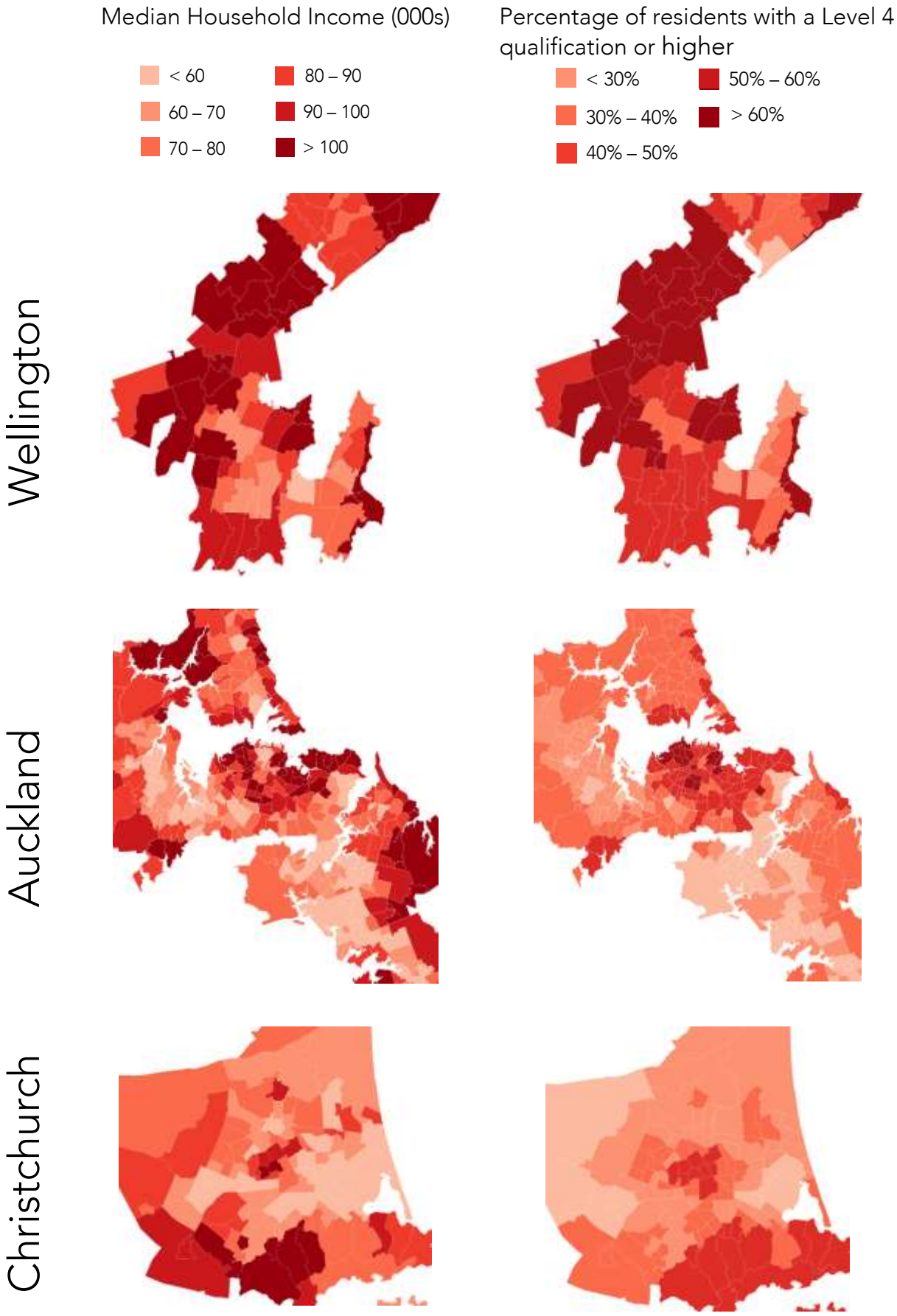
Source: Productivity Commission analysis of Howden-Chapman et al. (2015) data.

Similarly, UMR Research (2009) conducted a survey of locational preferences. That survey found that 39% of respondents most preferred to live in a suburb, compared with 11% for the central city, 22% for a small town and 26% for a rural area.

People who earn more and are more educated tend to live centrally

Significant income and education disparities exist in cities, including in New Zealand. Figure 4.20 illustrates that residents who earn more and are more educated tend to cluster in the inner suburbs and in suburbs with desirable natural attributes, particularly in Auckland and Christchurch. In contrast, a large proportion of residents who earn less and are less educated tend to cluster in the outer suburbs. As Chapter 2 highlights, these spatial inequalities can contribute to social exclusion, where residents in poorer or less-educated neighbourhoods face socio-economic barriers.

Figure 4.20 Income and qualification distribution for New Zealand cities, 2013



Source: Productivity Commission analysis of Statistics New Zealand data.

Notes:

1. A level 4 qualification relates to the New Zealand Qualifications Framework set by NZQA.
2. Cities are broken down into census area units as defined by Statistics New Zealand.

In Auckland and Christchurch, those residents who earn more and are more educated tend to cluster in suburbs near the city centre. Suburbs with lower levels of income and education are clustered in east Christchurch and in south Auckland and west Auckland. The main exceptions in both cities are suburbs close to natural amenities such as beaches and attractive views. These suburbs also attract those with higher incomes and education. Also, Auckland has many lower-income residents in its CBD because of its large student population.

Despite Auckland's poly-centric form, residents with higher education and greater incomes do not tend to live close to employment nodes outside the city centre. This may reflect that these employment nodes consist of fewer knowledge-intensive services or higher-earning industries.

Wellington exhibits patterns of spatial inequality, but less so than Auckland and Christchurch. Residents who earn more and are more educated tend to cluster in the inner suburbs and in suburbs close to the coastline. However, levels of income and education are higher in Wellington than in most other New Zealand cities.

Recent studies propose that population growth at the city fringe can contribute to spatial inequalities (Chapter 2). While evidence is mixed, the trend of most development occurring close to the urban fringe in New Zealand raises questions about the role of planning policies in influencing social outcomes and how people's housing choices affect their longer-term mobility.

F4.5 Spatial inequalities in levels of income and education exist in New Zealand's largest cities. Residents who earn more and are more educated tend to cluster in the inner suburbs and in suburbs with desirable natural attributes. By contrast, residents who earn less and are less educated tend to cluster in the outer suburbs.

4.5 Responding to growth and decline

Local governments in New Zealand are responsible for providing the services and infrastructure to support urban living. Changes in the size and population of cities – either upward or downward – can be challenging for local authorities to respond to effectively. This section discusses how councils have used policy to address issues relating to growth and decline.

Managing the growth of cities

Fast-growing New Zealand cities currently attempt to steer growth with urban limits and densification policies. However this has not always been so. Historically, urban development in New Zealand – particularly in larger cities – has comprised of sprawling low-density suburbs. Population growth has been absorbed through the expansion of greenfield developments. Such a settlement pattern occurred in part due to automobile-centred transportation and a lack of concern for environmental impacts. A strong preference of people for detached homes has also played a significant role in driving suburban development.

Some associate sprawl with traffic congestion, environmental damage and the inefficient provision of infrastructure. They also often argue that sprawling cities discourage community-oriented social patterns, promote private transport instead of walking, cycling and public transport, and ultimately lower each resident's quality of life.

These concerns about accommodating growth through sprawl have brought about a gradual shift in planning policy in New Zealand towards more compact urban development. Local government policies have drawn heavily from international trends influenced by the Compact City planning movement (Box 4.3).

Box 4.3 **The 'Compact City' movement**

Since the late 1980s, an increasing number of cities worldwide have pursued a compact form and promoted high-density living, public transport and accessibility. The movement began as a simple urban containment policy to protect the local natural environment. However, over time, it adopted broader policy objectives for liveability and global environmental issues.

Compact City policies aim to achieve "urban sustainability" by promoting environmental quality, economic prosperity and social equity. It is argued that by influencing the use of space in cities, policies can reduce intra-urban trip distances and so reduce the costs of transporting goods and services. Proponents also argue that maintaining a compact form helps to conserve farmland and biodiversity around urban areas and to make infrastructure investment more efficient. Other perceived benefits include reductions in carbon emissions through public transport, greater quality of life and better health outcomes for city residents, and stimulation of economic growth.

There is strong debate about the Compact City movement and its policies. Arbury (2005) emphasises the complexity of the urban environment, and notes that policies designed to achieve a compact urban form may have unintended consequences. Concern has also been raised around air pollution problems associated with increased traffic congestion, housing supply constraints and a loss of open and recreational space, resulting from a compact form. Michael Neuman (2005) argues that

> the compact city is neither a necessary [n]or sufficient condition for a city to be sustainable and that the attempt to make cities more sustainable only by using urban form strategies is counterproductive. Instead, conceiving urban form as a processual outcome of urbanization opens the door to a new and dynamic conception of urban planning that is based on a reversal of the last century's (not exclusive) focus on urban form governed by the static tools of the plan and zoning. (p. 23)

Source: OECD (2012b).

The growing trend of Compact City policy in New Zealand began with the introduction of the Auckland Regional Growth Strategy (ARGS) in 1999. The strategy aimed to accommodate the city's growing population in a way that did not further degrade the natural environment, economic viability and social equity of the Auckland region. It promoted both urban limits and densification policies to manage growth. Zhao, Chapman and Howden-Chapman (2011) argue that the trend of continuing urban sprawl around Auckland has been slowly diminishing since the ARGS was introduced. Yet in its *Using land for housing* report, the Commission noted an important downside of an urban limit restriction of land supply for housing has driven up land and house prices in Auckland.

Growth management and compact urban development have become central tenets of New Zealand urban policy. Section 4.2 finds that although population growth is unequally distributed across urban areas, a majority of cities have experienced some recent growth. Many local governments have introduced growth management strategies that aim to constrain the expansion of their cities (Table 4.2). Plans vary in their scale and scope.

Table 4.2 Selection of New Zealand spatial plans

Plan	Councils Involved	Summary
Whangarei Growth Strategy	Whangarei District Council	• Long-term strategy to accommodate growth in Whangarei District over the next 30–50 years. • Emphasis placed on urban consolidation as opposed to intensification. Most planned future development occurring near existing urban areas that have the capacity to grow to take advantage of existing assets, including the Whangarei District Council's infrastructure.
The Auckland Plan[27]	Auckland Council	• Plan that outlines how Auckland Council will address the challenges of Auckland's future growth. • Promotes the idea of a liveable and compact city with an excellent transport system, resilient communities and quality urban and natural environment. • Target set that 60% to 70% of future residential development will be within the 2010 Metropolitan Urban Limit.
Future Proof	Waikato Regional Council, Waikato District Council, Hamilton City Council, Waipa District Council	• A subregional growth strategy that focuses on providing well-designed, sustainable and affordable housing (including lifestyle options). • Supports urban renewal and increased densities in new residential development to accommodate growth and reduce people being dependent on their car for transport in the region.
Hamilton Urban Growth Strategy	Hamilton City Council	• Strategy that places a focus on developing land within urban limits more efficiently, and promotes compact living environments that limit sprawl. • Identifies greenfield development areas required to accommodate future growth.
SmartGrowth	Tauranga City Council, Western Bay of Plenty District Council, Bay of Plenty Regional Council	• A blueprint for future urban development to accommodate rapid growth in the western Bay of Plenty subregion. • Planning tools include urban limits as well as residential density targets. • Settlement pattern looks to promote a more compact urban footprint and protects productive rural land for the foreseeable future.
Wellington Urban Growth Strategy	Wellington City Council	• A strategy with objectives that include improving walking amenities and public transport, increasing medium-density housing, and encouraging a mixture of housing types.
Greater Christchurch Urban Development Strategy	Christchurch City Council, Selwyn District Council, Waimakariri District Council, Environment Canterbury	• A strategy (prepared before the Christchurch earthquakes) that aims to identify growth areas within the Greater Christchurch area. • The proposed settlement pattern is based on maintaining the distinction between urban and rural areas by concentrating development at and around existing urban areas.

Plans discussed in Table 4.2 place a heavy focus on the pursuit of "urban sustainability" while accommodating growth. All plans emphasise the importance of maintaining the distinction between urban and rural areas to limit sprawl. However, the degree to which cities aim to mitigate the sprawl effects of growth varies. For example, the Auckland Plan, Wellington Growth Strategy and SmartGrowth place a

[27] Auckland Plan is required under the Local Government (Auckland Council) Act 2009.

heavier emphasis on pursuing a compact form compared with other strategies such as the Whangarei Growth Strategy.

Councils often say urban intensification is a necessary tool to manage growth sustainably. Intensification refers to an increase in density within an established area. Policies that councils have implemented to promote intensification include residential density targets, urban growth boundaries and zoning for medium-density housing. The desired level of intensification is often linked to the ratio of greenfield to brownfield development or the proportion of growth which will be accommodated within urban limits. For example, the Auckland Plan specifies that 60% to 70% of Auckland's growth will be contained within existing urban limits.

Johnson (2008) notes that the focus of growth management planning in New Zealand has shifted from how to simply manage growth to how to create a more desirable future for residents. Many councils support the idea of a compact urban form so as to benefit the environment, increase public transport use and reduce car dependency, and increase amenity value.

While faster growing councils have been to the fore in preparing growth strategies, councils with low population growth have also expressed a desire for a more compact urban form. Dunedin City Council (2012) states that

> the overall objective for urban form and future development for Dunedin is to have a Compact City with resilient townships. (p. 31)

Palmerston North City Council (2010a) labels a compact city as one of its four economic objectives in its Residential Growth Strategy.

Gap between council aspirations and outcomes

A gap seems to exist between council aspirations of compact cities as expressed in their plans and actual policy outcomes. An evaluation of the Auckland Regional Growth Strategy in 2007 highlighted many challenges around delivering residential intensification including a lack of development capacity, little community support and a lack of consistency between regional plans and district plans (Regional Growth Forum, 2007). In Tauranga City Council's submission to the Commission for the *Using Land for Housing* inquiry, it noted that

> Residential infill and intensification is expected to accommodate 25% of the sub region's growth to 2051 in accordance with the BOPRC Regional Policy Statement….This would be about 300 to 400% greater than the recent trend for residential intensification. (sub. 47 attachment one, p. 68)

Greater Christchurch Urban Development Strategy Partnership also reported to the Commission in an engagement meeting difficulties faced in achieving densification targets.

As discussed, New Zealand cities have become denser but residential development tends to be concentrated near the urban fringe. Auckland in particular observed a subdued level of development in inner suburbs close to the city centre. Public preference for larger, stand-alone houses away from the city centre plays a key role in driving these trends (section 4.4). The tendency for existing property owners to oppose intensification in their neighbourhood also plays a role (Chapter 8). A high concentration of development in outer suburbs may not necessarily harm the neighbouring rural environment. However, it does not help to realise some of the perceived benefits of a compact urban form, including walkability and accessibility. To achieve these benefits, more development would be needed closer to the city centre.

F4.6 Many New Zealand councils have policies aimed at creating a compact urban form for their cities. Yet most have struggled to achieve this goal, particularly in densifying their inner-city suburbs.

Responding to decline

Many local authorities perceive population decline as a significant challenge. Section 4.3 notes that declining areas tend to lose a greater share of their younger and more productive residents, thus negatively impacting the local economy. The resulting impact on incomes and job opportunities hurts the wellbeing of local

residents and families. It could also potentially create a cycle of decline, with people choosing to migrate towards more prosperous towns and cities. Additionally, declining councils can find it hard to maintain service levels and fund the maintenance and replacement of infrastructure assets with a declining rating base.

The Terms of Reference for this inquiry ask the Commission to investigate the arrangements needed for areas of the country seeing economic contraction rather than growth.

Although most New Zealand cities are projected to grow over the next 30 years, a significant number of smaller urban areas are projected to decline. The following paragraphs discuss how councils have responded to decline pressures.

The most common planning response to urban decline in New Zealand has been planning ways to revitalise the local economy and reverse decline (Hollander et al., 2009). Ruapehu District Council (2015), for example, highlights the link between economic prosperity and population growth:

> Reversing our population decline and growing our population is a critical success factor to our future economic wellbeing. (p. 16)

Most declining councils prepare Economic Development Strategies that outline initiatives aimed at stimulating population and economic growth. Examples of initiatives include removing development contributions to encourage commercial and housing development (Whanganui District), redeveloping the CBD (Grey District) and collaborating between districts to promote local business (Kawerau District, Whakatane District and Opotiki District). Despite projections of a 40% population decline in the Kawerau District, the Council (2015) argues that

> population decline as projected will not eventuate due to: the anticipated future growth in Kawerau's commercial/industrial sector and subsequent availability of jobs, the lower cost of living and increased quality of life when compared to living in larger centres. (p. 117)

Yet, evidence on the success of these policies is mixed. Neumark and Simpson (2014) review relevant literature and argue that policies aimed at boosting the economic performance of underperforming areas are often ineffective. They also propose that positive evidence of these policies does not consider whether these areas will be able to sustain growth on their own following the immediate impact of revitalisation policies. McMillan (2015) argues that attempting to combat decline is increasingly challenging in New Zealand as demographic and economic trends encourage outmigration. Similarly, Hollander et al. (2009) contend that

> aiming for economic growth in order to regain population growth – an uneasy compromise – is the most typical response of planners and politicians, a strategy that rarely leads to success anywhere. (p. 12)

Alternatively, there are pockets throughout New Zealand where local councils have looked to adapt to the changing circumstances presented by population decline. Rangitikei District Council is an example of a district council that has focused on shrinking its built infrastructure to match its declining population; a practice often referred to as right-sizing (Box 4.4).

Box 4.4 **Adapting to decline**

Right-sizing strategies aim to slow the rate of population decline and manage its consequences. Strategies focus on stabilising the current population, providing services and upholding quality of life while bringing cities and towns down to a size that enables an area to pay for itself. The evidence about whether right-sizing has been successful is limited, since only a small number of urban areas have adopted these strategies.

Rangitikei District Council in particular has addressed the issue of population reduction head-on. The three largest towns in Rangitikei District (Bulls, Marton and Taihape) have all experienced recent declines. In response, the Council identified the following as likely changes to its infrastructure by 2046:

- a smaller urban water and wastewater reticulation network;
- increasing alternative water and wastewater provision;
- a larger rural water supply network (but not necessarily Council owned or managed);
- a larger network of roads, but of more varying condition, and some in private ownership; and
- a smaller number of Council-managed community facilities, with some transferred to community ownership.

Source: LGNZ (2015b).

4.6 Conclusion

New Zealand is a largely urbanised country, yet the extent of its urbanisation – and its comparability with other countries – depends on the definition used. The commonly cited figure that 86% of New Zealanders live in urban areas is based on a New Zealand definition. That percentage includes people living in cities like Auckland down to towns as small as Leeston. Estimates should be treated with some care, as other definitions lead to lower results.

A majority of New Zealand cities and towns are growing but at varying rates. Most growth in cities is concentrated in or near Auckland, while most other cities face either modest growth or stagnation. Decline is mostly limited to smaller urban areas, although the number of declining urban areas is projected to increase. Demographic trends in low-growth cities suggest that the onset of population decline has negative implications for the local economy.

Many New Zealand councils have policies aimed at creating a compact urban form for their cities, however most have struggled to achieve this goal. While cities have become denser, a large share of development and employment growth within cities has occurred in areas outside the inner-city.

The complexity and scale of planning for large cities is vastly different compared to smaller towns. In particular, Auckland faces unique planning challenges with a larger, denser and faster-growing population than nearly all other New Zealand cities. The last twenty years have seen a number of Auckland-centred planning initiatives, ranging from the Auckland Regional Growth Strategy to the more recent Auckland Plan. However, all local councils, regardless of size, face planning challenges in the provision and servicing of infrastructure and local public amenities, and land-use regulation, despite the diversity in their experiences.

5 New Zealand's current urban planning system

Key points

- The New Zealand urban planning system is underpinned by three main statutes – the Resource Management Act 1991 (RMA), the Local Government Act 2002 (LGA), and the Land Transport Management Act 2003 (LTMA). The RMA is primarily a regulatory statute, while the LGA and LTMA govern budgeting, service and infrastructure provision and planning.
- The founders of the RMA envisaged it as an enabling statute that would produce "tightly targeted controls that have minimum side effects" (Upton, 1991). The RMA has failed to deliver on this goal. The carrying over of old traditions and institutions from the former Town and Country Planning Act 1977, capability gaps and insufficient checks on regulatory quality contributed to this failure.
- The debate about the meaning of core concepts within the RMA and LGA has been considerable. This debate has led to rising frustration with the performance of the RMA (particularly in handling growth pressures in urban areas) and successive legislative amendments. Repeated amendments to the planning statutes have increased their complexity and reduced their coherence.
- Appeal rights in New Zealand are broader than in other comparable jurisdictions. The ability to appeal provisions of Plans is particularly unusual.
- Councils have faced difficulties recovering the full costs of infrastructure from those creating the demand. This has led many councils to ration the supply of new infrastructure, contributing to scarcity and higher land and housing prices.
- Councils face a number of statutory obligations to engage with the public. Statutory consultation requirements differ, sometimes creating duplication, and can be slow. Consultation processes are open to capture and can discourage participation by some groups.
- Apart from land transport, central government has played a relatively weak role in leading and managing the planning system. However, recent years have seen trends towards:
  - tighter central control over local government and reduced local discretion; and
  - legislative exceptions (specific to regions) from the main planning system.
- Multiple amendments to planning statutes have increased complexity and reduced legislative coherence, making it harder for the public to understand the laws and for councils to implement them. This mounting complexity and deteriorating coherence in the face of rising urban growth pressures sets the scene for the Commission's current inquiry.

Chapter 3 outlined the key purposes of planning:

- management of negative externalities;
- fair and efficient collective decisions about the provision of local public goods; and
- planning, implementation and coordination of infrastructure investments.

That chapter argued that land use regulations should conform to the principles and practices of good-practice regulation, in the interests of efficiency, innovation and fairness.

Chapter 5 describes and assesses key features of New Zealand's current planning system and discusses some debates about the purpose and scope of planning and local government.

In this chapter, the Commission analyses the statutes, processes, institutions and practices of the planning system against the good practice principles and frameworks laid out in its *Regulatory institutions and practices* report (2014). Although the planning system is not exclusively about regulation, it does have a significant regulatory component and the principles underpinning the *Regulatory institutions* framework are more widely applicable. Applying these frameworks also allows for comparisons between the existing system and good practice.

5.1 Clarity of purpose and scope

Clear roles and purposes matter for the effective and accountable operation of regulatory regimes. (NZPC, 2014b). The current planning system distributes roles and processes across three main statutes (see (Box 5.1):

- land use regulation through the Resource Management Act (RMA) 1991;
- budgeting, service and infrastructure provision and planning through the Local Government Act (LGA) 2002; and
- transport planning, provision and management through the Land Transport Management Act (LTMA) 2003.

Box 5.1 **Current purposes of the three main planning Acts:**

Resource Management Act 1991 (section 5)

(1) The purpose of this Act is to promote the sustainable management of natural and physical resources.

(2) In this Act, sustainable management means 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 well-being 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.

Local Government Act 2002 (section 3)

The purpose of this Act is to provide for democratic and effective local government that recognises the diversity of New Zealand communities; and, to that end, this Act—

(a) states the purpose of local government; and

(b) provides a framework and powers for local authorities to decide which activities they undertake and the manner in which they will undertake them; and

(c) promotes the accountability of local authorities to their communities; and

(d) provides for local authorities to play a broad role in meeting the current and future needs of their communities for good-quality local infrastructure, local public services, and performance of regulatory functions.

Land Transport Management Act 2003 (section 3)

The purpose of this Act is to contribute to an effective, efficient, and safe land transport system in the public interest.

The purposes of two of the main planning Acts – the RMA and LGA – have proved controversial, while the differing purposes of the three Acts create unhelpful tensions, costs and complexity within the planning system.

Three key points of debate for the RMA are the meaning and implications of "sustainable management" (section 5 of the RMA), the scope of sustainable management, and whether the RMA adequately reflects cities. Chapter 9 discusses the concept of "sustainability" in more detail.

Interpretation of section 5 of the RMA

The main question about the interpretation of section 5 and its "sustainable management" objective was whether the RMA set "environmental bottom lines" that could not be breached, or instead required decision-makers to form an "overall broad judgement" over an activity or development. Under the former approach, subsections 5 (2) (a), (b) and (c) are "safeguards or qualifications" that "must all be met before the purpose [of the RMA] is fulfilled" (*Shell Oil New Zealand Ltd v Auckland City Council*, W8/94 PT, at 10). Under the "overall broad judgement" approach, subsections 5(2) (a), (b) and (c) do not necessarily trump other considerations. As the Environment Court noted in *North Shore City Council v Auckland Regional Council*,

> The method of applying s 5 then involves an overall broad judgement of whether a proposal would promote the sustainable management of natural and physical resources. That recognises that the Act has a single purpose. Such a judgement allows for comparison of conflicting considerations and the scale or degree of them, and their relative significance or proportion in the final outcome. (para 347)

The judiciary's interpretation of section 5 changed over time. The founders of the RMA, Geoffrey Palmer and Simon Upton, were both clear in their Parliamentary speeches on the Resource Management Bill that the fundamental aim of the law was to provide an environmental "bottom line that must not be compromised" (Upton, 1991, p. 3019). Early court decisions appeared to favour this interpretation. The courts then gradually adopted the "overall broad judgement" method, partly on the grounds that the inclusion of "remedying, or mitigating" in section 5(2)(c) envisaged allowing for adverse effects from a development. A recent Supreme Court decision has modified and refined the "overall broad judgement" approach.[28]

As a result of this initial lack of clarity, councils in the earlier years of the RMA "had trouble understanding what was required of them under section 5" and

> either ducked the task of articulating sustainable management by choosing to write district plans that were based largely on their earlier activities-based plans, or regurgitated key phrases from the Act to avoid 'getting it wrong'. To avoid confrontation, many councils negotiated a resolution to disputes over plan content rather than defend their policies in the Environment Court…Only when a proposal for using or developing resources required a specific consent was the inadequacy of the plan revealed in its lack of a rigorous framework for assessing environmental effects. (Ericksen et al., 2003, p. 285)

F5.1 There has been considerable debate about the purpose of the Resource Management Act 1991, and the practical implications of "sustainable management" for council plans and rules. Confusion about the purpose of the RMA in its early years made it harder for councils to develop and implement land use plans.

[28] The implications of the Supreme Court's *Environmental Defence Society Inc. v New Zealand King Salmon Ltd* are discussed in K Palmer (2016)

Scope of sustainable management

The current planning system lacks clear limits. This reflects the wide scope of the purposes and definitions of both the RMA and LGA, and unforthcoming central government guidance. The lack of limits provides opportunities for councils and some interest groups to pursue land use regulations that have weak links to genuine externalities, are unlikely to provide net community benefits, or which only provide benefits for particular segments of the community. The lack of limits can also lead to local regulatory plans that have conflicting objectives.

Part of the reason for regulatory scope creep is the broad definition of "sustainable management" and "environment" in the RMA.

As noted in Box 5.1, section 5 of the RMA defines "sustainable management" 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 well-being and for their health and safety.

Section 2 of the RMA defines "environment" as including:

> (a) ecosystems and their constituent parts, including people and communities; and
>
> (b) all natural and physical resources; and
>
> (c) amenity values; and
>
> (d) the social, economic, aesthetic, and cultural conditions which affect the matters stated in paragraphs (a) to (c) or which are affected by those matters.

This wide scope lends itself to a number of intrusive rules and policies. For example, floor-to-ceiling height rules in plans were often effectively justified on the grounds that buildings were a "physical resource" and that "sustainable management" of that resource required regulation of internal building structures to ensure reuse and adaptability.

The broad definition of "environment" and "sustainable management", the range of other issues that must be considered or given effect to in Part 2 of the RMA, and the previous absence of national policy statements on urban issues, also provide little guidance to councils on priorities, and few limits. This lack of limits and priorities, and the legacy of the "four well beings" from the old LGA 2002 purpose statement, leaves the system open to behaviour that seeks to respond to an ever-growing variety of social ills, without considering whether planning is the most effective and efficient mechanism. Councils face rising pressures and community expectations to act on social matters (NZPC, 2013). This is noticeable in the wide range of objectives sought through the Auckland Plan, many of which are not within the control of local government. These include:

- eliminating life expectancy gaps "between European, Maori, Pacific and Asian ethnicities by 2040";
- decreasing "the number of child hospitalisations due to injury by 20% by 2025";
- increasing "the number of residents who are conversant in more than one language from 25% in 2006 to 50% in 2040";
- increasing "annual average real GDP growth from 3% p.a. in the last decade to 5% for the next 30 years"; and
- increasing "the value added to the Auckland economy by rural sectors (including rural production, complementary rural enterprises, tourism and visitor experiences" by 50% by 2040" (Auckland Council, 2012).

On the issue of lack of clarity in the meaning of "the environment", Simon Upton and others have pointed to the RMA's definition of "environment" – and in particular paragraph (d)[29] – as a key source of difficulty:

> The reality is that the definition of environment as it currently stands does allow the full gamut of economic and social consequences to be considered….As presently cast, the definition of environment is so wide that adverse effects could plausibly encompass any loss of employment, any loss of profits or even any loss of possible rates or taxes. While the direct effects of trade competition are prohibited from being taken into account under section 104 (8) of the Act, the indirect consequences of changes in the market place would still seem to be relevant considerations under section 5 (2) (c). (Upton, Atkins & Willis., 2002)

In Māori thinking (te ao Māori) the physical, the cultural, and the social form a holistic, interconnected whole, as described in the submission of the Greater Christchurch Urban Development Strategy (sub. 83, pp. 13-14)

> Mana whenua values, not just kaitakitanga, demonstrate the holistic, interconnected relationships between people and place and the importance placed on intergenerational obligations. Such values align well with sustainability and wellbeing principles more commonly expressed in legislation and oversees and reinforces the submission that an urban planning framework must have these values at its core.

Yet this need not and should not lead to plans and planning that attempt to tackle an overly broad range of social and cultural issues. Rather it calls for the meaningful involvement of mana whenua and mātāwaka in planning processes to recognise and provide for Māori values, rights and interests in the course of setting clear priorities (Ngā Aho and Papa Pounamu, 2016b)

F5.2 The planning system lacks clear statutory limits. This has led the system to respond to a growing variety of social and other issues, without considering whether land-use planning is the most effective and efficient mechanism for their resolution.

The RMA and cities

Compared with former planning Acts, the RMA is virtually silent on urban areas. The definition of the environment – set out in the previous section – refers to urban issues only indirectly:

"Natural and physical resources" is defined in the Act as including "land, water, air, soil, minerals, and energy, all forms of plants and animals (whether native to New Zealand or introduced), and all structures" (section 2). "Structures" is defined as meaning "any building, equipment, device, or other facility made by people and which is fixed to land; and includes any raft" (section 2).

Although some people argue that cities and urban environments are captured within the RMA (see, for example, Munro and Beattie, 2014), others have highlighted the absence of any focus on urban issues in the law as leading to difficulties. Key features of the RMA cited as restricting its usefulness in urban areas include its largely reactive character, its limited scope to deal with cumulative effects, and its focus on managing negative impacts rather than planning for positive effects (Parliamentary Commissioner for the Environment, (PCE) 2001; Rae, 2009; Miller, 2011; Urban Technical Advisory Group, 2010; NZCID[30], 2015a). Miller (2011) said that the Act's drafting "left planners with no clear indication of how urban issues should be addressed under the new legislation" (p. 85). The Ministry for the Environment (MfE, 2010) has noted "growing concerns and evidence" that the RMA was not delivering such outcomes as "[h]igh quality urban services and amenities, including open space" (p. 8).

F5.3 The Resource Management Act provides no clear indication of how the development of urban areas should be handled, and tends to focus on negative impacts only rather than on weighing up the potential benefits of development against those impacts.

[29] "(d) the social, economic, aesthetic and cultural conditions which affect the matters stated in paragraphs (a) to (c) of this definition or which are affected by those matters."

[30] New Zealand Council for Infrastructure Development (NZCID) is now called Infrastructure New Zealand.

The Local Government Act's purpose and scope

Debates about the LGA have concentrated on the wide scope given to local authorities in the 2002 Act's original purpose statement. Under the 2002 Act, councils' roles were

- to enable democratic local decision-making and action by, and on behalf of, communities; and
- to promote the social, economic, environmental, and cultural well-being of communities, in the present and for the future. (sections 10(a) and (b), Local Government Act 2002 [since amended])

Supporters of the original purpose statement argued that it better reflected the needs of modern local government, while critics said that it reduced council focus and encouraged scope creep. Since a change in government in 2008, the LGA has been amended several times to tighten the Act's purpose and provide greater clarity about the role of local authorities.

The 2002 LGA gave local government the power of "general competence", which allowed local authorities to "do anything that is not expressly forbidden by law or given exclusively to another organisation" (Palmer & Palmer, 2004, p. 250). It was a response to concerns that the previous 1974 Act had been overly prescriptive, limiting the activities of councils to specified tasks or roles. This could reach minute levels of detail:

> The approach in the old Act was: before local authorities did anything they needed to check to see that they were empowered to do it. For example, section 663 reassured that they were empowered to install clocks. Section 659 confirmed they could sell firewood. (Palmer & Palmer, 2004, p. 230)

"Well-being" was referenced throughout the 2002 Act, especially in relation to decision making. In making decisions about promoting wellbeing and fulfilling their purpose, councils were expected to either contribute to enhancing all four wellbeing dimensions, or make explicit trade-offs between them. The then government's discussion document on the need for a new approach to local government argued that

> the challenges facing New Zealand in areas such as sustainable development cannot be met by central government making decisions and acting on its own. They require a partnership approach within which central government, local government and the voluntary and business sectors can work together (DIA, 2001, p. 13)

The broad scope of the LGA and the introduction of general competence were controversial. Local government welcomed the new Act, and the law was "regarded internationally as highly innovative and cutting edge, particularly in its emphasis on sustainability and community outcomes" (Reid, 2010, p. 4). Others, however, argued that the lack of constraints led councils to lose focus on "core services", move outside their areas of comparative advantage, and reduced accountability and transparency to their communities (Kerr, 2003, 2005; Local Government Forum, 2007).

Rising council rate levels and burgeoning infrastructure costs were a particular source of concern. In a 2009 paper seeking Cabinet approval to amend the LGA, the Minister for Local Government commented that:

> In recent years:
>
> - residential rates have grown by 63.1 per cent while the consumers price index has grown by 23.7 per cent; and
> - residential rates have grown by 53 per cent while household incomes have grown by 37.8 per cent
>
> Infrastructure costs have risen at a rate more than consumer price inflation and have been a major source of rate increases. Councils have also needed to upgrade the quality of infrastructure, especially for water and wastewater treatment plants, and to invest in more infrastructure to meet growth demands. Councils' 2009 LTCCPs forecast local authority rates to grow to 3.7 per cent of Gross Domestic Product (GDP) and local authority debt to grow to almost seven per cent of GDP. These are levels never previously seen. (Office of the Minister for Local Government, 2009, pp. 2–3)

A series of amendments to the LGA between 2010 and 2014 revised the purpose of local government and introduced new reporting and review requirements on councils.

- Amendments to the LGA in 2010 introduced a list of "core services" that local authorities had to have "particular regard to" in performing their role. These include network infrastructure, public transport services, solid waste collection and disposal, the avoidance or mitigation of natural hazards, libraries, museums, reserves, recreational facilities, and other community infrastructure. The 2010 amendments also introduced a requirement on councils to periodically assess the expected returns "from investing in, or undertaking, a commercial activity" and satisfy themselves that the expected returns were "likely to outweigh the risks inherent in the investment or activity". The amendment also empowered the Secretary for Local Government to set non-financial performance measures that councils would have to report against.[31]

- In 2012, the LGA's purpose statement was amended to remove the references to the "four wellbeings". The Act's primary purpose remained "to provide for democratic and effective local government that recognises the diversity of New Zealand communities;" but the amended section 3 provided for local authorities to play a broad role "in meeting the current and future needs of their communities for good-quality local infrastructure, local public services, and performance of regulatory functions" instead of "in promoting the social, economic, environmental, and cultural well-being of their communities, taking a sustainable development approach".

- The amendments also changed the purpose of local government from promoting community wellbeing to meeting "the current and future needs of communities for good-quality local infrastructure, local public services, and performance of regulatory functions in a way that is most cost-effective for households and businesses" (section 10)

Overall coherence and consistency of the planning system

A fourth area of debate and controversy about the purposes and roles of the planning system is its internal coherence and consistency. The New Zealand Council for Infrastructure Development, for example, notes that

> the balance of the RMA is primarily concerned with the adverse impacts of development. Apart from proposed amendments which are hotly contested, almost no recognition is given to the positive outcomes derived from good urban planning and development or investment in infrastructure… The LGA and LTMA, conversely, remain oriented towards future action. Consequently, consenting and other regulatory issues may only arise through the implementation phase of activity planning, rather than through the development of plans. This increases uncertainty, adds significant cost and slows the delivery of essential services. (NZCID, 2015a, p. 34)

Local Government New Zealand similarly argues that

> plans and decision-making under the RMA, LTMA and LGA affect each other, all have different purposes, processes and criteria, and operate over different timeframes. This results in duplication and lack of clarity, demands considerable time and resourcing from all parties involved, and potentially frustrates efforts to promote innovative projects. (LGNZ, 2015a, p. 28)

The Commission has previously noted that the requirements of the three Acts create a:

> complex web of plans, with interactions at a number of points. This complexity can make it difficult to effectively and efficiently coordinate decisions around land use, transport services and infrastructure provision. (NZPC, 2015a, p. 269)

Ngā Aho & Papapounamu (2016b p. 36) note that this complexity can and does "often compromise the capacity of Māori communities to engage effectively in urban planning. The complexity of engaging in multiple planning processes is amplified when tribal takiwā straddle multiple districts or regions."

The range of social, economic, cultural and environmental objectives that some councils seek to achieve through the planning system can lead to "objective overload" and conflicting goals at a District Plan level.

[31] The performance measures would cover water supply, sewerage and the treatment and disposal of sewage, stormwater drainage, flood protection and control works, and the provision of roads and footpaths.

The Commission noted two examples of this in its *Using Land for Housing* report, where the expressed housing affordability objectives of the Proposed Auckland Unitary Plan and notified Christchurch Replacement District Plan were undermined by rules introduced to achieve other goals (eg, heritage and "special character" protection, environmental protection) (NZPC, 2015a, p. 119).

F5.4 The differing purposes of the three planning Acts create internal tensions, duplication, complexity and costs.

5.2 Governance and decision rights

Governance arrangements vary, and decision rights are allocated in different ways, between the three main planning Acts. The key points of difference between the three statutory processes are the role and influence of central government, and the relative roles of the different layers of local government.

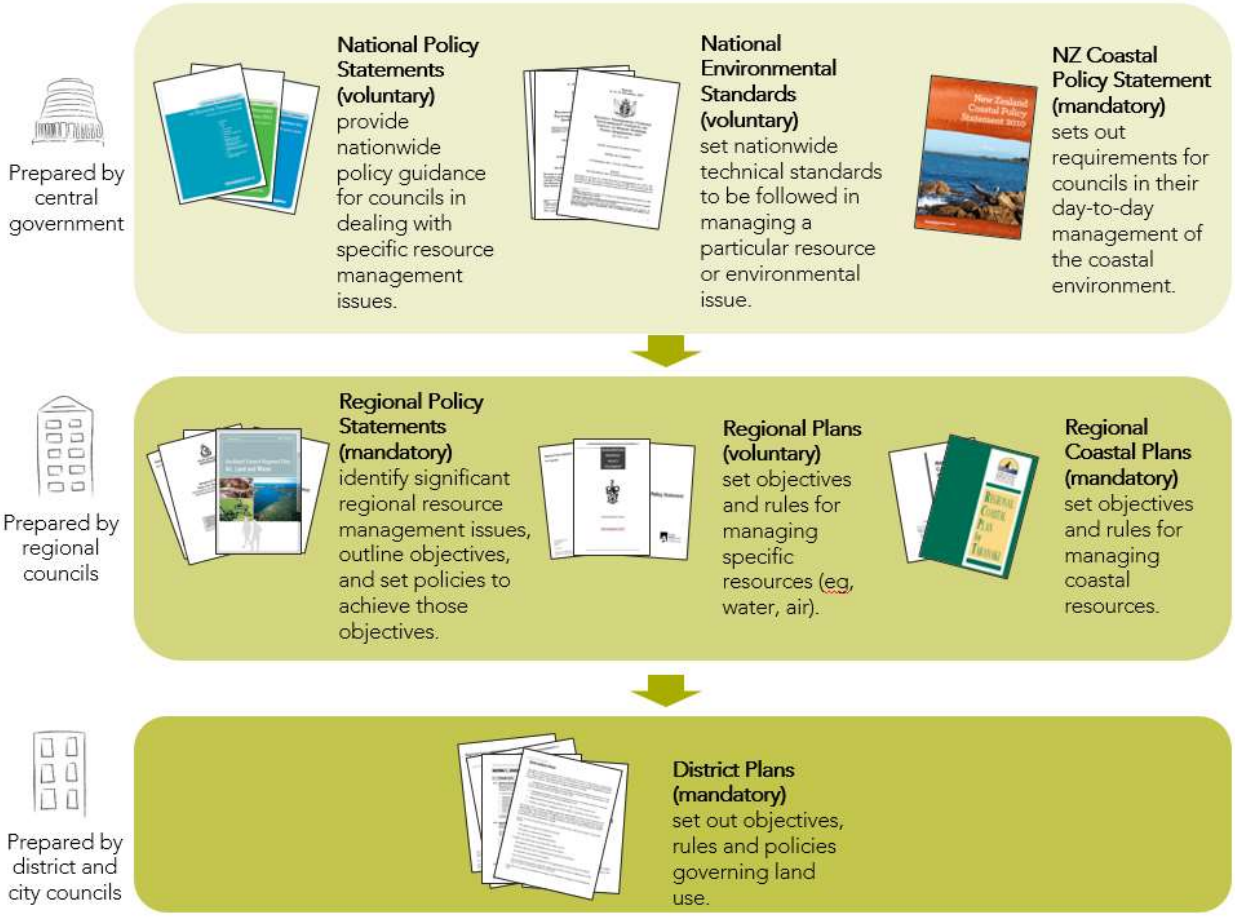
- Central government has the most direct and regular influence through the LTMA because of its major funding role, and the least through the LGA. Central government has significant powers under the RMA, but has not used them to their fullest extent.
- Under the RMA and LTMA, regional councils have a leading role, relative to territorial authorities.

Resource Management Act

Decisions over the development of plans

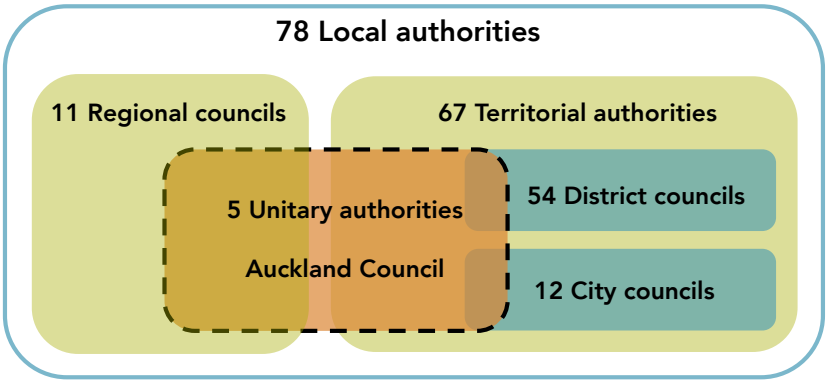
The RMA defines the responsibilities of central government, regional councils and territorial authorities, and requires or enables them to develop plans that show how they will manage the natural and physical environment. It also establishes a three-tier hierarchy of regulatory planning documents (Figure 5.1).

Figure 5.1 Hierarchy of RMA Plans



Each Plan must give effect to those higher up the hierarchy. In some circumstances, a single council can prepare Plans at more than one level in the hierarchy. For example, the Auckland Council, Gisborne District Council, Chatham Islands Council, Nelson City Council, Tasman District Council and Marlborough District Council are *unitary authorities* that carry out the functions of territorial authorities and regional councils (Figure 5.2). Unitary authorities can prepare both district plans and Regional Policy Statements (RPSs) (and regional plans, if they wish), and some councils – such as Auckland and Nelson – have developed Unitary Plans, which combine their District Plan, RPS and any other Regional Plans into one document.

Figure 5.2 Types of local authorities



Note:

1. Auckland Council is a unitary authority and a territorial authority but not a city or district council.

National Policy Statements (NPSs) set policies or objectives for matters of national significance. The Minister for the Environment issues NPSs, subject to a number of statutory content and procedural requirements. The New Zealand Coastal Policy Statement (NZCPS) is a mandatory NPS designed "to promote the sustainable management of natural and physical resources…in relation to New Zealand's coastal environment" (NZCPS 2010 Implementation Steering Group, 2011, p. 1). National Environmental Standards (NESs) are regulations that prescribe technical standards, methods or requirements for particular activities. The Governor-General issues them on the advice of the Minister for the Environment. Every regional council and territorial authority must enforce the same standard, although in some circumstances a council may set higher standards.

Other than the NZCPS, the government has discretion over whether and on what topics an NES or NPS is developed. Excluding the NZCPS, no national instrument was issued until 2004, and governments up to the present day have issued four NPSs and five NESs (Table 5.1). Others are currently being developed.

Table 5.1 RMA national tools currently in force

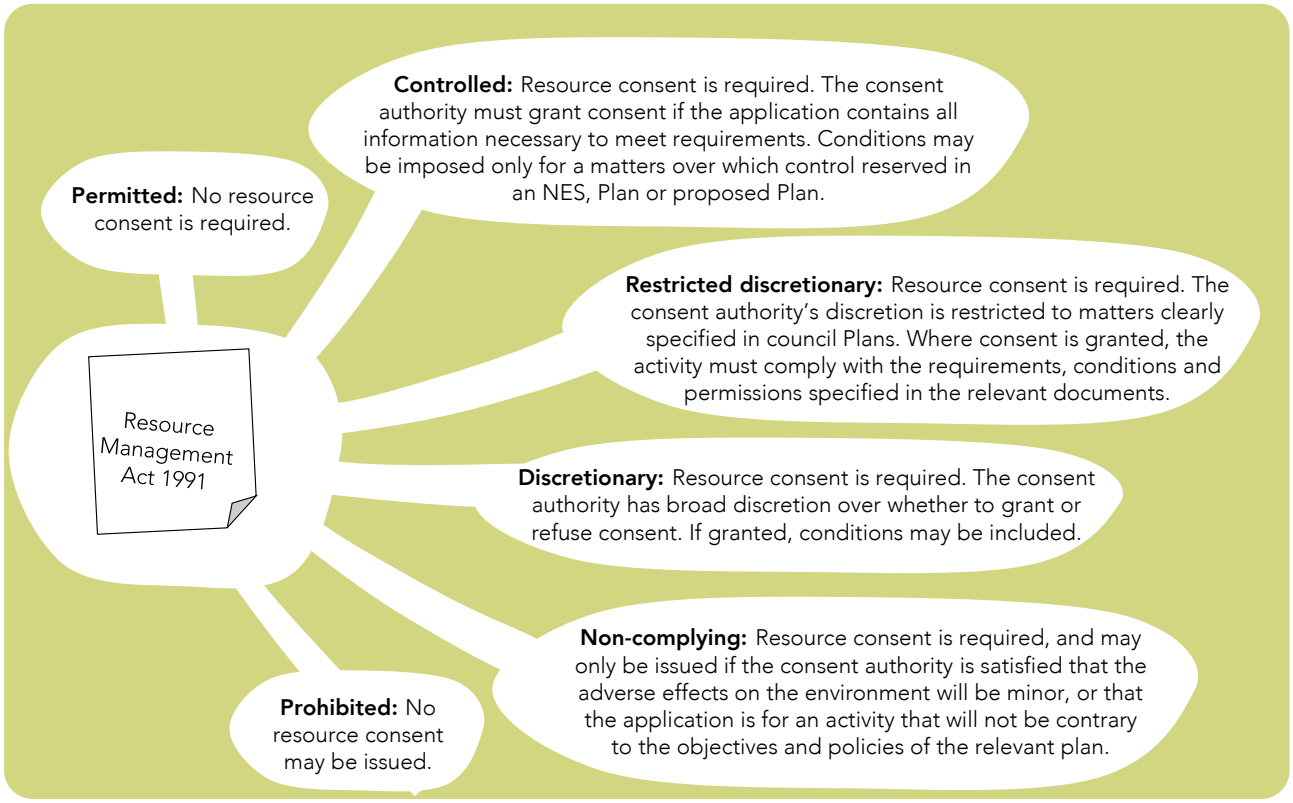
National tool	Year brought into force
New Zealand Coastal Policy Statement	1994 (new CPS issued in 2010)
National Environmental Standards for Air Quality	2004 (amended 2004, 2005, 2008, 2011)
National Environmental Standard for Sources of Drinking Water	2008
National Environmental Standards for Telecommunications Facilities	2008
National Policy Statement on Electricity Transmission	2008
National Environmental Standard for Electricity Transmission Activities	2010
National Policy Statement for Freshwater Management	2011 (revised in 2014)
National Policy Statement for Renewable Electricity Generation	2011
National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health	2012
National Policy Statement on Urban Development Capacity	2016

Each regional council prepares its RPS, which set directions for the management of resources within the region. Each regional council also prepares Regional Coastal Plans, which the Conservation Minister must approve.

District plans are the main tool used to regulate land use, although other Plans may affect certain types of development. District plans lay out whether or not a particular development activity is allowed, and the sorts of regulatory tests to meet before consent is issued. Zoning is a common way of defining the sorts of activities permitted in particular areas. In New Zealand, each territorial authority sets its own rules and zones.

Councils classify development activities in their district plans. Whether a resource consent is required depends on the classification applied (Figure 5.3). In 2014/15, 39% of processed resource consent applications were discretionary activities, followed by restricted discretionary (33%), controlled (15%) and non-complying activities (11%) (MfE, 2016a).[32]

Figure 5.3 Activity classifications under the RMA

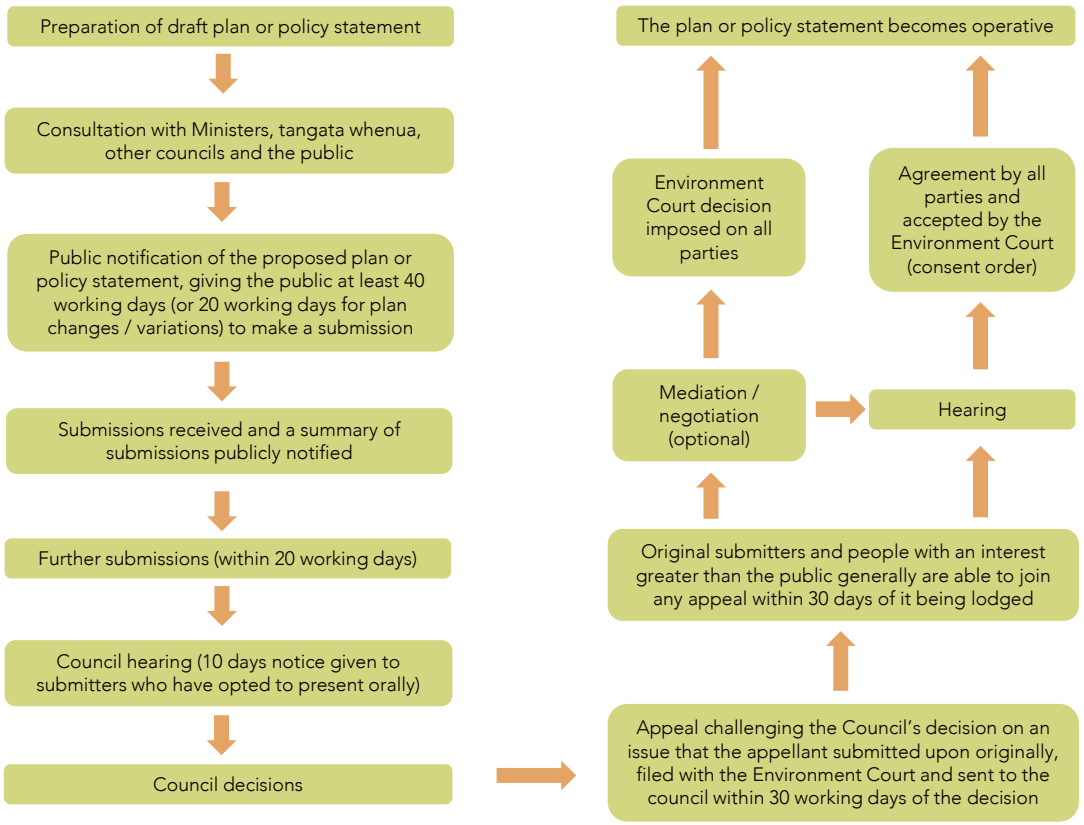


Territorial authorities can make changes to their district plans, while regional councils can change their Regional Plans and their RPSs. Councils are expected to review their Plans every 10 years, either in whole or on a rolling basis. The RMA lays down procedural requirements for making Plan changes and for preparing new Plans or reviewing existing Plans (Figure 5.4).

Generally, elected officials make decisions on whether to approve a new Plan or change an existing Plan, although the task of hearing submissions and making recommendations to councils may be delegated to commissioners. Commissioners may be "internal" (appointed from within a council) or "independent" (from outside the council). They may be appointed to act alone, with other commissioners, or as part of a panel with elected members.

[32] No data on the activity classification was available for the remaining 2% of processed applications.

Figure 5.4 RMA Plan preparation process



Bespoke arrangements were established for the Proposed Auckland Unitary Plan (PAUP) and the Christchurch Replacement District Plan. Independent Hearings Panels (IHPs) were set up to hear submissions and review the content of the Plans. Ministers appointed the IHPs,[33] which had prescribed terms of reference and had to complete their tasks within set timeframes (Box 5.2). The Auckland IHP delivered its recommendations to the Auckland Council on changes to the PAUP in August 2016. The Council had the right to accept or reject these recommendations. It accepted most of them knowing that if it rejected a panel recommendation it faced a higher risk of having the Plan appealed. The Christchurch IHP completed its work in December 2016. Unlike in Auckland, the Council cannot reject its decisions.

Box 5.2 **The Auckland and Christchurch Independent Hearings Panels**

Auckland

The Local Government (Auckland Transitional Provisions) Act 2010 established an Independent Hearings Panel (IHP) for the Proposed Auckland Unitary Plan (PAUP). The Panel was able to hear submissions on the PAUP, convene conferences of experts to resolve or clarify issues, and refer specific issues and parties to mediation. It made recommendations to Auckland Council on the Plan. Auckland Council then accepted most of Panel's recommendations but rejected several. Submitters were able to object to the IHP if it declined to consider their submission or struck out their submission in whole or in part. Except for a submitter making an objection (see below), no one can appeal the Panel's decision on an objection.

If the IHP declines to consider a submitter's objection, then that submitter can only appeal to the courts in the following circumstances.

- A submitter can appeal to the Environment Court on a matter they submitted on where the Auckland Council rejected a recommendation of the IHP.

[33] The Minister for the Environment and Minister of Conservation appoint the Auckland IHP members. The Minister for the Environment and Minister for Canterbury Earthquake Recovery appointed the Canterbury IHP members.

- An "unduly prejudiced" person can appeal to the Environment Court where Auckland Council accepted a recommendation by the IHP that was beyond the scope of submissions.
- Submitters can appeal to the High Court on a question of law where Auckland Council accepts a recommendation of the IHP (MfE, 2013, p. 4).

Environment Court Judge David Kirkpatrick chaired the Auckland Unitary Plan IHP, which included seven other members who are experts in urban planning, law, tikanga Māori, and economics. Several appeals to the Environment Court and the High Court are in progress.

Christchurch

The Canterbury Earthquake (Christchurch Replacement District Plan) Order 2014 modified the RMA to enable an accelerated process for reviewing the Christchurch City and Banks Peninsula District Plans. As in Auckland, Ministers established an IHP to hear submissions and review the content of the replacement Christchurch District Plan. Unlike in Auckland, however, the City Council was not able to reject the IHP's decisions which became operative in the Plan. Objection rights are similar to those for the Auckland IHP. Only Ministers, the City Council or submitters (in relation to matters raised in their submission) can appeal to the High Court. The High Court will only hear appeals on questions of law.

Retired High Court Judge Sir John Hansen chaired the Christchurch IHP, which included members who have significant legal, planning and development experience. The Panel concluded its deliberations in December 2016.

Ministers have the power to direct councils to change or review an existing RMA Plan, or to prepare a new Plan, where this would address an issue that relates to the council's function. Selected Ministers also have the right to be consulted on the preparation of new Plans, and have the right of audience before every planning and consent hearing. In recent years, however, these rights have not been exercised frequently. The Urban Technical Advisory Group observed in 2010 that

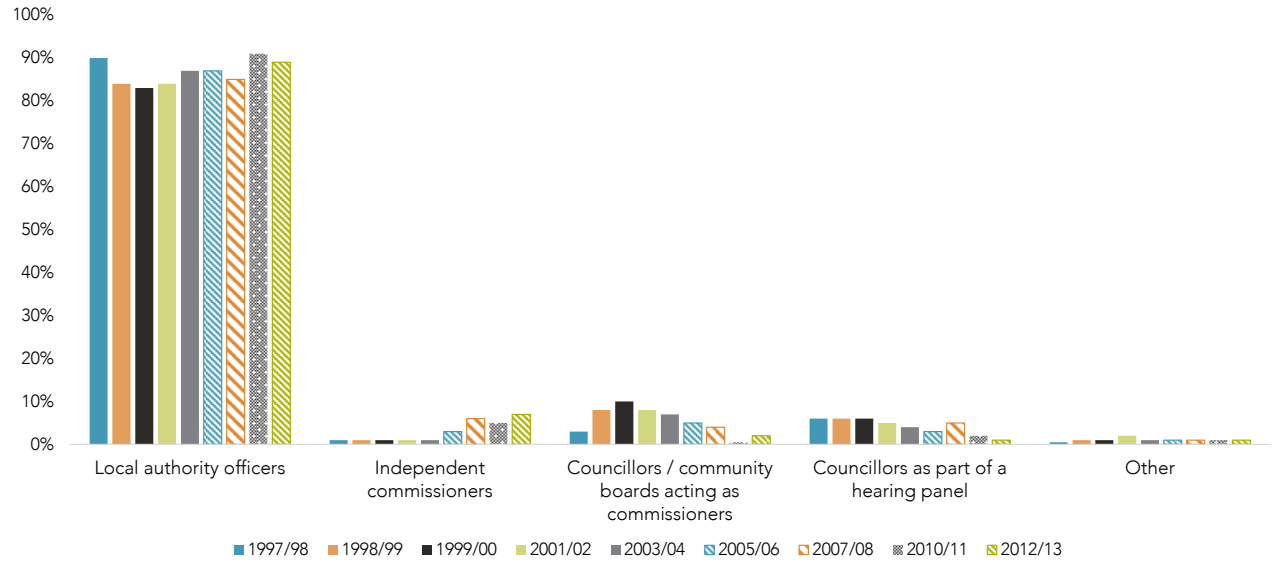
> every local authority is required by clause 3 of the First Schedule of the RMA to consult with the Minister during the preparation of a proposed plan or plan change. This affords the Minister an early opportunity to have an influential voice in the preparation of every planning document throughout the country. Our understanding however is that the Ministry no longer engages in this role to anything more than the most limited or cursory extent. Indeed, it may not be going too far to say that the Ministry has virtually withdrawn from this role altogether. (pp. 15–16)

Individuals and organisations can apply to make changes to district plans (known as "private Plan changes"). No one can seek Private Plan changes for Regional Plans, RPSs, National Policy Statements or National Environmental Standards.

Decisions over whether land can be developed

Who takes decisions on types of land use depends upon the nature of the proposed development and the policies of the specific council. Many councils delegate responsibilities for assessing low-risk and uncomplicated development proposals to their staff. For more complicated proposals, the council, independent commissioners, or panels of elected representatives and independent commissioners may decide on consent. Council staff make most resource consent decisions (Figure 5.5).

Figure 5.5 Percentage of resource consent decisions made, by decision maker, 1997/98–2012/13



Source: MfE, 2014a.

Note:

1. The MfE surveys were not run over consistent time periods.

Where the effects of a proposed development on the environment are considered "more than minor", the resource consent application will be publicised, or 'notified'. The two forms of consent notification are *limited notification* and *public notification*. For limited notification, only affected persons are advised and can make submissions. For public notification the council advertises the application and seeks submissions from the general public.

Under the RMA, an applicant for a notified resource consent or a submitter on a notified resource consent may request that a council appoint at least one independent commissioner to hear and decide on the application. Where a request is made, the council must delegate its functions, powers and duties to hear and decide the application to one or more independent commissioners. The council can decide on the number of commissioners appointed.

Since 2009, people or organisations seeking a resource consent or changes to existing resource consent conditions have been able to seek a "direct referral", under which the Environment Court rather than the relevant council decides on the application. The relevant council must agree to the request for a direct referral, and the avenue is only available for notified applications and requirements (ie, those consent applications that must be publicly announced).

Nationally significant proposals (Box 5.3) can include resource consent applications, applications to cancel or change consent conditions, private Plan change applications, and notices of requirement for designations or heritage protection orders. The people who can refer nationally significant proposals to a board of inquiry or the Environment Court are:

- the Minister for the Environment, acting on their own initiative (once the matter is lodged with a council);
- the relevant council or applicant, who can request the Minister to make a direction on a matter after it is lodged with the council; or
- the applicant, who can lodge the application directly with the Environmental Protection Authority (EPA) instead of the council.

Established in 2011, the EPA is New Zealand's single national-level environmental regulator and has consenting and regulatory functions under a range of statutes.[34] The EPA recommends to the Minister whether the issue should be referred to a board of inquiry or the Environment Court.

If the Minister decides not to refer a matter to a board of inquiry or the Environment Court, then the relevant council deals with the matter in the normal manner.

Box 5.3 **Nationally significant proposals and Boards of inquiry**

When the Minister decides a proposal is nationally significant, they may refer the proposal to an independent board of inquiry for a decision. The Minister for the Environment selects a board for a land-based proposal; the Minister of Conservation selects a board for a coastal proposal.[35] The Minister may refer a proposal that:

- has stimulated widespread public concern or interest regarding its effect on the environment;
- is likely to involve significant use of natural and physical resources;
- may affect a place of national significance, more than one region or district; or international obligations;
- may involve new technologies;
- could result in changes to the environment; or
- could be significant in terms of the Treaty of Waitangi.

A board must have between three and five members, selected by a Minister. The board members are selected based on factors such as local knowledge, understanding of the RMA, expertise in areas relevant to the proposal, and knowledge of tikanga Māori.

The board considers all submissions, holds a hearing process, and makes a final decision on the matter. It also uses the same decision-making criteria that a council would have to follow if it were dealing with the matter. The inquiry boards run their own processes and make a decision that is independent from the Environmental Protection Authority and the Minister. Decisions made under this process are subject to appeal only on points of law.

Source: MfE, 2009a; Environmental Protection Authority, 2013.

Gaps between the intentions and practice of RMA land use controls

The RMA was intended to introduce a very different form of environmental planning and management from the previous Town and Country Planning Act. It attempted to establish an effects-based system, where any land use or activity is permitted so long as it does not adversely impact the biophysical environment (Perkins & Thorns, 2001). However, in practice the RMA has not met those expectations. Concerns emerged shortly after the RMA was introduced. Those concerns were about excessive costs, complexity and poor regulatory analysis. Meanwhile, councils struggled to put "effects-based" plans into practice.

The goals behind the RMA were most famously expressed by then Minister for the Environment, Simon Upton, in his Third Reading speech on the Resource Management Bill:

> [T]he Government has moved to underscore the shift in focus from planning for activities to regulating their effects... We run a much more liberal market economy these days. Economic and social outcomes are in the hands of citizens to a much greater extent than they previously have been. The Government's focus is now on externalities – the effects of those activities on the receiving environments...

[34] Hazardous Substances and New Organisms Act 1996; Resource Management Act 1991; Ozone Layer Protection Act 1996; Import and Exports (Restrictions) Act 1988 and Imports and Exports (Restrictions) Prohibition Order (No.2) 2004; and Climate Change Response Act 2002.

[35] When a proposal contains both land and coastal matters, the Ministers will work together to select a board.

> The presumption about rights to use land should further underscore that point. Current law presumes that one can use land only in accordance with the provisions of the law. Clause 7 intentionally reverses that presumption. That was a very important reversal that the authors of the Bill made right at the outset – that is, people can use their land for any purpose they like. The law should restrain the intentions of private land-users only for clear reasons and through the use of tightly targeted controls that have minimum side effects. (1991, pp. 3019–3020)

Former Environment Ministry deputy secretary Lindsay Gow (2014) later commented that

> the idea was that rules should target the adverse effects of resource development rather than be constructed to encompass all sorts of restrictions that did not target the problem effects, and worse, created adverse side effects and new problems. (p. 8)

The introduction of the RMA initially led councils to look harder at the justifications for their rules and regulations. Citing interviews with local body politicians, Perkins and Thorns (2001) commented that the

> shift from zoning to effects-based management has been hard for some councillors to come to terms with as it had reshaped their ability to control activities. In the previous system they could more easily proscribe an activity; under the new system they must now show that the activity is harmful with respect to the 'environmental bottom lines' that they have established within their district plan. (p. 648)

Gleeson and Grundy (1997) note that while many early plans retained traditional approaches such as zoning, some councils felt "compelled for the first time…to defend, through explicit rationale, their continued use of zoning as a planning tool" and some local authorities reduced the number of zones and broadened their scope. (p. 304)

However, it soon became clear that planning practice on the ground was not providing "tightly targeted controls that have minimum side effects". Dormer (1994) pointed to the higher than expected costs of securing approvals, excessive information requirements from councils, the absence of the anticipated economic instruments, and poor regulatory analysis and land use rules. McShane (1996) concluded that the RMA "as it has been, and is being, implemented, has imposed massive extra costs on the residential housing market in the Auckland Region, in terms of both time and money" (p. 4). He attributed these cost increases to the absence of direction from central government, vague and broad regulatory definitions, the need for "a multitude of experts" to gain a resource consent, and the "ingenuity" of councils "in using the new Act to make the allocation of resources a necessary means of controlling effects" (1996, pp. 4, 49). Even the Environment Minister voiced his frustrations. In a 1997 speech, Simon Upton argued that

> there are still far too many rules being proposed that have absolutely no plausible foundation in the RMA and have nothing to do with environmental effects. I can illustrate the point very simply by referring to the Ashburton Plan in which we find a mind-numbingly detailed prescription for protecting retailers in the central business district.
>
> Isn't it comforting to know that the good people of Ashburton must proceed in orderly fashion to the fringes of the CBD to find awnings, blinds and curtains, equestrian supplies, sewing machines and spa pools? ….
>
> We have embraced, in my view, a huge amount of regulation aimed at development proposals that have only the very remotest chance of ever eventuating. The risk presented by these development proposals even if they did eventuate is often minimal. Yet the mere possibility provokes a response in the form of plans the size of several telephone directories. I am amazed that tiny settlements in provincial New Zealand continue to be constrained because of the threat that they may explode across the so called 'high quality' soils. The risk of this happening in places where the rate of population growth this century can be measured in single figures (and sometimes negative figures at that) must surely be infinitesimal. The risk to the availability of 'high quality' soils presented by the most likely scenario of a handful of new houses over the life of the plan is equally minimal. Yet many planners persist with such risk averse approaches.
>
> The practice of 'zoning in' the status quo and, by implication, 'zoning out' anything innovative or novel for fear of the unknown continues to undermine a truly effects based approach to the Act.

Local authorities encountered numerous problems implementing the RMA. Many found "effects-based" Plans extremely challenging to make work, especially as they tended to be highly complex and generate

public opposition. Miller (2011) cites the Far North District Plan and Christchurch City District Plan as examples:

> In many cases a person seeking to establish an activity had to assess their proposal against three different types of controls. If they undertook this assessment and determined that they could comply and then were unable to comply they became an enforcement problem, resulting in extra expense for all the parties involved. In the case of the Far North District Council the response was far more extreme…it attracted some 60,000 submissions, a petition to Parliament and a public march in opposition…Effects-based plans also provided a field day for lawyers, given the potential for litigation in the New Zealand planning system, which was again a 'turn off' for politicians trying to constrain local body budgets. (p. 184)

As a result, many councils stuck with or reverted to activity-based district plans, with "the greatest use of effects-based approaches…in regional plans in which the approach is a better fit" (Miller, 2011, p. 184).

F5.5 The founders of the Resource Management Act (RMA) envisaged it as an enabling statute that would restrain the activities of landowners "only for clear reasons and through tightly targeted controls that have minimum side effects." The RMA has failed to deliver on this goal. Critics charge the RMA with creating excess costs, complexity and poor regulation, while many councils have struggled to make "effects-based" plans work.

Local Government Act

Under the LGA, all local authorities are required to produce core planning and accountability documents, namely Long-Term Plans, Annual Plans and Annual Reports. The LGA also gives councils scope to set plans and strategies on a wide range of issues, some of which may affect the development of urban areas.

Long-Term Plans

The Act requires all local authorities to prepare a Long-Term Plan (LTP) every three years, covering at least 10 financial years. LTPs set out the local authority's planned activities and expected performance, the community outcomes it is pursuing, and forecast revenue and expenditure. These tasks are specifically required for specified classes of infrastructure. Such infrastructure is water supply, sewerage and the treatment and disposal of sewage, stormwater drainage, flood protection and control works, and the provision of roads and footpaths.

LTPs must include a funding impact statement that sets out revenue and funding across different classes of infrastructure. The funding impact statement includes details of what operational and capital funding will be raised from different sources (eg, rates, fees and charges, subsidies or grants) and how the local authority will apply this funding. LTPs must also include a revenue and funding policy that explains how and why the local authority has chosen the funding tools set out in their forecast financial statement.

Since 2014, local authorities have needed to prepare an infrastructure strategy and incorporate it into their LTP. That strategy should:

- identify infrastructure issues over a 30 year timeframe;
- identify the authority's plans for maintaining and improving its infrastructure assets;
- identify the estimated expenses, and key decisions about capital expenditure;
- explicitly state the authority's assumptions about the lifecycle of infrastructure assets, and changes in demand and service levels.

Annual Plans and Reports

Councils must prepare Annual Plans that detail their activities, revenue and expenditure for the next financial year. The purpose of an Annual Plan, as set out in the LGA, is to:

- contain the proposed budget and funding impact statement for the year to which the Annual Plan relates;
- identify any variation from the financial statements and funding impact statements included in the local authority's LTP for the year;
- provide integrated decision making and coordination of the resources of the local authority; and
- contribute to the accountability of the local authority to the community.

Every council must prepare an Annual Report for each financial year, to compare activities performed with those set out in the previous Annual Plan. A particular emphasis is on comparisons with the council's forecast financial and non-financial performance.

Other LGA plans and processes that may affect development

The LGA, as enacted in 2002, was an enabling statute that let local councils set strategies or plans on any topic they considered advanced the needs of their communities. One side effect of this wide scope was a proliferation of plans, as Miller (2011) observes:

> For urban areas this seems to have provided the opportunity to take a more strategic approach to issues, particularly urban growth, although there has been no guidance on how local bodies can and should reconcile its sustainable management focus of the RMA with the broader sustainable development remit of the Local Government Act. The enormity of reconciling the two with a lack of central government guidance seems to have had the perverse effect of generating a parallel planning system of strategic planning exercises, which are undertaken outside RMA processes. This has produced what can only be described as a plethora of plans – Whangarei City, with an estimated population of 79,000, has, in addition to its district plan and LTCCP [Long-Term Council Community Plan],[36] a strategic plan (for the council), a subregional growth strategy, an urban growth strategy, a coastal management strategy, a rural strategy, an open space strategy and a walking and cycling strategy. (p. 94)

This proliferation also reflects the expansion in the role and scope of planning (section 5.2). A number of councils have used the LGA to establish spatial or growth management plans, which act as linchpins to guide RMA, LGA and LTMA decisions. Councils use the LGA plans to set the strategic goals for their cities, and then use the RMA to set regulatory controls aimed at achieving these goals. These plans were discussed in *Using land for housing* (NZPC, 2015a) and in Chapter 4.

Individual development proposals may also have to comply with council bylaws – a type of subordinate legislation. Under the LGA, territorial authorities can set bylaws for one or more of the following purposes:

(a) protecting the public from nuisance;

(b) protecting, promoting, and maintaining public health and safety;

(c) minimising the potential for offensive behaviour in public places. (section 145)

The LGA prescribes the process that local authorities must follow to make a bylaw. In preparing bylaws, local authorities must determine whether "a bylaw is the most appropriate way of addressing the perceived problem" and consider whether a proposed bylaw gives rise to any New Zealand Bill of Rights Act 1990 implications (section 155(2)).

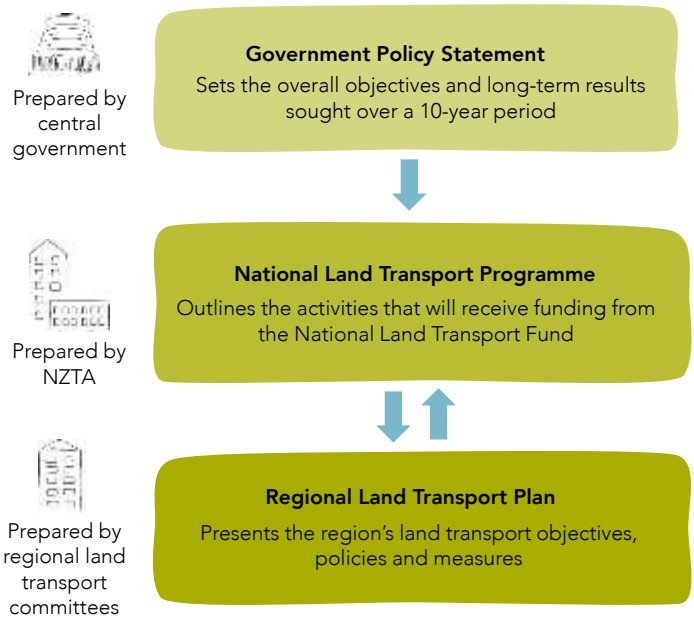
Land Transport Management Act

Central government has its largest role in the planning system through the LTMA. Every three years, central government issues a Government Policy Statement (GPS) on Land Transport, which sets the overall objectives and long-term results sought for land transport over a 10-year period, as well as the expenditure ranges for each class of transport activity. In doing this, central government sets out how it will allocate funding between activities such as road safety policing, state highways, local roads and public transport. The New Zealand Transport Agency (NZTA) then develops a three-year National Land Transport Programme

[36] Long-Term Council Community Plans were renamed 'Long-Term Plans' in the 2010 amendments to the LGA.

(NLTP), which gives effect to the GPS and outlines the activities that will receive funding from the National Land Transport Fund (Figure 5.6).

Figure 5.6 The LTMA planning hierarchy



At the regional level, activities proposed for funding through the NLTP must form part of the Regional Land Transport Plan (RLTP). RLTPs are prepared by regional land transport committees, which include representatives of NZTA and the relevant regional council and territorial authorities.[37] RLTPs present the region's land transport objectives, policies and measures over a 10-year period. The Plan must include:

- transport priorities;
- a financial forecast of anticipated revenue and expenditure;
- all regionally significant land transport expenditure to be funded from sources other than the National Land Transport Fund; and
- an identification of activities that have inter-regional significance (section 16).

Once the RLTP is confirmed, territorial authorities can seek funding for activities carried out in their area.

Because of the close interaction between land-use regulation and the performance of the transport system, NZTA participates actively in the development of RMA and LGA plans, through submissions, court actions and participation in council collaborative processes (such as the SmartGrowth partnership in the Western Bay of Plenty, Future Proof in greater Hamilton, and the Greater Christchurch Urban Development Strategy).

Other statutes affecting land use decisions

In some circumstances, other statutes may affect individual development proposals. The Terms of Reference specifically ask the Commission to consider "the elements of Building Act, Reserves Act and Conservation Act relating to land use".

The Building Act 2004 regulates building work to promote its safety, health and sustainability. That Act has some areas of overlap with the RMA about land use issues. For example, the safety of land subject to material damage from natural hazards must be assessed under both Acts. Some councils have also used the RMA to impose controls on the internal design or construction of buildings that exceed the standards set by the Building Act. This may be unlawful (NZPC, 2015a).

[37] Auckland Transport prepares the RLTP for Auckland.

Where land has been designated as a public reserve under the Reserves Act, it must be held and administered for the purposes to which it is dedicated. The Act sets out seven different types of reserves: recreation reserves; historic reserves; scenic reserves; nature reserves; scientific reserves; Government purposes reserves; and local purpose reserves. An administering body can change the purpose or designation of a public reserve, but only after notifying interested parties, and considering any objections from the Minister of Conservation. The Minister may not agree to a change of purpose for scenic, nature, scientific or historic reserves unless physical changes have made the reserve unsuitable for its designated purpose. The Minister can authorise the exchange of reserve land for other land to be held for the same purpose.

Where the revocation or change of purpose for a reserve also requires a change to the local District Plan, the local authority must notify the wider public under the RMA. The two processes are interdependent, but occur sequentially rather than concurrently. This increases holding costs and uncertainty for some urban development projects, and is unnecessarily duplicative. A regulatory impact statement prepared for the Resource Legislation Amendment Bill noted that

> reserve exchanges or revocation processes can take three to six months, depending on the scale of the project. Resource consents and plan changes can take longer, which means that it can take up to one year or more to get approval under both regimes. (MfE, 2015a, p. 68)

Similar issues of duplication and costs can arise under the Conservation Act, where some applicants for concessions (ie, permission to carry out activities on conservation land) also have to apply for resource consents.[38] Each process has distinct notification criteria, scopes and timeframes, and different submission time periods.

Amendments to the RMA currently before Parliament include proposals to:

- align the notified concessions processes and timeframes under the Conservation Act with those for notified resource consents under the RMA; and
- create an "optional joint process of public notification, hearings, and decisions for proposals that involve publicly notified plan changes or resource consents under the RMA and recreation reserve exchanges under the Reserves Act" (explanatory note, Resource Legislation Amendment Bill, p. 4).

Māori land is also regulated under the Te Ture Whenua Maori Act 1993. The Act sets out processes and rules to govern the "effective use, management, and development, by or on behalf of the owners, of Maori land and General land owned by Maori" (section 17 (1)(b)). Parliament is currently considering a new Te Ture Whenua Māori Bill (Chapter 7).

5.3 Decision review

Opportunities to review decisions are most extensive under the RMA, reflecting that Act's regulatory focus. Apart from the RMA, the options to review decisions are mostly limited to judicial review. Decision review and appeal rights under the RMA are broad by international standards, although they have narrowed since the Act's introduction.

A range of council planning decisions can be appealed to the Environment Court, which has three main functions: appeals; hearing and deciding applications; and enforcement matters. Most of the Court's work involves hearing appeals relating to issues that arise under the RMA, with most of its workload generated by appeals brought against decisions of local authorities. The Court's jurisdiction includes hearing:

- appeals against decisions on submissions regarding Policy Statements and Plans prepared by local authorities;
- appeals against decisions on resource consent applications;

[38] A regulatory impact statement prepared for the Resource Legislation Amendment Bill estimated that about 5% of concession applicants also required a resource consent (MfE, 2015a).

- applications for declarations, applications for enforcement orders; and
- appeals against abatement notices (Daya-Winterbottom, 2005).

Appeals before the Court are *de novo*, meaning the Court considers all relevant issues afresh. Hearings must consist of at least one judge and one environmental commissioner. The RMA allows for automatic rights of appeal on a question of law to the High Court from a decision of the Environment Court. Further rights of appeal (if leave is granted) exist to the Court of Appeal and the Supreme Court.

Appeal rights in New Zealand have expanded over successive iterations of the planning system (NZPC, 2015a) and are now broad compared with similar appeal rights in other comparable jurisdictions. The ability in New Zealand to appeal decisions on Plans in the courts, including by third parties, is particularly unusual. Chapter 8 gives more details and sets out the Commission's view on the reform of appeal rights.

Amendments to the RMA in recent years have restricted appeal rights.

First, a new form of public notification ("limited notification") was introduced in 2009 for some resource consents. That notification meant that only "affected persons" (rather than the general public) would be informed of applications. As only notified consents (and not limited notified ones) can be appealed, this reduced the number of parties with recourse to the courts.

Second, the ability of trade competitors "or other potentially frivolous or vexatious parties" to participate in appeal processes was limited in 2009. Persons who could gain an advantage in trade competition can now only make submissions on Plans and Policy Statements if directly affected by an aspect of a Plan that adversely affects the environment, and does not relate to trade competition or its effects. Appeals may not be sought for the purposes of protecting from trade competition or deterring others from engaging in competition. Also, decision-makers must not consider competition when preparing or changing Plans and Policy Statements or considering resource consent applications. The Environment Court is also empowered to declare that a party to an appeal has contravened the Act's trade competition provisions and order that party to pay costs. A person who obtains a declaration from the Court may also bring damages proceedings in the High Court against the person in breach (MfE, 2009b).

The 2009 amendments removed the ability of any member of the public to participate in proceedings before the Environment Court where they "represented a relevant aspect of the public interest". This role is now the prerogative of the Attorney-General. However, people and organisations who have an "interest in the proceedings that is greater than the interest that the general public has" may still join as parties to an appeal (section 274 (1)(d)). Finally, as noted earlier, appeals against decisions by boards of inquiry and the Auckland and Christchurch IHPs are limited to points of law[39].

The role of the courts in the planning system is controversial. This is examined in Chapter 8.

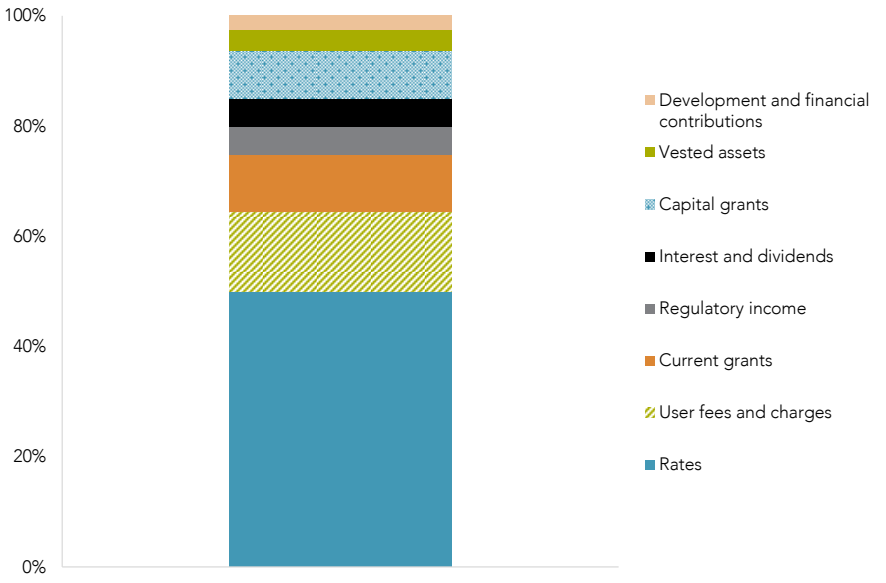
5.4 Funding

Local authorities in New Zealand fund their own regulatory activities and infrastructure needs, with the partial exception of transport assets and services. Local government funding and financing practices can be a barrier to the growth of cities.

Under the Local Government (Rating) Act 2002, local authorities have flexible powers to determine rates, which make the largest contribution to council income. Other sources of funding include user fees and charges; current grants; regulatory income; interest and dividends; capital grants; vested assets and development and financial contributions (Figure 5.7). Financial and development contributions are charges associated with land-use development. Financial contributions can be imposed to avoid or mitigate adverse environmental effects, while development contributions can be imposed to fund the portion of new infrastructure related to development.

[39] Except in the case of Auckland's IHP, if Auckland Council does not accept an IHP recommendation on a matter, then a submitter on that matter can appeal the decision.

Figure 5.7 Summary of local government revenue sources, 2013–2014



Source: Statistics New Zealand, 2015a.

Note:

1. "Capital grants" and "current grants" are transfers from central government, mainly for land transport activities. Excludes income from valuation changes and other non-operating income.

Local councils often rely on increased debt to fund capital expenditure (which includes infrastructure such as road and water assets). The extent of reliance on debt varies between councils (Figure 5.8).

Figure 5.8 Sources of council capital funding, 2016

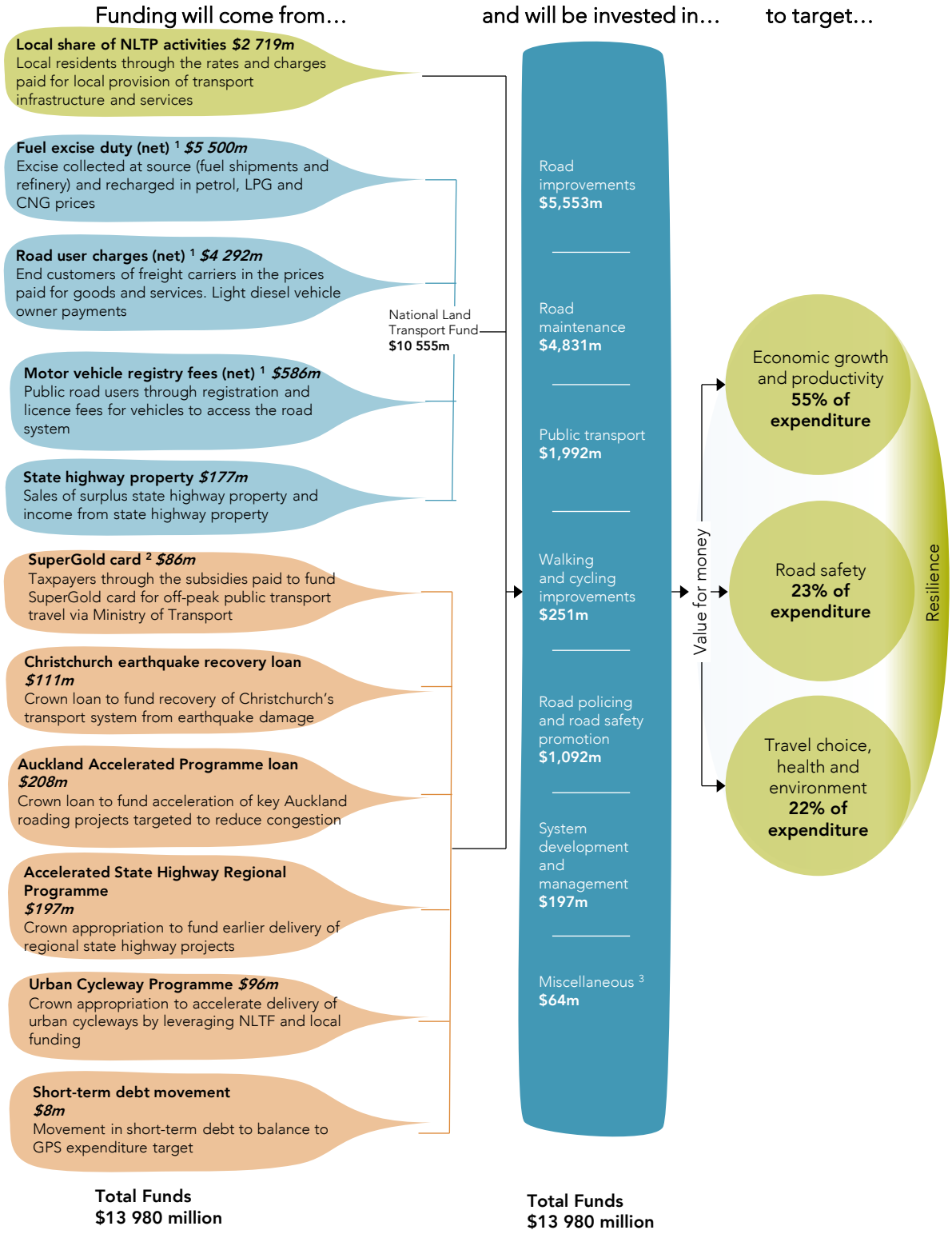
Source: Long-Term Plan data from Department of Internal Affairs.

Councils share the costs of transport assets and services (eg, public transport, local road improvements and extensions) with central government. Central government's contribution is funded through a Crown contribution, vehicle licence and registration fees and fuel levies (Figure 5.9). Under current settings, the National Land Transport Fund meets an average of 53% of local transport costs across the country. Local authorities meet the remaining costs from sources such as rates, development contributions and passenger fares.

In its *Using Land for Housing* report, the Commission found that councils in high-growth areas were tightly rationing the supply of infrastructure. This in turn constrained the supply of development capacity and contributed to rising land prices. Reasons for the rationing of infrastructure included:

- risks to councils associated with installing infrastructure ahead of demand;
- an inability or unwillingness by councils to appropriately price new infrastructure;
- unclear statutory governance frameworks for the supply of water infrastructure;
- reluctance by councils to take on debt to fund new investment; and
- resistance from ratepayers to higher rate bills (NZPC, 2015a).

Figure 5.9 2015–2018 National Land Transport Fund revenue and investment flows



Source: adapted from NZTA.

Notes:

1. Net of refunds and administration costs.
2. SuperGold card amount is an estimate only.
3. Covers costs for bad debts, search and rescue, recreational boating safety awareness and revenue system management.

5.5 Culture and capability

The "culture" of an organisation or profession describes the norms, values and beliefs shared by staff working in the organisation or within the profession. These norms of behaviour influence how planning related tasks are undertaken. When introduced in 1991, the RMA looked to replace the existing prescriptive approach to planning with an enabling "effects-based" approach. This new approach ran contrary to conventional planning norms and challenged the existing culture of the planning profession. These tensions remain to this day.

Planning requires councils and central government agencies to draw on a wide range of disciplines including engineering, economics, natural sciences, sociology and Māori studies. There are capability gaps within the planning system – particularly in the areas of economics and environmental science. In addition, there is a scarcity of critical assessment skills within New Zealand planning profession.

Chapter 14 explores in more detail how planning culture and capability have contributed to the Resource Management Act failing to achieve its potential. It also examines the culture and capability needs of a future planning system.

5.6 Communication and engagement

Effective communication helps ensure the legitimacy of regulatory and policy actions. Local councils face a number of statutory obligations to consult and engage with their communities when making decisions on plans and, in some cases, on individual development proposals. Statutory consultation requirements differ somewhat between the main planning Acts. These differences create costs, duplication and delay for councils. Council engagement processes often do not gain representative input from the community.

Requirements for engaging with the community

Expectations of community participation in local affairs have been increasing since the 1970s (NZPC, 2015a), and both the RMA and LGA place a heavy weight on public consultation. The RMA was designed on the basis of "[o]pen public participation with no restrictions on standing" (Gow, 2014). Schedule 1 of the Act (see Figure 5.4) requires councils to:

- notify proposed new Plans or changes to existing Plans to the general public;
- receive and summarise submissions from the public;
- invite further submissions;
- hold public hearings; and
- consult with Ministers and iwi in the development of RMA Plans.

As noted earlier, if a local authority considers that a development proposal could have more than minor effects on the environment, then the resource consent application will be notified.

The LGA imposes general obligations on councils to take the views of their communities into account, reflecting the RMA's goal of promoting "the accountability of local authorities to their communities" (section 3(c)). Consultation on decisions must follow statutory principles (Box 5.4), and must provide opportunities for Māori to contribute to decision-making processes. The Act also lays down particular requirements for the content of public consultation documents on Annual Plans and Long-Term Plans.

Box 5.4 **The Local Government Act consultation principles**

- that persons who will or may be affected by, or have an interest in, the decision or matter should be provided by the local authority with reasonable access to relevant information in a manner and format that is appropriate to the preferences and needs of those persons,
- that persons who will or may be affected by, or have an interest in, the decision or matter should be encouraged by the local authority to present their views to the local authority,
- that persons who are invited or encouraged to present their views to the local authority should be given clear information by the local authority concerning the purpose of the consultation and the scope of the decisions to be taken following the consideration of views presented,
- that persons who wish to have their views on the decision or matter considered by the local authority should be provided by the local authority with a reasonable opportunity to present those views to the local authority in a manner and format that is appropriate to the preferences and needs of those persons,
- that the views presented to the local authority should be received by the local authority with an open mind and should be given by the local authority, in making a decision, due consideration,
- that persons who present views to the local authority should have access to a clear record or description of relevant decisions made by the local authority and explanatory material relating to the decisions, which may include, for example, reports relating to the matter that were considered before the decisions were made.

Source: LGA 2002, section 82(1).

Effectiveness of engagement

The legislative goals are to encourage broad public participation in planning. Even so, engagement and decision-making processes are open to capture and can discourage some groups from getting involved.

In its *Using Land for Housing* report, the Commission found that homeowners were more likely to participate in political and planning processes, and that their influence promotes decisions that reduce the supply of development capacity for housing. Existing homeowners also have a disproportionate influence in the policy and political processes, and tend to be the dominant voters in local body elections (NZPC, 2015a). Nunns' (2016) comparison of the age, gender and ethnicity of submitters on Auckland's 2015–2025 Long-term Plan with the demographics of all Auckland residents confirms that younger age groups were significantly underrepresented. The age profile of submitters was almost the inverse of the age profile of the overall population of Auckland (Table 5.2).

Others have raised concerns about the accessibility and openness of local authority decision-making processes:

> The complexity of the RMA and the cost of engaging experts to buttress one's position makes it more difficult for individuals to compete with corporate entities, and is a barrier to community participation – individual community members regularly represent themselves at hearings or build a case off the information and evidence provided by councils. On the other hand, vested interests – including individual community members with NIMBY and BANANA attitudes[40] – have disproportionate power and too much scope to limit competition or thwart rezoning and development that would be in the wider public interest. (LGNZ, 2015a, p. 28)

NZCID (2015a), in reviewing the three main planning statutes, concluded that

[40] NIMBY stands for "Not in my back yard"; BANANA stands for "Build Absolutely Nothing Anywhere Near Anyone".

typically engagement models are based on the rigid statutorily defined special consultative procedure, which, instead of encouraging proactive solutions to contentious issues, engenders antagonism and division. (p. 36)

Table 5.2 Demographics of submitters on the Auckland 2015–2025 Long-term Plan

Demographic Category	Proportion of submitters	Proportion of Auckland residents	Degree of over-or-under representation	
Gender				
Male	61.9%	48.6%	Overrepresented by:	27%
Female	38.1%	51.4%	Underrepresented by:	-26%
Ethnicity				
Kiwi (or New Zealander)	3.9%	1.0%	Overrepresented by:	287%
European	80.2%	53.5%	Overrepresented by:	50%
Māori	3.7%	9.7%	Underrepresented by:	-62%
Pacific	2.6%	13.2%	Underrepresented by:	-81%
Asian	5.7%	20.8%	Underrepresented by:	-73%
African/Middle Eastern/ Latin America	0.7%	1.7%	Underrepresented by:	-58%
Other	3.2%	0.1%	Overrepresented by:	6324%
Age				
<15	0.2%	20.9%	Underrepresented by:	-99%
15-24	4.2%	14.9%	Underrepresented by:	-72%
25-34	12.5%	14.0%	Underrepresented by:	-11%
35-44	17.8%	14.3%	Overrepresented by:	25%
45-54	19.1%	14.0%	Overrepresented by:	37%
55-64	18.4%	10.4%	Overrepresented by:	77%
65-74	19.0%	6.7%	Overrepresented: by:	182%
75+	8.8%	4.8%	Overrepresented by:	84%

Source: Nunns (2016).

Different consultation processes and requirements within the planning system – and in particular between the RMA and the other two statutes – create the potential for duplication of effort. Local authority submitters to the *Using Land for Housing* inquiry emphasised this:

> As the law stands, even though a spatial plan goes through considerable consultation with the community, the RMA requires a separate consultation process to embed it into a statutory plan developed under the RMA, and includes possible appeal to the Environment Court. (Greater Wellington, Using Land for Housing sub. 38, p. 3)

> Even though a spatial plan goes through considerable consultation with the community, the RMA requires a separate consultation process to embed it into a statutory plan. (Selwyn District Council, Using Land for Housing sub. 45, p. 14)

> An important aspect of planning for future housing supply needs in Hamilton has occurred through the Future Proof strategy and the Hamilton Urban Growth Strategy. The development of these strategies occurred under the Local Government Act 2002 special consultative procedures. However, in order to embed these into RMA documents to give the strategies sufficient statutory weight, further processes such as a Regional Policy statement Review, district plan changes/variations and reviews, have been undertaken. These have taken around 5 years in total to date and some of the processes are still not complete. (Hamilton City Council, Using Land for Housing sub. 70, p. 14)

Chapter 8 explores how to improve consultation in a future planning system.

5.7 Ensuring the principles of the Treaty of Waitangi are taken into account

The Treaty of Waitangi is an integral part of New Zealand's constitutional fabric, and the rights and obligations that it creates need to be reflected accordingly in regulatory and policy systems. This is particularly the case with the planning system, where decisions over land and other natural resources can touch on Article 2 rights and obligations. All three planning statutes refer to the Treaty, and require councils to take steps to enable Māori to participate in making decisions. However, councils have performed these obligations to varying extents. Chapter 7 explores in more detail the performance of the current planning system in reflecting Treaty obligations.

5.8 Effective approaches to keeping regulation and policy up to date

It is important to review regulation and policy regularly, to ensure that they are still needed and fit for purpose. The LGA and RMA include requirements on councils to assess whether their proposed policies or regulations would be efficient and effective, and the RMA obliges councils to monitor the effectiveness of their plans. However, these checks and balances have had disappointing effects.

Statutory obligations on councils

Planning statutes impose a number of obligations on councils to ensure that their policies and regulations are necessary, efficient and effective. The LGA requires local authorities, in making decisions, to:

> (a) seek to identify all reasonably practicable options for the achievement of the objective of a decision; and
>
> (b) assess the options in terms of their advantages and disadvantages; and
>
> (c) if any of the options identified under paragraph (a) involves a significant decision in relation to land or a body of water, take into account the relationship of Māori and their culture and traditions with their ancestral land, water, sites, waahi tapu, valued flora and fauna, and other taonga. (section 77, LGA)

In meeting these obligations, councils have discretion over the depth of analysis and quantification. The depth should be "largely in proportion to the significance of the matters affected by the decision", and in line with the council's significance and engagement policy (section 79, LGA).

Section 32 of the RMA requires councils to prepare and publish an evaluation report for any "proposal", which is defined as "a proposed standard, statement, regulation, plan, or change". An evaluation report should "contain a level of detail that corresponds to the scale and significance of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the proposal". Aside from this, it must:

> (a) examine the extent to which the objectives of the proposal being evaluated are the most appropriate way to achieve the purpose of this Act; and
>
> (b) examine whether the provisions in the proposal are the most appropriate way to achieve the objectives by—
>
> (i) identifying other reasonably practicable options for achieving the objectives; and
>
> (ii) assessing the efficiency and effectiveness of the provisions in achieving the objectives; and
>
> (iii) summarising the reasons for deciding on the provisions. (section 32(1))

The RMA also obliges local authorities to monitor:

- a number of outcomes and activities, including the state of the environment;
- the exercise of any delegated or transferred powers, functions and duties;

- the exercise of resource consents granted, and "the efficiency and effectiveness of policies, rules, or other methods in its policy statement or its plan" (section 35(2)(b)).

Effectiveness of evaluation, monitoring and review

In its previous inquiries, the Commission has identified a number of weaknesses in the implementation of these checks (such as provided by evaluation reports) on local government regulatory and policy action. Other parties have also raised questions about the rigour and impact of council monitoring processes.

In its local government regulatory inquiry, the Commission noted that "considerable room for improvement" existed in areas of local government decision making (2013, p. 77). Particular areas of weakness were:

- insufficient tailoring of regulatory objectives to local conditions;
- consideration of few options;
- a tendency to assess alternative options with the same broad characteristics;
- insufficient analysis of options against stated objectives; and
- poor implementation analysis.

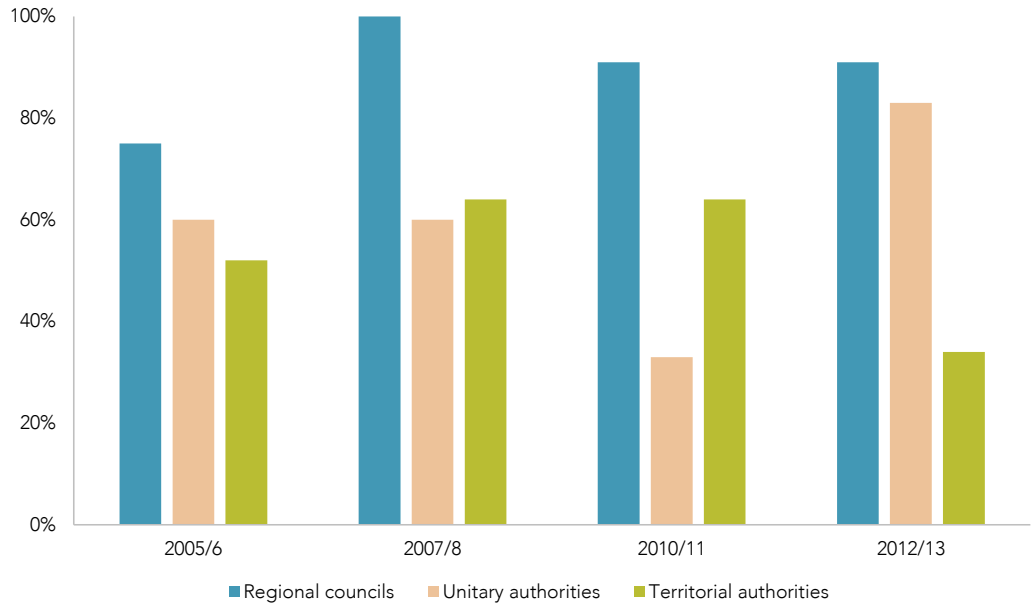
The Commission also observed:

- a "low level of prioritisation of monitoring and enforcement resources based on risks" (p. 79);
- inappropriate involvement by elected officers in decisions about investigations and prosecutions;
- inadequate feedback loops;
- a lack of balance in what is measured; and
- insufficient assessment of performance information.

Similarly, in its *Using land for housing* inquiry, the Commission identified a number of land-use regulations in district plans whose costs likely exceeded their benefits. It identified other land-use regulations that could provide net benefits, but which were not well-designed. The key sources of unnecessary regulatory costs were multiple or conflicting objectives in district plans, inadequate analysis before rules are introduced, and poor overlaps with other regulatory frameworks (especially the Building Act) (NZPC, 2015a).

Other reports have echoed these findings. Dormer (1994) highlighted problems with section 32 analyses only a few years after the RMA was introduced. The Urban Technical Advisory Group (2010) concluded that "s.32 has not proven to be an effective check on interventions that intentionally or otherwise result in a rise in the price of housing" (p. 30). Crawford (2007) noted that "many councils are reluctant to fund research and monitoring" of plans, and that few councils have provided resources for non-regulatory planning methods (p. 217). Ericksen et al.'s review (2003) of the introduction of the RMA highlighted the generally poor quality of data underpinning district plans and regional policy statements, and the resulting "lacklustre scores" for plan monitoring efforts (p. 290). MfE surveys of local authorities show variable levels of monitoring (Figure 5.10).

Figure 5.10 Percentage of councils monitoring effectiveness and efficiency of plans and policy statements



Source: MfE (2009c, 2011, 2014a).

Note:

1. The 2005/06, 2007/08, and 2010/11 results are councils reporting that they had monitored their plans/policy statements. The 2012/13 results are for councils that had monitored and reported on their plans, policy statements, or both.

F5.6 Although local authorities are required to ensure that their plans, policies and regulations are necessary, efficient and effective, their use of these checks and balances has been disappointing.

5.9 Monitoring, leadership and management from the centre

Successful regulatory systems and institutions require strong monitoring and oversight arrangements and effective leadership from the centre of government (NZPC, 2014b). Until recently, central government's management of the planning system has been weak. Its current ability to monitor the performance of the system varies, depending on the statute. Since about the end of the last decade, central government has taken a more active and directive role, including through legislative amendments that have strengthened central intervention powers and limited council discretion.

In *Towards better local regulation* (2013), the Commission concluded that central government's relationship with local authorities over regulatory regimes has often been poor. Key problems identified were:

- limited analysis of local government's capability or capacity to implement regulations before allocating additional regulatory functions;
- inadequate knowledge by central government agencies about the local government sector; and
- poor engagement with local government during the design of new regulations.

Similar issues are apparent in the management and operation of the planning system. Until recently, central government has played a relatively weak role in planning compared with other countries. The Urban Technical Advisory Group (2010) concluded that:

> central government is much less involved in planning for our cities (or indeed planning for anywhere) than is common overseas… Another way of putting the same proposition is that New Zealand has an extremely devolved planning/land and resource use regulation system: more so than any of the

> countries with which we commonly compare ourselves. This devolved system, combined with the multitude of local authorities in New Zealand, means there are many inefficiencies that arise. (pp. 10–11)

A lack of central government leadership in the early years of the RMA's implementation is a particular point of criticism. Palmer (2015a) argued that the absence of guidance through NPSs or NESs contributed to unnecessary pain:

> Much trouble and expense for many people could have been avoided had more extensive use been made of these instruments. Central government failed to do the work and provide the guidance required to make the statute work well. Years of central government being asleep at the wheel made the implementation of the Act by local government much more difficult than it needed to be. (p. 16)

Miller (2011), who was a planning professional during the Act's implementation, observed that the Ministry for the Environment

> was slow to provide any practical assistance to regional and city/district councils on how to interpret the new sustainable management mandate and most importantly how to translate it into the new effects-based plans that the minister in particular emphasised were the true practical embodiment of the act. Essentially, the lower levels of the planning mandate were left to 'learn by doing', which inevitably ensured that everyone learned at least a slightly different lesson. (p. 167)

Ericksen et al. (2003) point to the small size of the Ministry for the Environment in the early 1990s, the tight fiscal constraints under which it operated, and the limited funding available for the Act's implementation. The Planning Tribunal (later renamed the Environment Court) saw its caseload quadruple between 1992 and 2001, contributing to significant delays in the development and roll-out of district and regional plans (OECD, 2007). Simon Upton, Environment Minister during the passage and implementation of the RMA, later said that the Government had been "slow in its provision of guidelines to assist councils, staff, applicants, consultants et al in determining the type of information required, how much is needed and how it should be evaluated" (1999).

Because of central government's limited involvement, many councils in the early years of the RMA faced significant challenges in meeting their obligations.

> Some four years after the RMA became law, serious conflicts were emerging in some local councils, such as over seeking to recognize and protect significant indigenous flora and fauna and outstanding landscapes in new plans. In part this was due to four interrelated problems. First, there was an inadequate appreciation of what and how much to protect, and why, as there were no national policy statements to guide councils in their thinking about these matters, just phrases in the Act. Second, the methods by which natural areas should be identified for protection were flawed. No specific methods were provided by central government to guide local councils. Instead, councils searched the literature or employed consultants to devise their own, or pleaded with the under-resourced DoC for help. Sometimes others told them that they had it wrong when their proposed plans were reviewed. Third, there were limited options for protecting these important areas. A regulatory approach combined with the lack of funds for adequate research and consultation too often resulted in a backlash from property-owners to the notified plans because they would be carrying the costs…Fourth, there was no case law for guiding actions. (Ericksen et al., 2003, p. 70)

The absence of central government also left space for local interests to gain a disproportionate influence over local plans. Gow (2014) commented that in some cases, "devolution has resulted in local interests having an unacceptable dominance, leading to poor decisions; in other cases political differences and inertia have led to insufficient change" (p. 7).

Ngā Aho and Papa Pounamu (2016b) note that recognition of Māori kaupapa in planning, and of Māori values, rights and interests has been uneven across local authorities. Greater central government leadership on the Treaty obligations of local authorities would likely have "levelled up" practice in areas that were falling short. (Chapter 7) They also note the complexities and costs for Māori communities to engage in planning processes that vary across the country (pp. 37-38).

Central government's current ability to monitor the performance of the planning system varies, depending on the statute. At least until the NPS-UDC came into effect in late 2016, the urban outcomes desired from the RMA lacked specificity.

For the LGA, the increased focus on 'core services' in recent years has led to the development of a suite of non-financial performance benchmarks, providing comparable data on delivery of key services by local authorities (Table 5.3). Councils will report against the benchmarks for the first time in their 2015/2016 annual reports. It is unclear how the Government will use this data to inform its involvement in the planning system.

Table 5.3 Local authority non-financial performance measures

Water supply	Sewerage and the treatment & disposal of sewage	Stormwater drainage	Flood protection & control works	The provision of roads & footpaths
• Safety of drinking water • Maintenance of the reticulation network • Fault response times • Customer satisfaction • Demand management	• System and adequacy • Discharge compliance • Fault response times • Customer satisfaction	• System and adequacy • Discharge compliance • Response times • Customer satisfaction	• System adequacy and maintenance	• Road safety • Road condition • Road maintenance • Footpaths • Response to service requests

Source: Department of Internal Affairs (DIA), 2013.

As noted earlier, councils must also report against financial prudence measures. According to the Department of Internal Affairs (DIA), information from these measures will

> assist the Minister of Local Government to determine whether, in the case of any particular local authority, financial management problems are such that the Minister should initiate any of the assistance and intervention options in the Local Government Act 2002. (DIA, 2013)

Monitoring and evaluation is most sophisticated through the LTMA, where the Government regularly expresses clear objectives for the land transport system through its GPS. NZTA and the Ministry of Transport collect data on a number of indicators and use these to inform investment decisions and the development of future GPSs.

For the RMA, the MfE has recently introduced a National Monitoring System, which collects detailed information on the inputs and timeframes involved in producing plans, assessing resource consent applications, and monitoring and enforcement. The Ministry has also recently published a statement of its long-term environmental goals. While many of the goals and targets expressed for the natural environment are clear and measurable, the goals for the urban environment are much less specific:

> Urban: our vision is that New Zealand is a leader of environmentally sustainable cities, leveraging the benefits that cities offer while reducing the costs and impacts that they impose
>
> Long-term outcomes: the use of the environment, including natural resources, is optimised for the betterment of society and the economy, now and over time
>
> Long-term targets: urban environments maximise social, cultural and economic exchange
>
> Intermediate outcomes: urban form supports liveable, connected and productive urban environments that are adaptable to changing needs
>
> Intermediate targets:
>
> - 2020: Frameworks are in place to support development of resilient, multi-functional and adaptive urban environments including infrastructure
> - 2030: Urban environments are developed through coordinated urban and infrastructure planning (MfE, 2015b)

F5.7 Apart from land transport, central government has, until very recently, played a relatively weak role in leading and managing the planning system.

Processes to align local and national interests

Planning decisions in most countries occur at a local level, reflecting the fact that this is where most of the information needed to make decisions lies and where most of the costs and benefits of these decisions are borne. However, as noted in Chapter 6, decisions taken locally can have effects felt much further afield, creating costs and residual risks that have to be borne by central government (eg, health and accommodation expenses). Planning systems need to ensure that local and national interests are aligned.

In other comparable systems; higher-level governments (states, territories or provinces in Australia, Canada and some parts of the United States; central government in England and Wales) play a more active and regular role in the oversight and operation of planning systems.

Central government in New Zealand currently lacks:

- a significant planning capability of its own;
- the systems needed to support well-informed and timely intervention in plan-making processes, or effective engagement with local authorities over the wider impacts and suitability of their proposed land-use rules and policies[41]; or
- a clear leader or contact point on planning issues, meaning that local authorities can face difficulties obtaining a coherent central government view.

These deficiencies indicate that central government needs to improve its performance as a regulatory steward of the planning system (Chapter 13).

F5.8 Central government lacks the capability and systems needed to support timely and well-informed intervention on issues and wider impacts of local land-use regulation, or effective engagement with local authorities on planning issues.

Tighter central control over local government, and reduced local discretion

Decision rights and responsibilities in New Zealand's planning systems have been progressively devolved to local authorities. (NZPC, 2015a) In recent years, however, the policy pendulum has swung away from this trend towards greater devolution, with central government increasingly setting standards and controls over local government planning processes. This is noticeable in a number of amendments to the LGA and RMA. In addition to the amendments to the purposes of the LGA 2002 discussed earlier, these amendments have increased Ministerial powers, council reporting requirements and individual rights to object:

- Ministerial powers to intervene in councils (eg, through appointing Crown review teams, Crown observers, Crown managers or Commissions or calling elections) were strengthened through 2012 changes to the LGA.

[41] NZTA (and its predecessor agencies) has been active in local planning processes for some time, but has focused primarily on transport issues rather than wider regulatory matters about land use. Other Crown delivery agents (eg, Housing New Zealand Corporation) also regularly submit on District Plans. At a policy level, MfE has submitted on the specific issue of genetically modified organisms in the case of the Hastings, Far North and Whangarei District Plans (MfE, pers. comm.). The Department of Conservation also submits on issues related to conservation, many of which are dealt with at a regional level (rather than by territorial authorities).

- Amendments in 2014 required local authorities to prepare 30-year infrastructure strategies (discussed in section 5.2 above), and required councils to report in their Annual Plans, Annual Reports and Long-Term Plans on their planned and actual performance against a set of financial prudence benchmarks.[42]
- Finally, amendments in 2014 enabled developers and other interested parties to object to the "assessed amount of development contribution" that their council required. Independent development contributions commissioners would hear the objections.

Similar trends towards greater central control and less local discretion can be observed for the RMA, where successive amendments have increased Ministerial control, removed some decisions from councils, and introduced greater standardisation:

- Amendments in 2005 created a new power for the Minister for the Environment to direct plan changes. This power was expanded in 2009 to allow the Minister to direct councils to review their plans.
- Amendments in 2009 mandated "changes to the protection for trees in all district plans nationwide – preventing councils from making general rules to protect trees or groups of trees in an urban environment" (G. Palmer, 2013a, p. 24).
- Amendments in 2009 also obliged councils to offer discounts for late consent decisions, where the local authority was at fault.
- As discussed earlier, changes to the RMA in 2009 created the power for the Minister to refer nationally significant proposals for decision to a board of inquiry or the Environment Court, and "significantly extended" the list of matters that a Minister could "call in" (G. Palmer, 2013a, p. 26).
- Changes to the law in 2013 altered the factors that councils must consider when conducting section 32 analyses to include the "opportunities for (i) economic growth that are anticipated to be provided or reduced; and (ii) employment that are anticipated to be provided or reduced"[43].
- The Housing Accords and Special Housing Areas Act 2013 created the power for the Governor-General to designate regions or districts experiencing significant housing supply or affordability issues. Once designated, the Minister can negotiate with the relevant territorial authority to establish a Housing Accord, which is an agreement for central and local government to work together to make housing more affordable by increasing land or housing supply. Where a district or region has been designated, a Special Housing Area may be established, enabling faster and more permissive resource consenting processes and more limited notification of development.[44]

F5.9

After decades of greater devolution of planning powers to local government, recent developments have seen a trend towards central control.

- Amendments to the Local Government Act have narrowed the purpose of local government, introduced more planning requirements, imposed standardised reporting obligations on councils, and given central government more powers to intervene.
- Amendments to the Resource Management Act have increased Ministerial powers to direct changes to plans, removed some decisions from councils, and increased the expectations for regulatory analysis.

[42] The financial prudence benchmarks cover rates affordability, debt affordability, balanced budgets, essential services, debt servicing, debt control, and operations control.

[43] Section 32(2((a)(i) and (ii).

[44] Where a Housing Accord is in place, the relevant council must approve the establishment of any Special Housing Area.

Legislative exceptions to the planning system that are specific to a region

Another notable recent trend has been legislative exceptions to the main planning system to meet the governance needs or challenges of particular areas.

The first area to see exceptions from the planning system was Auckland. The scale and complexity of Auckland, its rapid growth, and the large number of local authorities in the region raised questions during the 1990s and 2000s about the need for more effective coordination. As the Royal Commission on Auckland Governance commented:

> Auckland remained bedevilled by the problem of complex governance that failed to deliver progressive and necessary solutions to infrastructure issues, particularly transport. As the population continued its runaway growth, the region faced increasing challenges in ensuring areas such as public transport, affordable housing, and urban growth kept up with demand. (2009a, p. 130)

In response to the calls for greater coordination, the LGA and RMA were amended in 2004 to "promote increased integration of decision making in respect of Auckland land transport" (explanatory note, Local Government (Auckland) Amendment Bill). A new council controlled organisation – the Auckland Regional Transport Authority – was established to carry out the planning, funding and development of land transport. The 2004 amendments also gave legislative weight to the Auckland Regional Growth Strategy (ARGS), a growth management plan prepared under the 1974 LGA, requiring all councils within the Auckland region to change their RMA Plans to give effect to the Growth Strategy. The ARGS sought to prevent Auckland's expansion and better integrate transport and land use decisions. The 2004 amendments prevented the Environment Court or councils from making changes to RMA Plans that would extend the city's metropolitan urban limit without the approval of the Auckland Regional Council.

Ongoing concerns about the performance of New Zealand's largest city led to the establishment of a Royal Commission on Auckland Governance. The Commission recommended, among other things, establishing a single unitary authority to replace the Auckland Regional Council and the seven territorial authorities. A new government took up many of the Royal Commission's recommendations, successively amending the LGA and other planning statutes between 2009 and 2013 to:

- establish the new Auckland Council;
- arrange for the transition from the legacy councils to the new authority; and
- make provision for new planning tools and processes.

The planning institutions and arrangements for Auckland differed in a number of ways from those in place elsewhere in New Zealand.

- The new council would be required to prepare a spatial plan (later named the Auckland Plan) to:
    - set a strategic direction for Auckland and its communities that integrates social, economic, environmental, and cultural objectives; and
    - outline a high-level development strategy that will achieve that direction and those objectives; and
    - enable coherent and co-ordinated decision making by the Auckland Council (as the spatial planning agency) and other parties to determine the future location and timing of critical infrastructure, services, and investment within Auckland in accordance with the strategy; and
    - provide a basis for aligning the implementation plans, regulatory plans, and funding programmes of the Auckland Council. (section 79(3), Local Government (Auckland Council) Act 2009)
- Auckland Council was required to maintain council controlled organisations to provide water and transport services, as opposed to having the options to provide these in-house.[45]
- The new Council was required, at least in its initial year, to adopt a capital value rating system.

[45] Statute prevented the Council from disestablishing Watercare Services as a council controlled organisation until 30 June 2015.

- A council-controlled organisation (Auckland Transport) rather than a committee would carry out the regional land transport planning role.
- An Independent Māori Statutory Board was established to assist the Auckland Council by promoting issues of significance to Māori and ensuring that the Council meets its Treaty of Waitangi obligations (see Chapter 7 for more details).
- The new council was required to prepare a new Unitary Plan, to replace the District Plans, Regional Plans and RPS of its predecessor councils. The new Unitary Plan would be prepared under a streamlined process, and an IHP (appointed by the Minister for the Environment and Minister of Conservation) would review the Plan (see Box 5.2). The IHP would, within timeframes set by statute, make recommendations to the Council on changes to the Unitary Plan. The Council would be required to respond to those recommendations within 20 working days.[46]

In Canterbury, concerns about governance at the regional council led the Government to seek special legislation under urgency in 2010 to replace elected councillors with commissioners, cancel the 2010 election, give the commissioners additional powers,[47] and limit appeals on the commissioners' decisions on plans to points of law. The intervention followed a damning independent review of the council's management of the region's freshwater, and concerns about the council's performance in processing resource consents. Special legislation was sought because of concerns that the LGA and RMA lacked sufficient powers "to enable an effective and timely response" (DIA, 2010a, p. 8).

The third area where statutory variations from the main planning system have been created is the Treaty of Waitangi settlements. Perhaps the most far-reaching of these to date has been the Waikato and Waipa river settlements, which saw the establishment of a Waikato River Authority (see Chapter 7 for more details).

The Auckland, Canterbury and Waikato innovations raise questions about the flexibility and fitness of the planning system and suggest rising doubt on the part of central government about the ability of local communities to resolve problems or identify solutions themselves. The Institute of Policy Studies argues that they also signify a growing willingness by central government to promote "what it considers national policy goals over local goals" at "the expense of local community voice" (2011, p. 225).

F5.10 A notable recent trend has been legislative exceptions to the main planning system to meet the governance needs or challenges of particular areas (Auckland, Waikato and Canterbury), as central government has promoted national goals over local interests.

5.10 Increasing legislative complexity, declining coherence and accessibility

One result of rising frustration with the RMA and the performance of local government has been repeated legislative amendment, leading to increased complexity. This has implications for the ability of councils to manage the system and the quality of its outcomes.

The RMA in particular has been amended extensively. As Palmer (2015a) notes, the RMA "occupied 382 pages of statute book when it was passed in 1991. The April 2014 reprint had 827 pages. The September 2015 reprint has 682 pages. So at present the Act is exactly 300 pages longer than when it began" (p. 6). Chief Justice Sian Elias observed of the RMA in 2013:

> If revisiting the suggestion that the Resource Management Act was "overambitious", today it would not perhaps be necessary to go beyond pointing to volume 41 of the Bound Reprinted Statutes. The Act takes up almost the entire volume and the section numbers have been obliged by amendment to adopt the sort of alphabet soup consistency of the technical and turgid Income Tax Act 2007. So, for example, s 165ZFG is obliged to cross-refer to s 165ZFF. As if 433 sections is not long enough, important

[46] Provision was made for the Council to seek an extension of a further 20 working days.

[47] These additional powers include the ability to impose a moratorium on the issue of further water take and discharge consents.

> procedural provisions and references to other legislative provisions are contained in a further 12 schedules. (pp. 1–2)

The length and complexity has implications for the public to understand the law. Justice Elias continues:

> The complexity in the Income Tax Act is understandable. It is a technical Act dealing with a wholly artificial universe constructed by law. But the Resource Management Act is an Act that affects people and their aspirations in the real world. It is a framework of values for practical living and for the management of disagreements about the physical environment. It is meant to engage communities, not alienate them. So impenetrability and complexity in this statute is not a good thing. (2013, p. 2)

Many believe that this continual change has led to legislative frameworks that are neither coherent nor easy to implement (Box 5.5).

Box 5.5 **Views on the impact of continued reform to planning statutes**

> Over the past few decades, the resource management system has evolved through new legislation, institutions, and multiple amendments to address new and emerging issues. However, when the system is viewed as a 'whole', this evolution has resulted in inconsistencies and misalignment between core legislative frameworks… Fundamentally, the problem with reforms to date is that they have avoided the difficult, publicly contentious structural issues at the heart of domestic governance and resource management. With the exception of the reform of Auckland governance, none of these, nor any other, responses address underlying structural anomalies in the overall domestic governance and planning system. (NZCID, 2015a, p. 44)
>
> …there have been too many piece meal changes responding to one off issues, and this has led to a weighty and somewhat cumbersome legislative package. (Gow, 2014, p. 12)
>
> New Zealand exhibits a habit of passing big statutes, finding we do not like the results and then engaging in a constant series of amendments whereby the statutes lose both their principles and their coherence...What results is legislation of lower quality than is optimal. (Palmer, 2015a, p. 6)
>
> Reform itself has become the norm. This creates major difficulties for councils' planning and delivery of long-run infrastructural services as the willingness of successive Parliaments to amend their governing legislation can only result in an unstable and uncertain environment. (Reid, 2010, p. 68)
>
> The constant amending of the [Resource Management] act has left it as a disjointed patchwork that needs to be replaced. (Associate Professor Caroline Miller, sub. 50, p. 9)
>
> …substantial reforms have been advanced without the benefit of robust and reliable information on system performance. It is arguable that this has led to a series of changes that address symptoms rather than root causes or part of the problem, but not the whole. Similarly, changes have potentially addressed one issue, but created another or shifted a problem from one part of the system to another. (LGNZ, 2015a, p. 23)

F5.11 Continual reform of the planning statutes has increased their complexity, reduced the coherence of the legislative frameworks, and made it harder for councils to implement the planning system and for the general public to participate in it.

5.11 Conclusion

When assessed against principles of good regulatory practice, a number of weaknesses are noticeable in New Zealand's current planning system. These weaknesses include:

- unclear purposes;
- funding difficulties (especially for infrastructure);
- variable public engagement processes;
- poor mechanisms for keeping regulation and policy up to date; and
- weak leadership from central government in several areas of the planning system.

As a result of these weaknesses, recent years have seen:

- rising frustration with the RMA;
- increasing central control;
- a reduction in local discretion; and
- the emergence of regionally-specific exemptions from the planning system.

Multiple amendments to the underlying planning statutes have increased complexity and reduced legislative coherence, making it harder for the public to understand the laws and for councils to implement them. The repeated use of legislative amendments and overrides also signal that the main planning system has struggled to deal with pressure. This growing complexity, deteriorating coherence and rising pressure sets the scene for the Commission's current inquiry.

6 Outcomes from the current system

Key points

- The purposes of the three main planning Acts suggest that the main outcomes sought from the planning system are:
  - the maintenance of or improvements in environmental quality;
  - the supply of local infrastructure and services in a timely and cost-effective manner and to desired standards; and
  - the safe and reasonably easy movement of goods and people.
- Available data provides a mixed picture of performance.
  - Air quality generally complies with national standards, is good by international levels, and has improved against some measures. Yet air quality problems remain in some smaller New Zealand cities and towns.
  - The proportion of New Zealanders serviced by safe drinking water has increased over time, reflecting more effective regulation, support from central government and increased investment from local authorities in water treatment.
  - Freshwater quality is generally lower in waterways that flow through urban areas. The sources of pollution in urban waterways typically include sewage leaks and stormwater run-off.
  - Net and total greenhouse gas emissions have increased by 54% and 26% respectively since 1990.
  - Development capacity has failed to keep pace with demand in New Zealand's fastest growing cities. Substantially as a result, housing affordability has deteriorated significantly over the past 25 years. People on lower incomes feel the burdens of this deterioration most heavily.
  - Urban congestion levels have been broadly steady for the past 10 years, and traffic-related accident and fatality rates have been falling since the 1970s. Despite improvements, New Zealand has a relatively high rate of traffic-related deaths compared with other developed countries.
  - New Zealand has low levels of public-transport use by developed world standards. The rates of use have been broadly stable since the early 2000s.
  - More New Zealanders live in dwellings connected to systems for treating sewage than the OECD average. New Zealand sewerage systems perform somewhat poorly against a number of international benchmarks.
- The ability of councils to change outcomes through the planning system depends to a large degree on whether local government is the primary actor. Changes in technology and consumer preferences, and central government policy, can be more significant factors. However, the muted effects on many urban and environmental outcomes point to weaknesses in the design and operation of the New Zealand planning system. Underlying political dynamics have constrained the effectiveness of the planning system for both urban and environmental outcomes.

Chapter 5 discussed the nature of the urban planning system in New Zealand, its evolution, and some of its strengths and weaknesses. But how has the New Zealand urban planning system performed? In other words, has the planning system delivered the outcomes expected of it? If not, why has it not delivered those outcomes?

The planning system as a whole currently has no single purpose statement. However, the three main Acts and related material provide guidance, and suggest the following main outcomes currently sought from the planning system.

- *Protection and enhancement of the environment:* the Resource Management Act (RMA) is an environmental management statute, with a particularly broad definition of the 'environment' (Chapter 5).
- *The efficient, effective and appropriate provision of infrastructure and local public services:* the Local Government Act (LGA) explicitly identifies these as falling within the purpose of local government.
- *Safe, efficient and effective land transport:* as stated in the purpose of the Land Transport Management Act (LTMA), and reinforced by the specific priorities of the Government Policy Statement (GPS).

Broadly speaking, therefore, where the planning system was performing well, we might expect to see:

- the maintenance or improvements in key environmental measures (eg, air quality, water quality, ecosystem health);
- the supply of local infrastructure and services in a timely and cost-effective manner and to desired standards; and
- the safe and reasonably easy movement of goods and people.

This chapter reviews recent developments in these environmental and urban outcomes, and considers the contributions of the planning system. Consistent long-term data is not available for all of these outcomes; so, in some cases, proxy measures have been used. In other cases, some judgements have been made about which outcomes to focus on. For example, a large number of environmental outcomes could potentially be reviewed. Given the focus of this inquiry on *urban* planning, the Commission has decided to focus on those environmental outcomes most closely connected to cities, urban development and land use. These include:

- air quality;
- drinking and recreational water quality; and
- climate change.

For urban outcomes, the Commission has focused on four measures that reflect the purposes of the current Acts, are essential to the effective functioning of cities, or both. These measures are:

- the availability of sufficient development capacity to respond to changing social and economic needs;[48]
- the speed and safety with which people and goods can move around a city;
- the extent to which essential infrastructure and services (eg, roads, water treatment, waste management, public transport) keep pace with demand and are maintained; and
- the ability of local residents and governments to fund essential infrastructure and services over time.

6.1 Air quality

Air quality in New Zealand is measured against a number of indicators. The National Environmental Standards (NES) for Air Quality set ambient air quality standards, which regional and unitary councils must give effect to through their plans and policies. The standards set thresholds for five pollutants (PM10 (see

[48] The supply of sufficient development capacity is not currently an explicit goal or requirement under the three planning Acts. However, proposed amendments to the RMA and the proposed National Policy Statement on Urban Development Capacity will make it a clear role and obligation for councils.

particulate matter below), nitrogen dioxide, carbon monoxide, sulphur dioxide and ozone), and outline how many times these thresholds can be exceeded.[49] Air quality is also assessed against other guidelines or benchmarks, principally those developed by the World Health Organization (WHO) and the Ministry for the Environment (MfE).

As this section discusses, available evidence suggests air quality has generally improved since the Resource Management Act came into force. A recent study by the Environmental Defence Society (EDS, 2016) supports this conclusion. While noting the difficulty in attributing improvements solely to the RMA the EDS concludes:

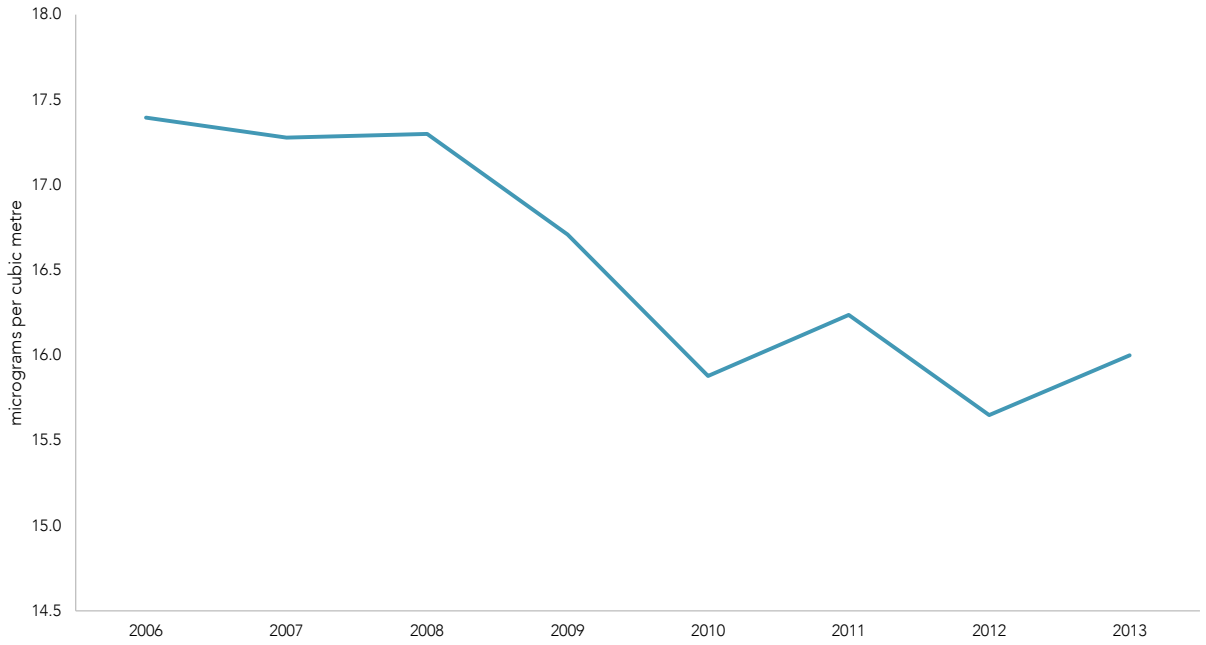
> A combination of regulatory change and technological improvement has improved New Zealand's air quality, primarily motivated by human health concerns. This […] illustrates that where technical solutions are available, and national direction is clear, good environmental outcomes can be achieved. (EDS, 2016, p.33)

Exposure to particulate matter

A key measure of air quality is the presence of particulates in the air. Two indicators of particulate matter pollution are PM10 and PM2.5. PM10 particles have a diameter of 10 micrometres (or microns) or less, and PM2.5 particles have a diameter of 2.5 micrometres of less. To put these measurements in scale, a human hair has a diameter of 50 micrometres. Airborne particle pollutants can be naturally-occurring (eg, from sea spray) or human-made (eg, wood and coal fires), and can cause a range of health problems, including respiratory diseases, heart attacks, strokes and cancer. Monitoring of PM10 levels has been mandatory in New Zealand since NES was introduced in 2004, while monitoring of PM2.5 is currently voluntary.

Average PM10 concentrations have fallen in recent years (Figure 6.1) and are low by OECD standards, although many monitored sites fail to meet the national standard of one exceedance each year. Exceedances are typically seasonal, with most occurring in winter (when households need heating) and in the South Island (where wood burners are a more common form of household heating).

Figure 6.1 National yearly average concentrations of PM10, 2006–2013



Source: Ministry for the Environment / Statistics New Zealand.

WHO data from 2012 to 2014 suggests that major New Zealand cities have broadly similar PM10 and PM2.5 levels to major Australian cities (Figure 6.2), and both countries have very low levels of particulate pollution by international standards (Figure 6.3). However, some smaller New Zealand cities and towns – especially in

[49] For some pollutants (ie, ozone, and the higher sulphur dioxide threshold) no exceedances are allowed.

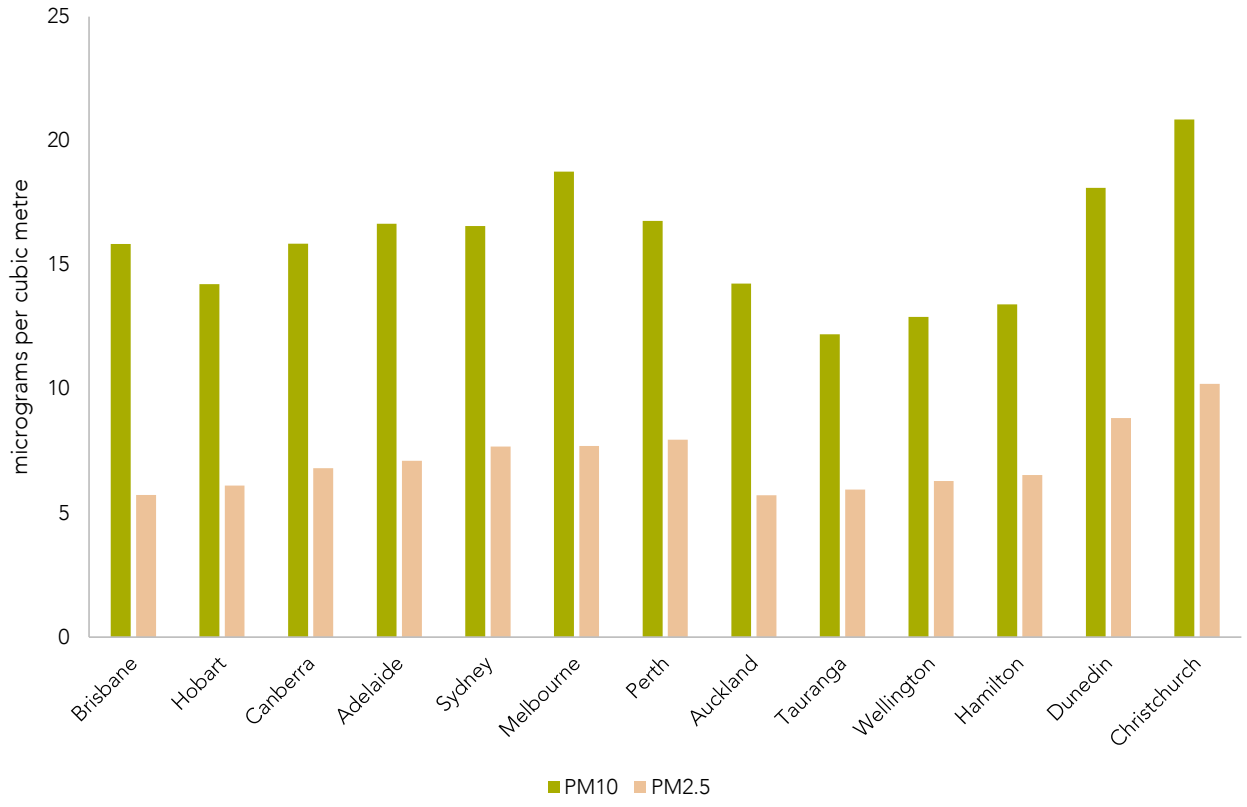
the South Island - have comparatively high levels of particulate pollution, with Timaru described in media coverage as having the worst level of air pollution in Australasia (Hudson, 2016).

Despite recent improvements, PM10-based air pollution in New Zealand has significant health effects. In 2012, air pollution from human-made PM10 was linked to approximately:

- 1 000 premature deaths;
- 520 extra hospital admissions for cardiovascular and respiratory diseases; and
- 1.35 million restricted activity days, when symptoms prevented everyday activities such as work or study (Ministry for the Environment / Statistics New Zealand, 2014).

Young people are particularly vulnerable to the effects of air pollution. A third of all estimated hospital respiratory admissions due to human-made air pollution in 2006 were children aged 1–4 years (Kuschel et al., 2012).

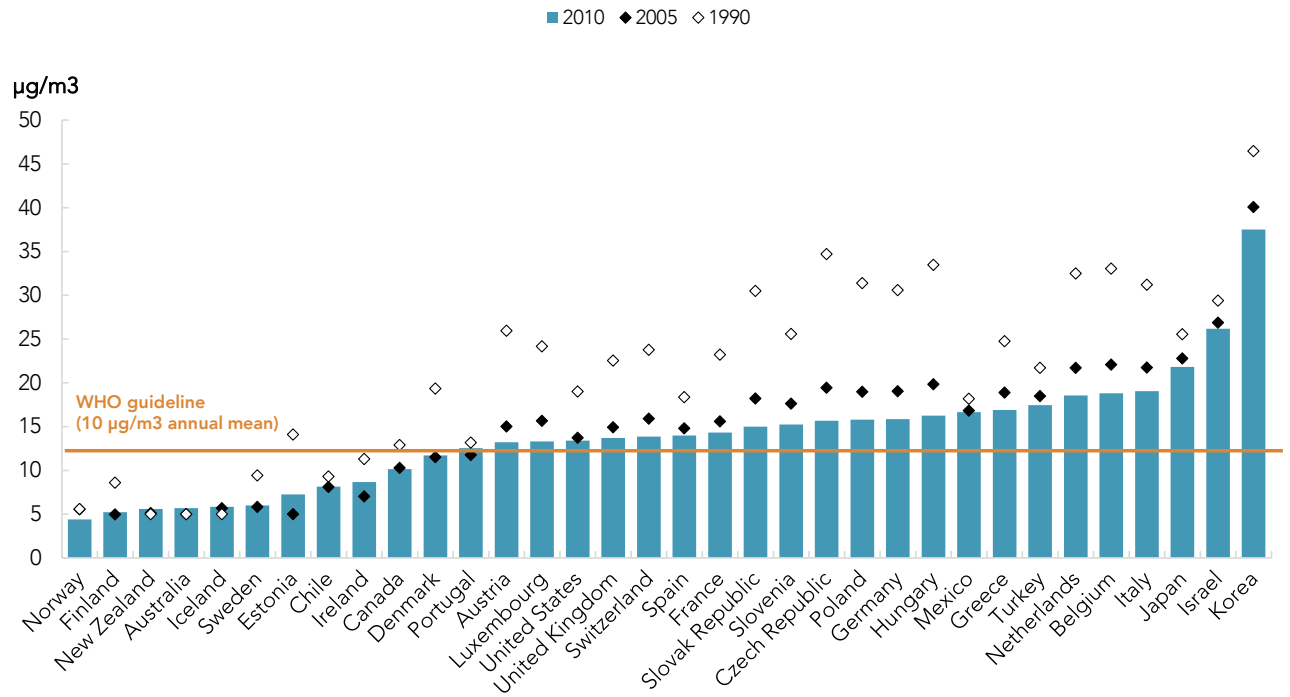
Figure 6.2 Yearly average particulate levels in major Australian and New Zealand cities



Source: Productivity Commission analysis of World Health Organization data.

Notes: Results are from different points across the 2012 to2014 period. WHO have converted some results to provide comparability.

Figure 6.3 Yearly average PM2.5 exposure levels of an average resident, by OECD country



Source: OECD, 2015c.

Note: The symbol µg refers to microgram.

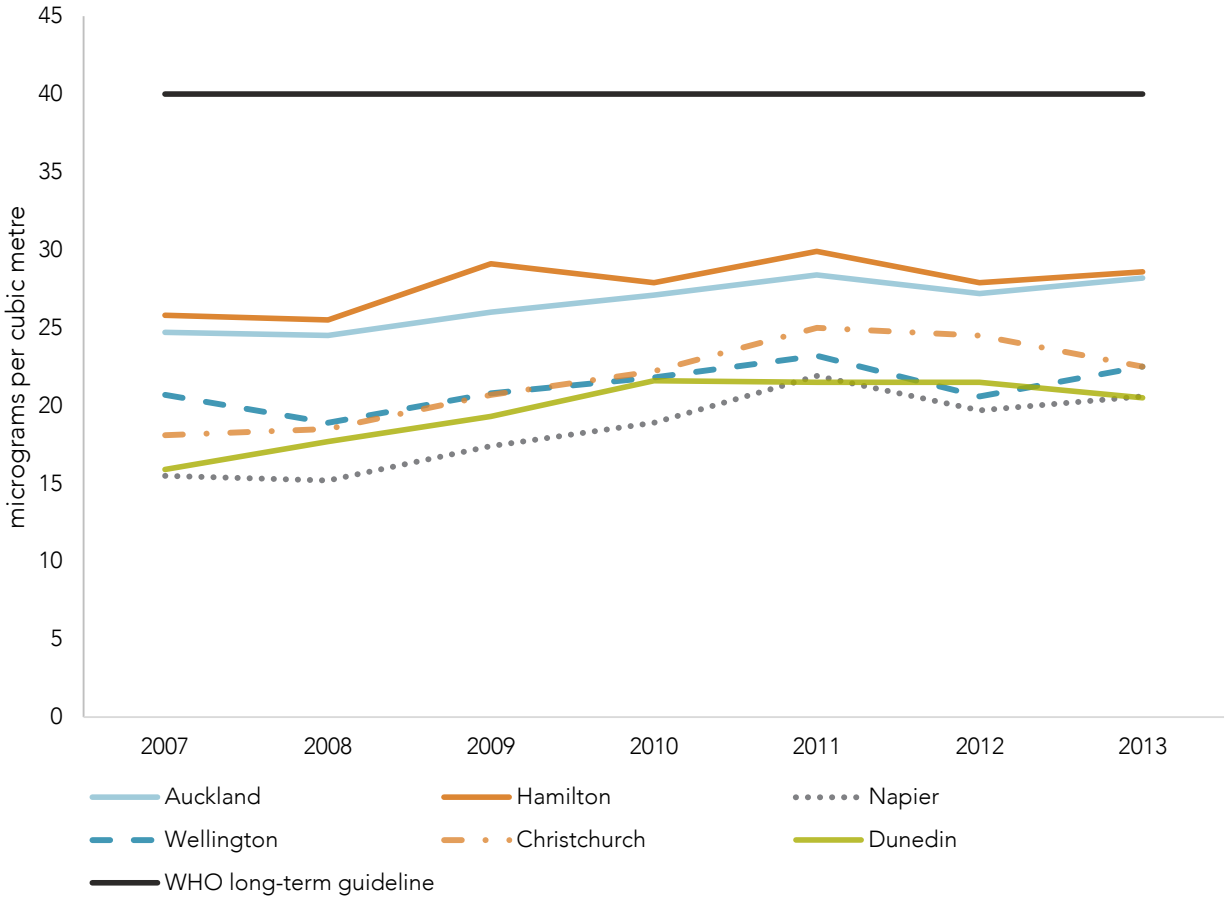
Exposure to nitrogen dioxide

Nitrogen dioxide is a pollutant associated with motor vehicle use. It has been linked to respiratory illnesses, such as asthma, and impaired lung development and function. According to the Ministry for the Environment and Statistics New Zealand,

> 97 percent of 122 monitored sites likely met the WHO long-term guideline (measured using screening methods) for nitrogen dioxide. Between 2010 and 2013, 3 to 6 sites (about 2–5 percent of sites) 'likely' exceeded this guideline in each of these four years.
>
> The 'likely' exceedances occurred close to busy local roads and state highways in major urban centres (Auckland, Hamilton, Wellington, and Christchurch). No 'likely' exceedances occurred at monitored urban areas away from busy roads, and concentrations were much lower than those at busy local roads and state highways. (Ministry for the Environment/Statistics New Zealand, 2015, p. 37)

Nitrogen dioxide levels at major state highway monitoring sites over time appear largely stable, and below WHO long-term guidelines (Figure 6.4).

Figure 6.4 Yearly average nitrogen dioxide concentration levels at six highway sites, 2007–2013



Source: Ministry for the Environment / Statistics New Zealand, 2015.

Exposure to carbon monoxide

Exposure to carbon monoxide can reduce the body's ability to absorb oxygen, with adverse impacts on heart, brain and general health. In New Zealand, the main sources of carbon monoxide emissions are the burning of wood or coal for household heating, and motor vehicle use.

Carbon monoxide levels at monitoring sites in New Zealand sit below national standards, often considerably lower. In 2013, 18 of the 21 monitoring sites had concentration levels less than half the national standard. Where trends in carbon monoxide concentration levels can be determined, they tend to show improvements:

> Between 2005 and 2013, annual concentrations decreased significantly in 44 percent of monitoring sites (7 of 16) where trend assessments could be conducted. The trend of the remaining nine sites is indeterminate – showing neither a significant increasing or decreasing trend. (Statistics New Zealand, 2015b)

Exposure to sulphur dioxide

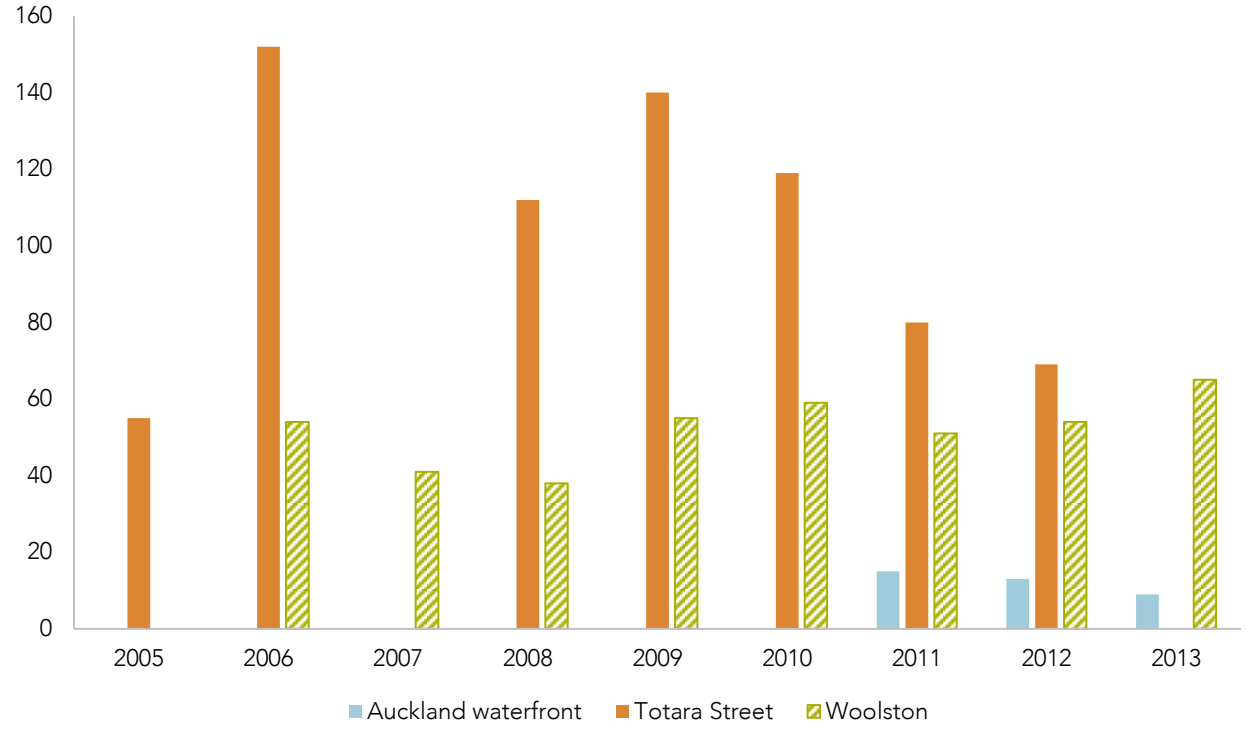
Sulphur dioxide is associated with respiratory and cardiovascular illness. The main source of sulphur dioxide emissions in New Zealand is industrial processes. According to MfE (2016b), "[s]ulphur dioxide levels in urban areas have decreased significantly since the 1970s and are generally below the ambient standard and guideline levels".

The Air Quality NES sets two standards for sulphur dioxide – one at a lower level (a one-hour average of 350 micrograms per cubic metre) which may be exceeded 9 times over a 12-month period, and a second at a higher level (a one-hour average of 570 micrograms) which may not be exceeded at all. New Zealand has a few monitored sites (Woolston in Christchurch and Totara Street in Mount Maunganui) that have exceeded

the 350 micrograms per cubic metre threshold on multiple occasions[50]. The higher 570 micrograms per cubic metre threshold has been breached twice each at Woolston and Totara Street.

The WHO has set a short-term daily guideline for sulphur dioxide at a much lower level than the NES – 20 micrograms per cubic metre. Although these are not part of the NES or ambient air quality guidelines issued by MfE, performance against the WHO daily guideline is monitored and reported on. Air quality at the Woolston and Totara St sites regularly breaches this guideline (Figure 6.5).

Figure 6.5 Exceedances of WHO sulphur dioxide daily guideline, 2005–2013



Source: Ministry for the Environment / Statistics New Zealand, 2015.

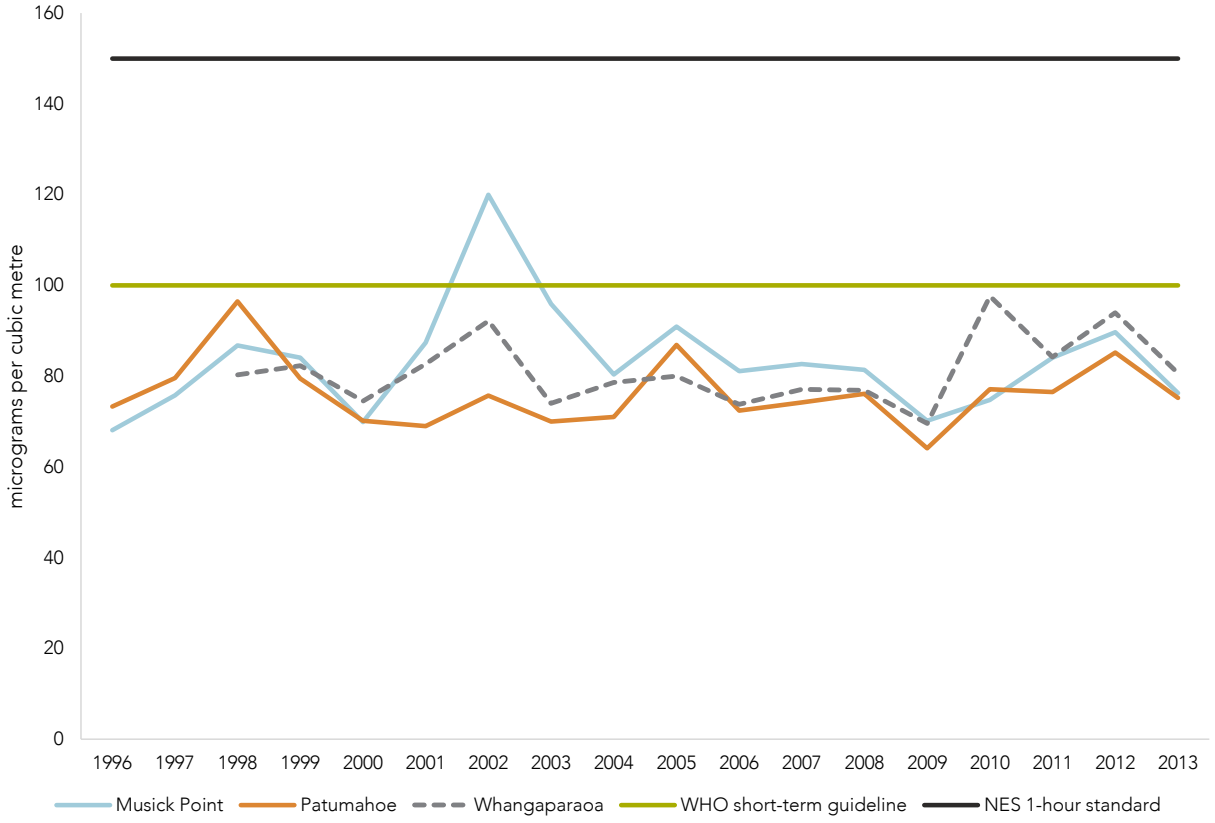
Notes: No valid data are available for Totara Street in 2007 and 2013, for Woolston for 2005 and for the Auckland waterfront for 2005–2010.

Exposure to increased levels of ozone

Ozone occurs naturally in the environment at outer heights of the atmosphere. At lower heights ozone is a pollutant, created by the reaction of other chemicals, such as nitrogen oxide, with sunlight. Exposure to increased levels of ozone is linked with increased mortality, cardiovascular and respiratory illnesses. In 2002, New Zealand experienced one period of elevated ground-level ozone levels (attributed to bushfires in Australia). Apart from this instance, ground-level ozone levels have remained below WHO guidelines; the NES standard has not been breached since its introduction.

[50] Both sites have significant industrial operations. This includes fertiliser, asphalt, and other chemical plants in Mt Maunganui, and a gelatine production factory in Woolston.

Figure 6.6 Maximum ozone concentrations in 8-hour periods, 1996–2013



Source: Ministry for the Environment / Statistics New Zealand, 2015.

F6.1 Air quality generally complies with national standards, is good by international levels, and has improved against some measures. Although air quality problems remain in some smaller New Zealand cities and towns.

6.2 Drinking and recreational water quality

Drinking and recreational water quality is assessed in a number of ways in New Zealand.

- Drinking water is assessed against the Drinking-water Standards for New Zealand, which are regulations set under the Health Act 1956. Regional councils are also required under the National Environmental Standard for Sources of Human Drinking Water to ensure that effects of activities on drinking water sources are considered in resource consent and regional plan decisions.
- Fresh water will be measured against the revised National Policy Statement on Freshwater Management (NPS-FM), which sets "national bottom lines" for a number of water quality attributes. Implementation of the NPS is in its early stages; the deadline for full implementation is 31 December 2015. The deadline can be extended to 2030 if "the 2025 timeframe will affect plan quality or it would be impracticable for the council to fully implement the NPS-FM by 2025" (Ministry for the Environment / Ministry for Primary Industries, 2015, p. 14).
- Coastal water is not measured against quantitative national standards, but activities affecting coastal water are regulated under District Plans, Regional Plans, Regional Coastal Plans and the New Zealand Coastal Policy Statement (NZCPS). National guidelines measure the suitability of fresh and coastal water for recreational purposes.

Quality of drinking water

The Drinking-water Standards for New Zealand set minimum bacteriological, protozoal and chemical requirements. Large zones (ie, areas with more than 10 000 people), which are almost all located in urban areas, had the highest level of achievement with the standards (Table 6.1).

Table 6.1 Proportion of population served by compliant water supplies, by zone size

	Large zone (10 000+ people)	Medium zone (5 001–10 000 people)	Minor zone (501–5 000 people)	Small zone (101–500 people)
Bacteriological achievement	99.1%	92.4%	89.1%	74.5%
Protozoal achievement	88.4%	63.1%	48.2%	25.0%
Chemical achievement	100%	95.1%	92.6%	99.0%
Overall achievement	88.4%	60.2%	46.1%	21.0%

Source: MoH, 2016b.

Compliance with the drinking water standards (and their predecessors) has been gradually increasing over time, reflecting tighter regulation,[51] increased investment from local authorities in water treatment, and some financial support from central government (primarily for small suppliers).

Table 6.2 Proportion of population served by compliant water supplies, 2010–2011 to 2014–2015

	2010–11	2011–12	2012–13	2013–14	2014–15
Bacteriological achievement	97.3%	95.8%	96.7%	97.2%	96.8%
Protozoal achievement	79.1%	79.8%	79.2%	80.8%	80.0%
Chemical achievement	97.1%	95.7%	95.3%	97.4%	98.7%
Overall achievement	78.5%	76.7%	76.9%	79.0%	79.4%

Source: Ministry of Health, 2013, 2014, 2015, 2016.

Note:

2. The decline between 2010–11 and 2011–12 was partly due to the Canterbury earthquakes.

F6.2 The proportion of New Zealanders serviced by safe drinking water is high and has marginally increased over time, reflecting tighter regulation, support from central government and increased investment from local authorities in water treatment. Compliance with drinking water standards is higher in more populous areas.

Quality of fresh water

The quality of fresh water in New Zealand has been the topic of considerable debate. National data shows mixed trends in terms of whether freshwater quality is improving or declining (Table 6.3), and evidence shows considerable damage to water bodies (eg, Verburg et al., 2010).

[51] Since the amendments in 2007, most water suppliers have required local authorities to comply with standards (although deadlines for compliance varied, depending on the type of supplier). Before the 2007 amendments, this compliance was voluntary.

Table 6.3 Trends for water clarity, nutrients and macroinvertebrates at NIWA sites, 1989–2013

Variable	Trend	Sites showing a statistically significant increase (%)	Sites showing a statistically significant decrease (%)	Sites showing an indeterminate trend (%)
Clarity	Improving	64	9	27
Total nitrogen	Deteriorating	60	14	26
Nitrate-nitrogen	No trend	52	27	21
Ammonia-nitrogen	Improving	4	78	18
Total phosphorous	No trend	38	30	32
Dissolved phosphorous	Deteriorating	51	14	35
Macroinvertebrate community index (MCI)	No trend	5	13	83

Source: Ministry for the Environment / Statistics New Zealand, 2015.

Note:

3. Figures may not add to 100% due to rounding. The MCI scores the diversity of taxa observed at a site based on their tolerance to pollution. Taxa are groups of one or more populations of an organism or organisms that taxonomists view as forming a unit. Those taxa which are characteristic of more unpolluted conditions score more highly than those that dominate polluted streams, and generate a higher MCI score.

Freshwater quality is generally lower in waterways that run through urban land, and highest in areas where indigenous land cover is dominant (Table 6.4).

Table 6.4 Median water quality scores by dominant land cover, 2009–2013

	Urban land cover	Pastoral land cover	Indigenous land cover	Exotic land cover
Nitrate-nitrogen (lower is better)	709 mg/m^3	403 mg/m^3	39 mg/m^3	191 mg/m^3
Ammonia-nitrogen (lower is better)	25 mg/m^3	14 mg/m^3	4 mg/m^3	11 mg/m^3
Total phosphorous (lower is better)	47.7 mg/m^3	32.1 mg/m^3	10.0 mg/m3	24.2 mg/m^3
Dissolved phosphorous (lower is better)	18.5 mg/m^3	13.5 mg/m^3	5.5 mg/m^3	19.0 mg/m^3
E.coli (lower is better)	440 E.coli/100 mL	190 E.coli/100 mL	20 E.coli/100 mL	67 E.coli/100 mL
Water clarity (higher is better)	1.5m	1.1m	2.6m	1.7m
MCI (higher is better)	79 (poor)	100 (fair to good)	120 (excellent)	110 (good)

Source: Ministry for the Environment / Statistics New Zealand, 2015.

These differentials reflect the impact on fresh water of:

- fertiliser and effluent run-off or leaching from agriculture;
- industrial discharges;
- run-off from roads and other human-made surfaces in urban areas; and

- discharges from city stormwater or sewage systems.

However, the level, nature and sources of pollutants differ somewhat between regions and waterways. Three examples are noted below.

- An independent scoping study of the Waikato River identified three major pollutants – mercury and arsenic (from nearby geothermal activity), cyanotoxins (from agricultural nutrient run-off) and faecal contaminants (from poorly treated rural water supplies) (National Institute of Water and Atmospheric Research Ltd, 2010).
- Analysis of rivers and streams in the Wellington region pointed to the following as major contributors to poor water quality (Perrie et al., 2012):
  - municipal wastewater discharges;
  - agricultural nutrient run-off;
  - sediment loss from farmland, forestry and urban development;
  - sewer infrastructure leaks;
  - urban stormwater discharges; and
  - stock access to streams
- An Environment Canterbury overview of river water trends in the region highlighted "contamination from metals and hydrocarbons in storm water runoff from roads and roofs", "sediment inputs from construction activities", stream modification (eg piping, culverts) and faecal contamination from "wildfowl, storm water runoff and sewage overflows" as putting pressure on urban streams and rivers (Stevenson, Wiks & Hayward., 2010, pp. 54, 57).

F6.3 Freshwater quality is generally lower in waterways that flow through predominantly urban areas. The sources of pollution in urban waterways typically include sewage leaks and stormwater run-off.

Quality of coastal water

Unlike the NPS on Freshwater Management, the NZCPS does not set quantitative standards for coastal waters which must be given effect to in RMA plans. However, national guidelines measure microbiological water quality in marine environments, which regional councils use. Regional council monitoring reports covering coastal New Zealand cities differ in their assessments of the state of marine water and environments.

- In Auckland in 2015, the Council assessed 72% of beaches as safe to swim at,[52] but assessed only 25% of monitored marine water sites as "excellent" or "good". Major contributors to the poor marine water quality results were suspended sediments from rural land use, agricultural fertiliser and wastewater discharges. Marine water quality parameters (suspended sediment, total oxidised nitrogen and total phosphorous) had changed little over the past 10 years. Concentrations of lead and copper in marine sediments were declining, while zinc concentrations were increasing in some sites (Auckland Council, 2015a).
- In the Wellington region, 64% of beach sites had recreational suitability grades of "good" or "very good" (Greenfield, Ryan & Milne, 2012). Most coastal environments in the region were found to be "generally in good condition", but showing "some 'early warning' signs of stress" from either sedimentation or nutrient enrichment" (Oliver & Milne, 2012, p. ii). Stormwater and sewage leaks or overflows were considered to be "the main source of microbiological contamination at beaches in or

[52] Graded A means "very low risk of becoming sick and it is safe to swim almost all of the time") or B ("low risk of becoming sick and it is safe to swim most of the time" (Auckland Council, 2015, p. 161).

near urban areas" (Greenfield, Ryan & Milne, 2012, p. ii). Between the 2001/02–2005/06 and 2005/06–2009/10 monitoring periods 51% of monitored beaches showed no change in bacteriological water quality, while 33% improved (Greenfield, Ryan & Milne, 2012).

- In the Bay of Plenty, 85.7% of open coastal sites received a "suitability for recreation" grade of "good" or "very good" in 2014/15. Estuaries in the region scored considerably lower, with half graded "fair" and 7.1% graded "poor" (Scholes & McKelvey, 2015).

Indications are that the quality of coastal water has improved over the longer term. The Parliamentary Commissioner for the Environment (PCE, 2012) described the impact of better sewage treatment in Auckland:

> Between 1960 and the 1990s, the population of Auckland doubled and so did its sewage. The city responded by adding secondary and tertiary treatment (bioreactor systems and an ultraviolet light disinfection step) to the Mangere sewage treatment plant. The discharge now contains less nutrients and fewer viruses than before the upgrade. As a result, shellfish in the Manukau estuary are once again edible. (p. 50)

The New Zealand Planning Institute noted that tighter controls of discharges and the resulting better performance of wastewater and stormwater systems "had led to measurable declines in enterrococci and other signs of human sewage in – for example – Waitemata Harbour" (sub.27, p. 11). The OECD (2007) also concluded that the introduction and implementation of coastal management plans had "helped reduce pollutant loading to coastal waters and thus improved coastal bathing water quality" (p. 18). Rosier (2006) argued that the NZCPS had "been effective changing current practice concerning direct discharges of sewage effluent in the coastal marine area" (p. 498).

6.3 Greenhouse gas emissions, and rising sea levels from climate change

Land-use changes and land-based activities, such as more intensive agriculture and road transport, contribute to greenhouse gas emissions. All persons exercising powers under the RMA are required to have "particular regard to…the effects of climate change", and the MfE has described the Act as "the key piece of legislation for adapting to climate change and associated natural hazards" (2014b, p. 2). Many RMA plans include objectives and policies aimed at mitigating climate change, often by discouraging the expansion of cities and car use and promoting more intensive development within established areas.

New Zealand's net greenhouse gas emissions in 2014 were 53.6% higher than those in 1990, but were lower than their peak in 2006. Total greenhouse gas emissions in 2014 were 23.2% higher than in 1990. However, the emissions intensity of the economy (that is, gross emissions of greenhouse gases per unit of Gross Domestic Product (GDP) fell by 34% over the same period (MfE, 2016c).

Agriculture is the largest contributor to New Zealand's greenhouse gas emissions, although almost half the increase in New Zealand's total emissions from 1990 came from the energy sector (Table 6.5). The transport sector represents over 40% of the energy sector's emissions (MoT, 2017). Absorption of carbon dioxide by forests has reduced in recent years, due to increased harvesting of plantation forests (MfE, 2016c).

Table 6.5 New Zealand's emissions by sector in 1990 and 2014

Sector	1990 (kt CO^2 equivalent)	2014 (kt CO^2 equivalent)	Change from 1990 (kt CO^2 equivalent)	Change from 1990 (%)
Agriculture	34 351.1	39 585.3	+5 234.2	+15.2
Energy	23 793.2	32 240.2	+8 447.0	+35.5
Industrial processes and product use	3 578.9	5 193.6	+1 614.7	+45.1
Waste	4 105.2	4 085.4	-19.9	-0.5

Sector	1990 (kt CO^2 equivalent)	2014 (kt CO^2 equivalent)	Change from 1990 (kt CO^2 equivalent)	Change from 1990 (%)
Total (excluding LULUCF)	65 828.4	81 104.4	+15 276.0	+23.2
Land use, land-use change and forestry (LULUCF)	-28 927.7	-24 414.8	+4 512.8	-15.6
Net total (including LULUCF)	36 900.7	56 689.6	+19 788.9	+53.6

Source: MfE, 2016c.

Note: Total emissions' include emissions from the four main sectors (agriculture, energy, industrial processes and product use, and waste). 'Net emissions' are made up of emissions from those four sectors and also include emissions and removals from the LULUCF sector. The abbreviation kt refers to kilotonne.

F6.4 Net and total greenhouse gas emissions increased from 1990 to 2014 by 54% and 23% respectively. Most of the increases were due to road transport activities, agriculture and reduced carbon dioxide absorption from forests.

Council efforts to plan for the effects of climate change – eg, rising sea levels, increasing coastal erosion, more frequent flooding and storm surges – have varied, reflecting the different pressures that communities face. In Dunedin, the City Council is considering options for the low-lying Harbourside and South City suburbs, including measures to either defend them from rising sea levels or retreat (ie move settlements away from affected areas). In some cases, council action has been controversial. Following the release of a report on coastal erosion in 2012, the Kapiti Coast District Council:

- sent letters to 1 800 coastal residents informing them that the Land Information Memorandum (LIM) reports for their properties would now note that they were within 'erosion hazard zones'; and
- notified a new proposed District Plan, placing restrictions on building and subdivision within the 50-year 'erosion hazard zone'.

The District Council subsequently abandoned the inclusion of the erosion zones in its new District Plan, following a critical independent review of the 2012 report. It also decided not to include the coastal erosion zones on LIM reports, after the High Court criticised its behaviour.

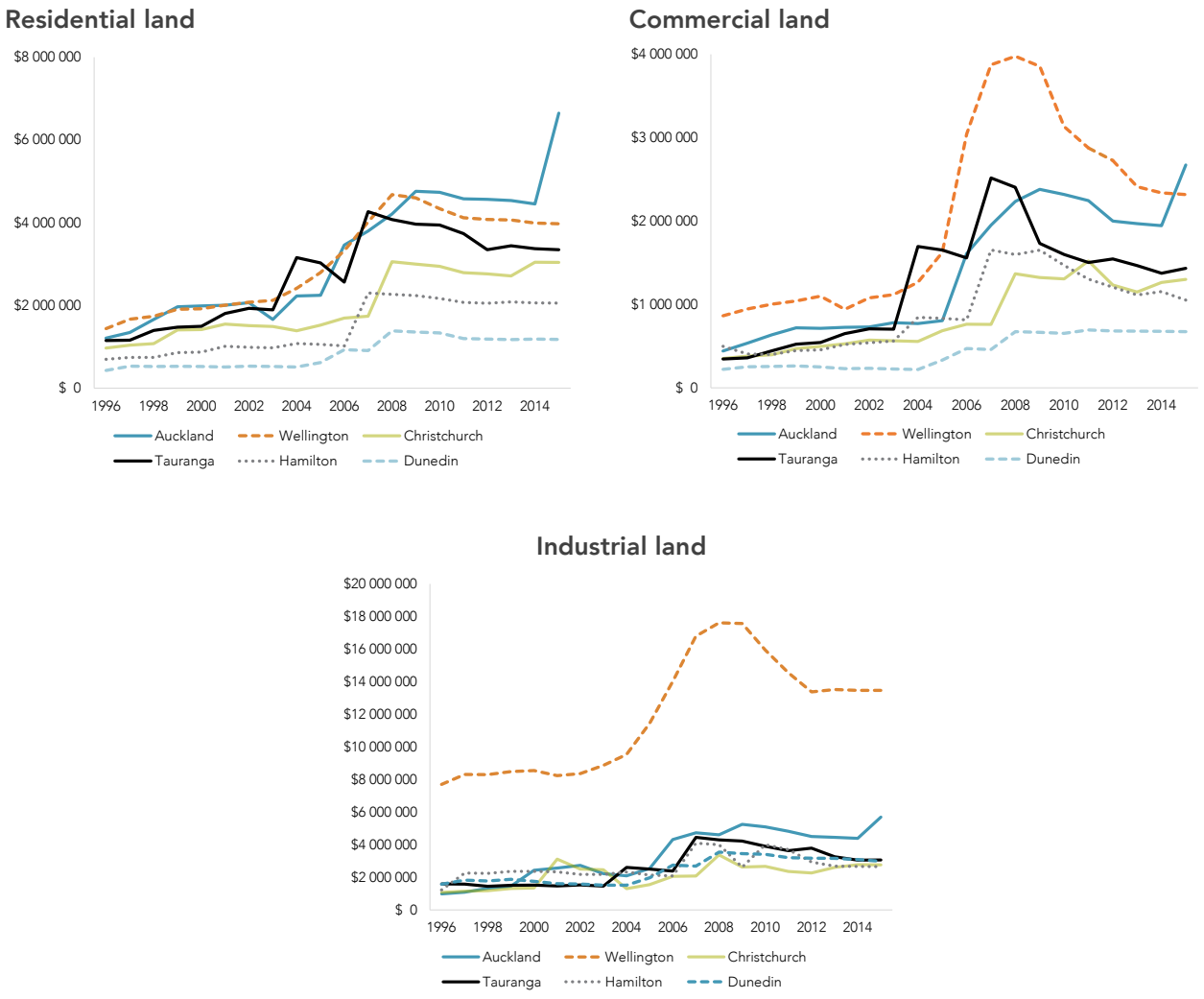
The Parliamentary Commissioner for the Environment has recommended that, in planning for climate change, councils need to "engage with coastal communities in a measured and empathetic way. The focus should be on preparing well rather than rushing" (PCE, 2015, p. 71). The Commissioner also recommended that central government provide better national direction, guidance and support for councils carrying out such planning (PCE, 2015).

6.4 Urban development capacity

Development capacity refers to land that is "shovel ready" for building (ie, appropriately zoned and serviced with infrastructure), and that can be developed to meet a range of market demands. This includes both greenfield land and brownfield land that can be redeveloped for other and more intensive uses (NZPC, 2015a). The term 'development capacity' is not currently defined consistently within New Zealand's planning system.[53]

The best available indicator of the adequacy of supply is the price of urban land. All else being equal, rising prices would indicate a shortfall of development capacity relative to demand. Land price data from major New Zealand cities indicates that development capacity – especially for residential and commercial development – has failed to keep pace with demand (Figure 6.7).

Figure 6.7 Nominal per-hectare land prices in major New Zealand cities by type, 1996–2014



Source: Productivity Commission analysis of Quotable Value data.

[53] However, the Resource Legislation Amendment Bill 2015, which was before Parliament at the time of publication, includes the following definition: "development capacity, in relation to residential and business land, means the capacity of the land for development, taking into account the following factors:

(a) the zoning of the land; and

(b) the provision of adequate infrastructure, existing or likely to exist, to support the development of the land, having regard to—

(i) the relevant proposed and operative policy statements and plans for the region; and

(ii) the relevant proposed and operative plans for the district; and

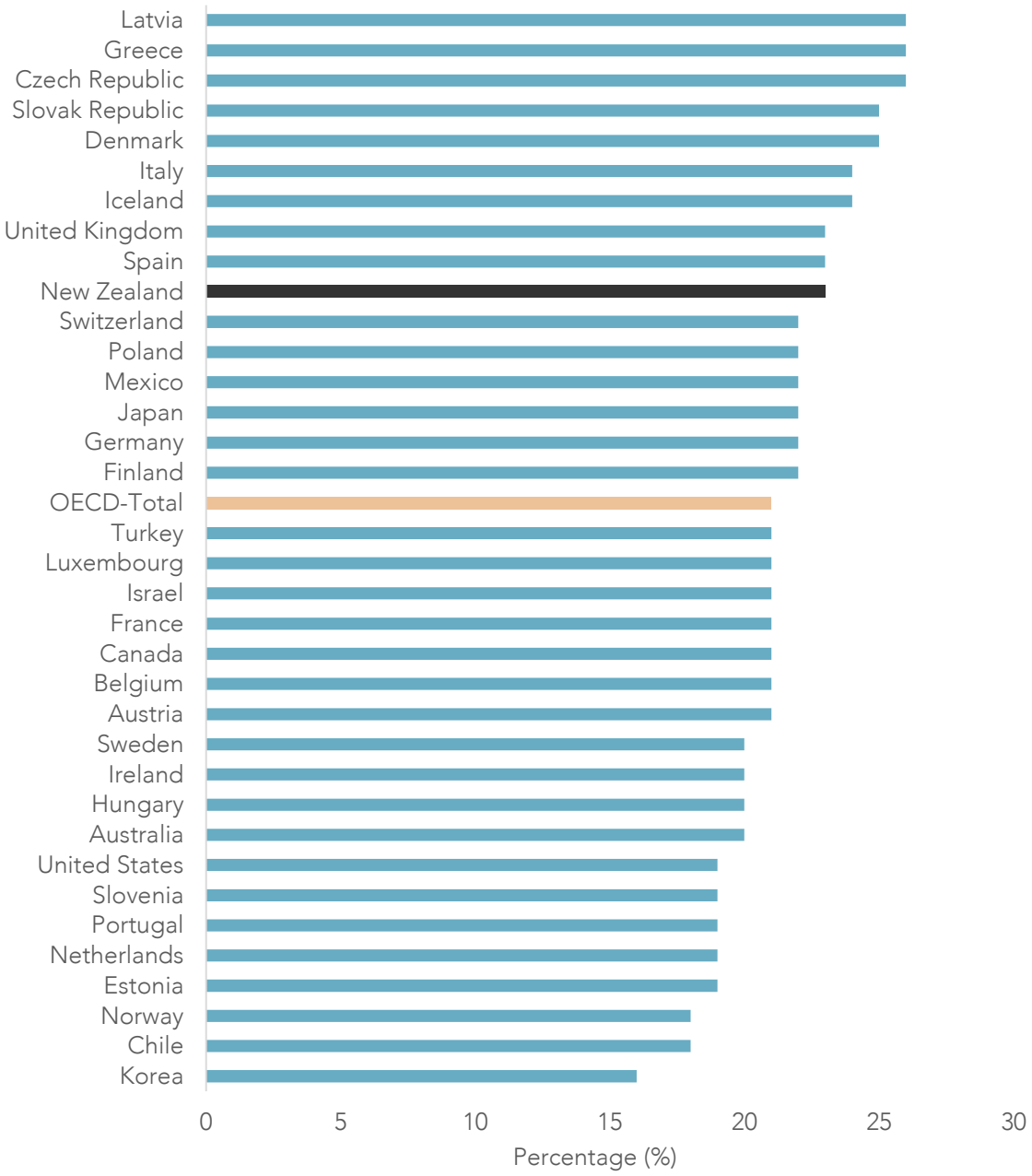
(iii) any relevant management plans and strategies prepared under other Acts; and

(c) the rules and methods in the operative plans that govern the capacity of the land for development; and

(d) other constraints on the development of the land, including natural and physical constraints."

One result of the shortfall of residential development capacity has been rising house prices and declining affordability. One frequently used measure of housing affordability is the proportion of household income devoted to housing costs. By this measure, New Zealand performs poorly compared with other OECD countries (Figure 6.8), and affordability has been deteriorating over time (Figure 6.9).

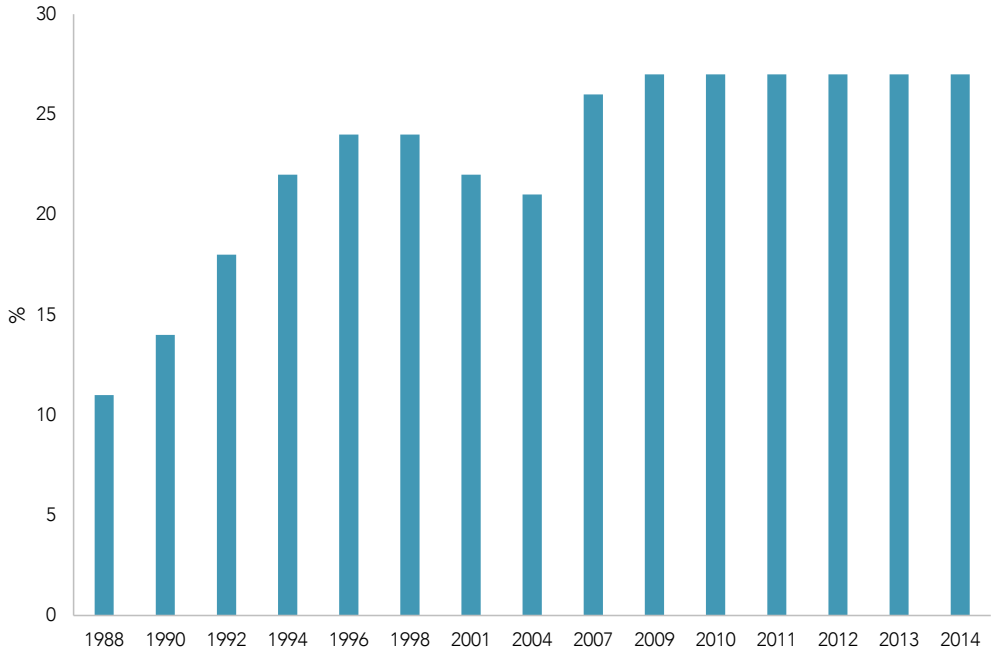
Figure 6.8 Percentage of gross adjusted disposable income spent on housing, by OECD country, 2016



Source: OECD

Note: Results for Iceland, Israel, Luxembourg, and Turkey are estimated values.

Figure 6.9 Share of New Zealand households that spend more than 30% of their disposable income on housing, various years between 1998 and 2014



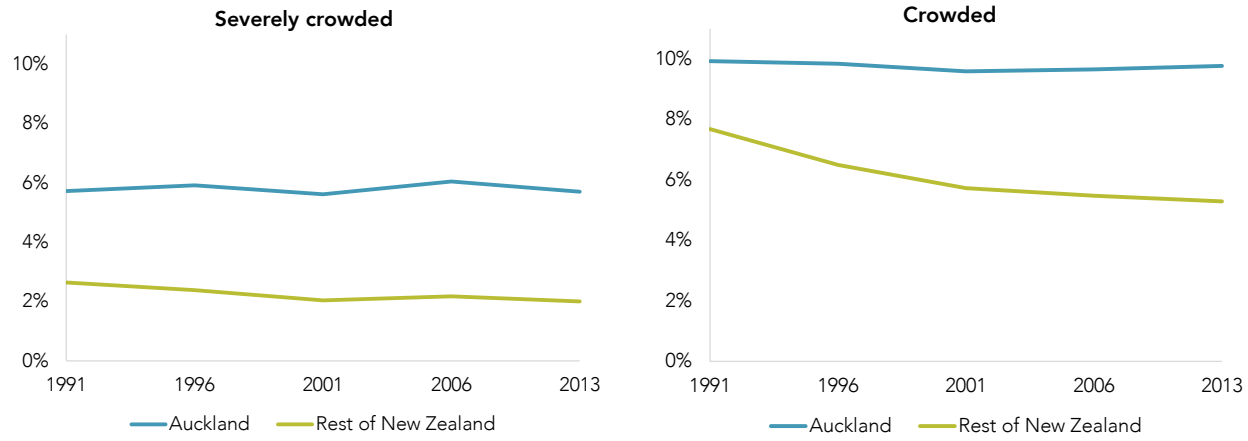
Sources: Statistics New Zealand.

Rising housing prices in New Zealand have had a number of negative social and economic impacts, including:

- stubbornly high crowding rates in Auckland (Figure 6.10);
- infectious diseases associated with crowding;
- upward pressure on central government housing assistance budgets;
- barriers to wealth accumulation;
- risks to macroeconomic stability; and
- constraints on the performance of the labour market and higher productivity (NZPC, 2015a).

Rising housing costs also bear more heavily on people who earn lower incomes. In 2014, 41% of households in the lowest income quintile were paying more than 30% of their disposable income on housing costs, compared with just one-tenth of households in the top income quintile (Statistics New Zealand, 2015c).

Figure 6.10 Share of New Zealand's population living in crowded housing, 1991–2013



Source: Productivity Commission analysis of Statistics New Zealand data.

Note: Crowding is defined using the Canadian National Occupancy Standard (CNOS). CNOS defines a household as crowded if it fails to meet all of the following characteristics: (1) Children aged under 5 may share a bedroom, but children aged 5 to 18 should only share a room if they are of the same sex. (2) Couples and people aged over 18 should each have their own bedroom. (3) No more than 2 people should share a room. "Crowded" means that one extra bedroom is needed to meet the CNO standard. "Severely crowded" means that two or more extra bedrooms are required to meet CNOS.

F6.5 Housing affordability, expressed as the portion of the community paying more than 30% of disposable income on housing, has deteriorated significantly over the past 25 years. People on lower incomes feel the burdens of this deterioration most heavily.

6.5 Congestion and road safety

The speed and safety of people and goods moving around a city matter for economic performance and wellbeing. While road safety has improved over time, congestion appears less improved.

Congestion levels in major cities have been largely stable for about the past 10 years, with some improvements in Auckland compared to 2003 (Figure 6.11 and Figure 6.12). A report prepared for the New Zealand Transport Agency (NZTA) estimated that the yearly costs of congestion in Auckland alone were between $250 million and $1.25 billion, depending on the measure used (Wallis & Lupton, 2013).[54]

[54] The amount of $250 million a year measured the difference between the observed cost of travel and the cost of travel when the network is at capacity. The amount of $1.25 billion a year measured the difference between the observed cost and travel and zero traffic ("free flow"). Both measures include the costs of travel time delay, schedule costs (ie, those who stagger or delay their trip times), crash costs, vehicle operating costs and environmental costs.

Figure 6.11 Morning peak traffic congestion in selected New Zealand cities, 2003–2015

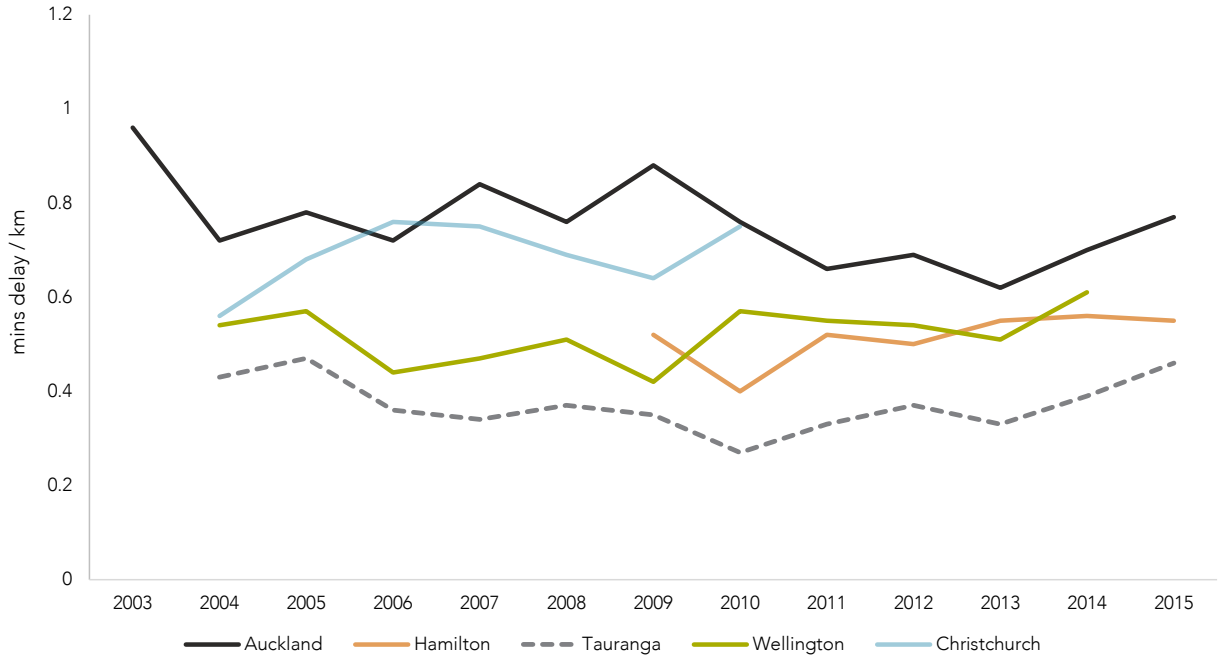
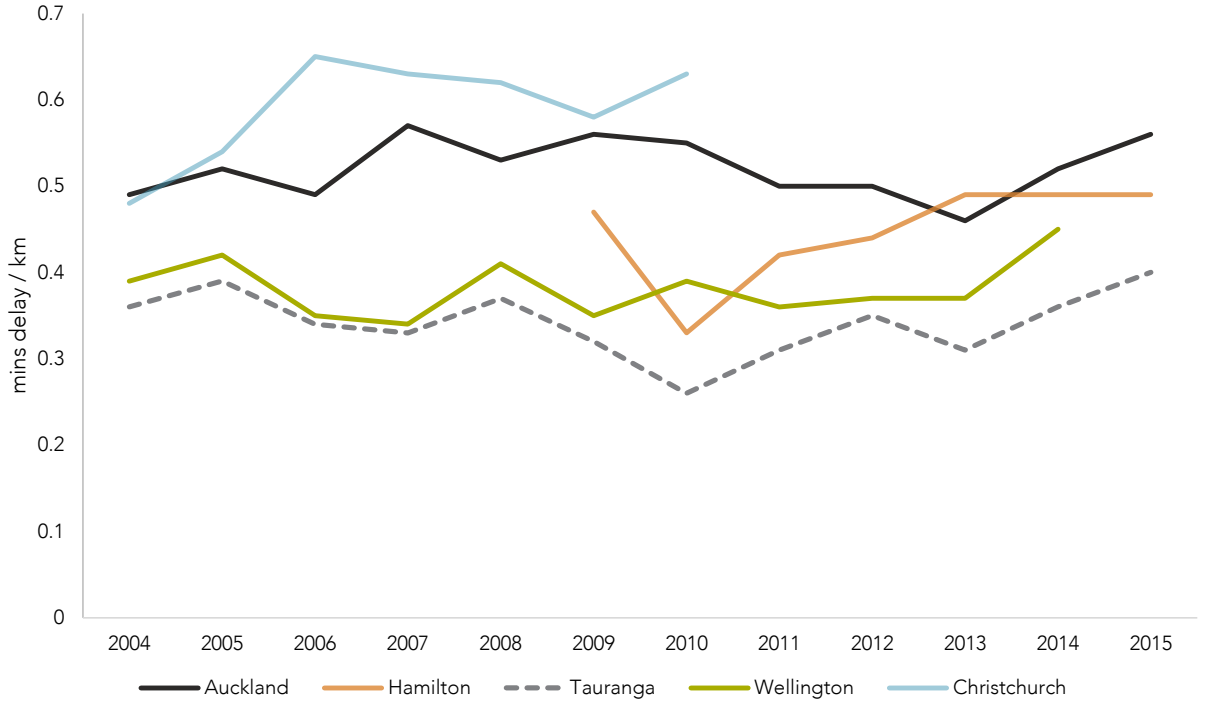


Figure 6.12 All-day traffic congestion in selected New Zealand cities, 2003–2015



Source: Productivity Commission analysis of Ministry of Transport data.

Note: indicators are for March years, and measure minutes delay per kilometre, compared to travel at the speed limit in the surveyed area. 2015 results only available for some cities. No reliable data is available on Christchurch since 2011 due to disruption caused by earthquakes.

The incidences of fatal and injury crashes on New Zealand roads have decreased since the 1970s, on both a per capita and per-vehicle basis (Figure 6.13 and Figure 6.14). Most crashes occur on rural roads, with only 28% of accidents taking place on urban roads.

Figure 6.13 Fatal crashes, on a per-capita and per-vehicle basis, 1950–2014

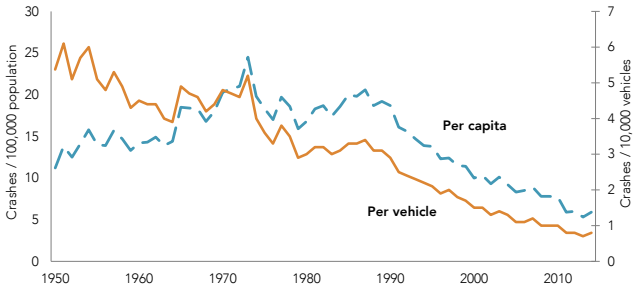
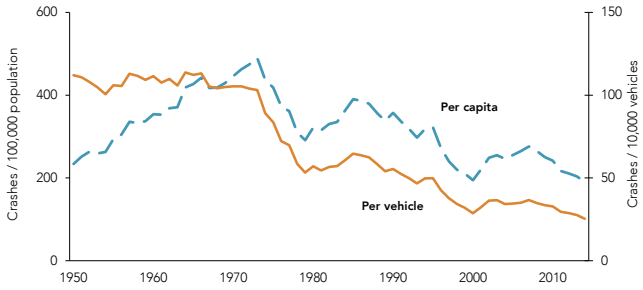


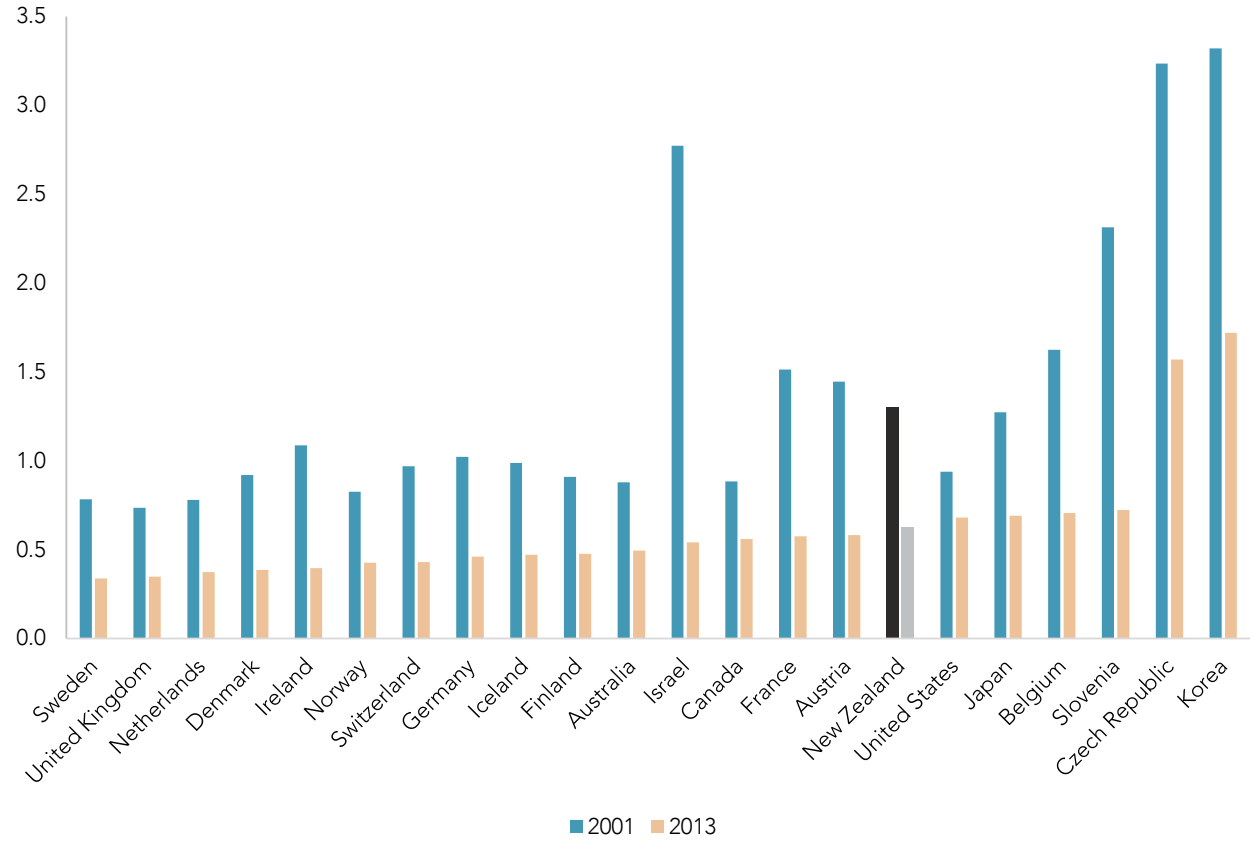
Figure 6.14 Injury crashes, on a per-capita and per-vehicle basis, 1950–2014



Source: Ministry of Transport.

Despite these improvements in accident and fatality rates, New Zealand still has relatively high rates of traffic death by the standards of other developed countries (Figure 6.15).

Figure 6.15 Yearly road deaths per 100 million kilometres travelled, 2001 and 2013



Source: Bureau of Infrastructure Transport and Regional Economics, 2015.

F6.6 Congestion levels in major New Zealand cities have been broadly steady for the past 10 years, and traffic-related accident and fatality rates have been falling since the 1970s. Despite recent improvements, New Zealand still has relatively high rates of traffic deaths by the standards of other developed countries.

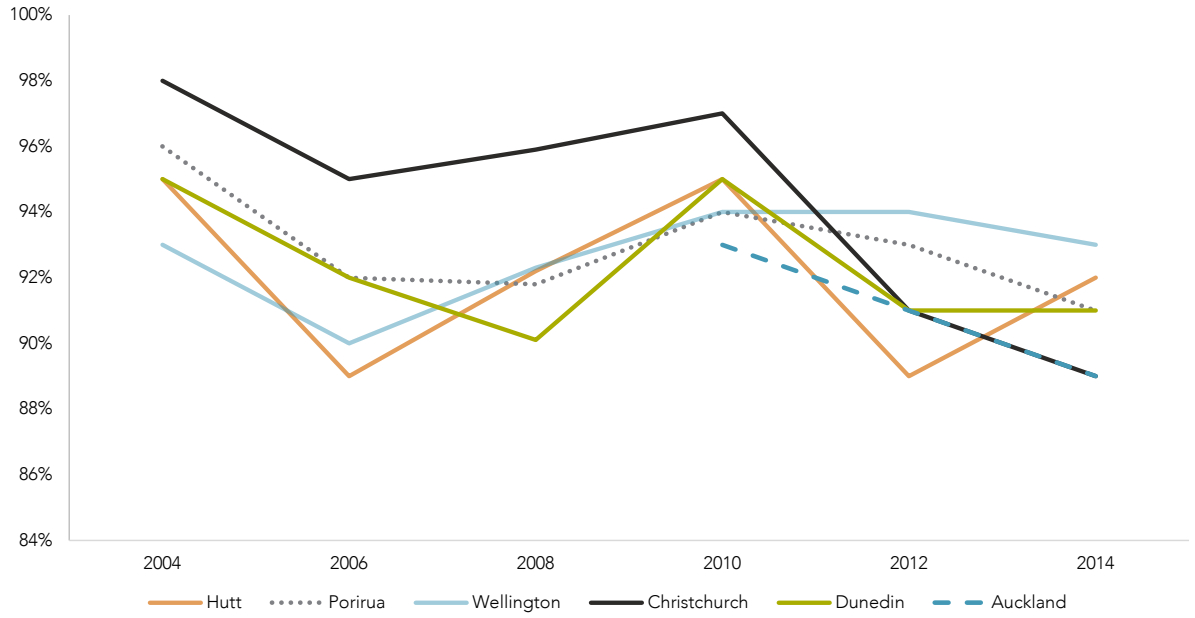
6.6 Core infrastructure and services

In their 2015–16 annual reports, local authorities will report against non-financial performance indicators covering the delivery of specified core services.[55] In the absence of this information, the Commission has gathered available data to assess the state of urban infrastructure and services and, where possible, trends in their performance.

Access to green space

Urban New Zealanders have good access to green space. Witten et al. (2008) estimated that residents in three out of four New Zealand neighbourhoods can travel by car to a local, regional or national park in less than two and a half minutes, and to a beach in just over half an hour. The Quality of Life surveys of residents in six major New Zealand cities similarly report high levels of access to green space (Figure 6.16).

Figure 6.16 Proportion of residents reporting they have "easy" or "very easy" access to green spaces



Source: Quality of Life Project, 2005, 2007, 2009, 2011, 2013, 2014.

Note: Data for Auckland before 2010 was collected at the level of the legacy councils. Other cities were involved in the Quality of Life surveys, but have dropped out over time. Most of those other cities also reported high levels of access to green space.

F6.7 Urban New Zealanders currently have good access to green space.

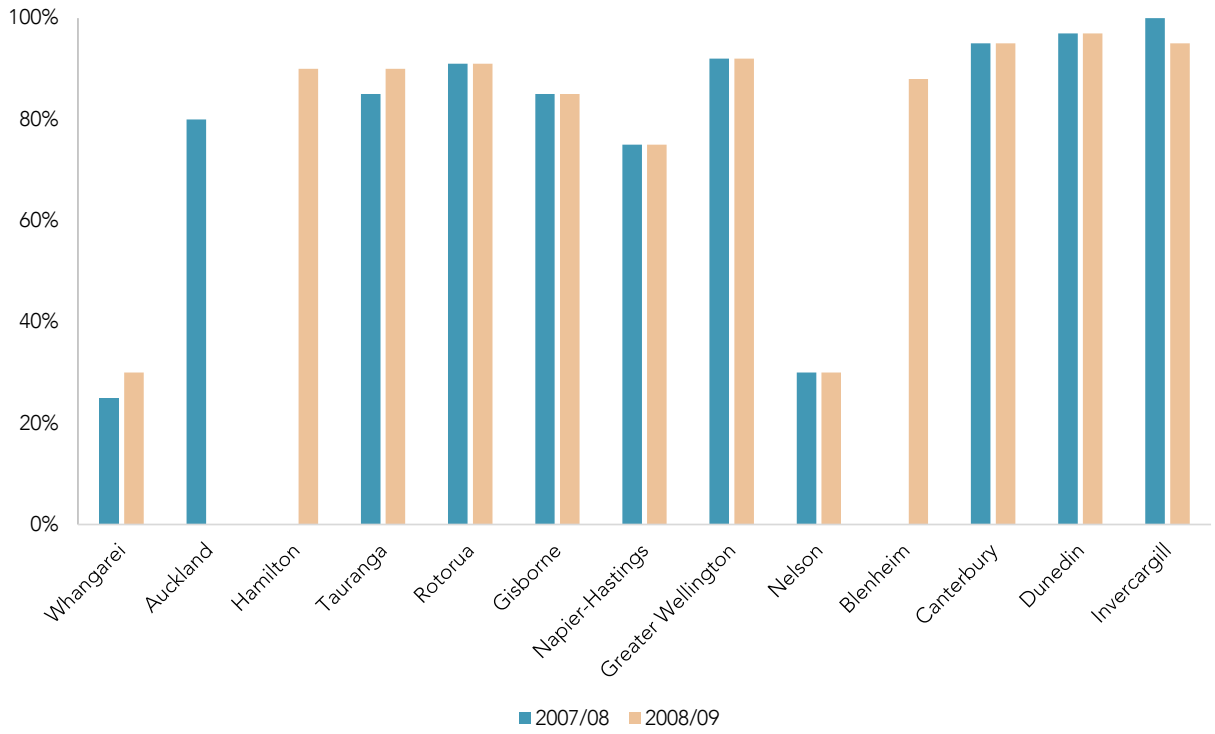
Using public transport to ease road congestion

Most urban local authorities provide or subsidise public transport services and infrastructure, to ease road congestion (ie, encouraging people to move out of private vehicles onto buses and trains) and to improve access to jobs and services by people who do not own cars (GWRC, 2015; Auckland Transport, 2015).

Consistent data about access to, and the performance of, public transport is limited. Surveys conducted for the NZTA and its predecessor agencies suggest reasonable access to bus stops in most New Zealand cities (Figure 6.17), although this says little about the reach or adequacy of the public transport networks.

[55] The specified core services are water supply, sewerage and the treatment and disposal of sewage, stormwater drainage, flood protection and control works, and the provision of roads and footpaths.

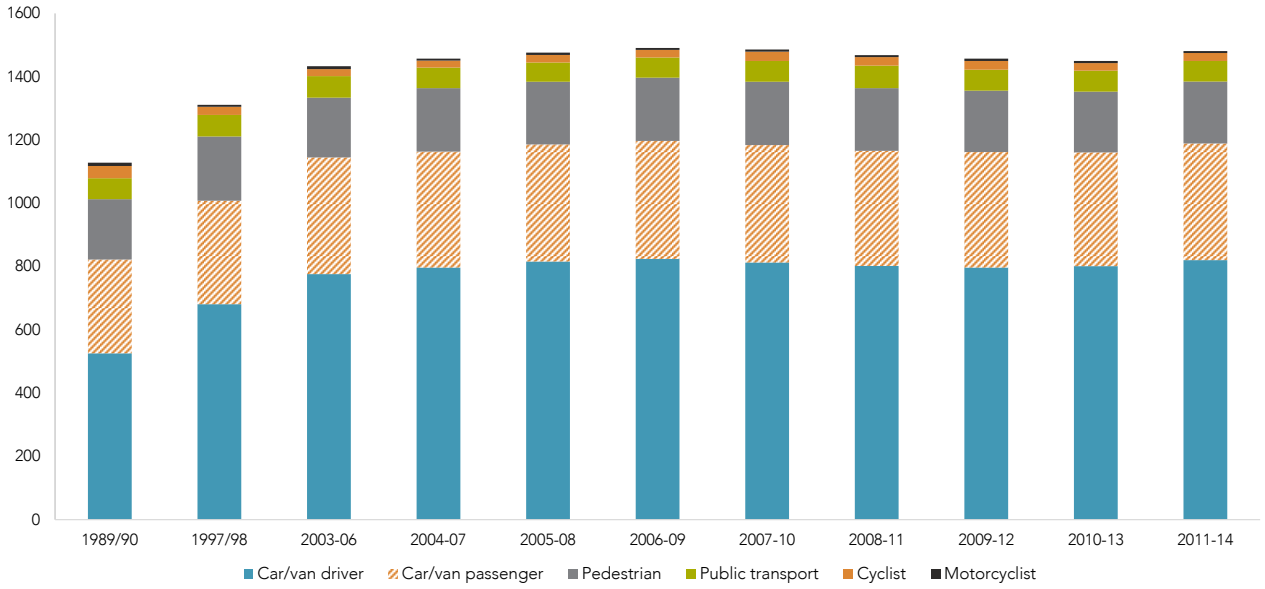
Figure 6.17 Proportion of population living within 500m of a bus stop, 2007/08 and 2008/9



Source: Productivity Commission analysis of MoT data.

At a national level, public transport makes up a relatively small proportion of travel by any measure (duration, distance, trip leg) and its share has not significantly increased since the early 1990s (Figure 6.18). Data from the Household Travel Survey suggests that the total volume of trip legs taken on public transport by people aged 5 and over has hovered around 160 million since the early 2000s (Figure 6.19).

Figure 6.18 Million hours spent travelling each year, by mode, for various years since 1989



Source: Productivity Commission analysis of MoT data.

Figure 6.19 Million public transport trip legs each year by people over 5, various years since 1989

Source: Productivity Commission analysis of MoT data.

Few current international comparisons of public transport use include many New Zealand cities. The most comprehensive analysis is by Bachels, Newman & Kenworthy. (1999), which looked at transport, land use and economic indicators across selected New Zealand, Australian, United States, Canadian, European and Asian cities. They found that New Zealand had the lowest average public transport kilometres travelled per person, the lowest number of public transport trips per person, and the lowest share of overall trips by public transport. These results were attributed, in part, to low levels of urban density and very high provision of carparks in New Zealand cities. A later Auckland Regional Transport Authority study (2005) comparing public transport use in selected Australian, Canadian, New Zealand and US cities found that Auckland and Christchurch had the lowest rates of all, and a 2014 Ministry of Transport-commissioned study concluded that Auckland had a low use of public transport compared with major Australian cities (Sydney, Melbourne, Brisbane and Perth) (Richard Paling Consulting, 2014).

F6.8 New Zealand has low levels of public transport use by developed world standards, and rates of public transport use have been broadly stable since the early 2000s.

The adequacy of public transport networks has implications for the ability of people to access the labour market. Leung and Adli's (2016) comparison of job accessibility in Auckland, Brisbane, Perth and Sydney suggests that public transport in Auckland compared poorly with the Australian cities:

> In absolute terms, this means only 100 000 Aucklanders are living within a 45-minute public transport commute of 100 000 or more jobs compared to about 300 000 people in Perth or over a million people in Sydney. (p. 4)

Leung and Aldi also found that "Auckland's road infrastructure generates a lower quantity of job accessibility compared to Perth, Brisbane and Sydney" (p. 4). The Auckland Transport Alignment Project compared Auckland with Vancouver and five major Australian cities and noted that

> access to employment in Auckland varies significantly by location and declines comparatively rapidly beyond the central area. For example, the proportion of Aucklanders who can access more than 20% of the city's jobs within a 45-minute public transport commute is lower than any of the other cities analysed. (2016, p. 22)

Length and quality of the national road network

Roads allow people and goods to move to, and within, cities, and support the operation of labour and product markets. By length, most roads in New Zealand are rural (76,037 km in 2015, compared to 18,785 km

of urban roads). However, the expansion of the road network over the past decade or so has been concentrated in urban areas. Between 2006 and 2015 the length of urban roads increased by 9%, while the length of the rural road network fell by 0.4%.

The quality of urban roads is generally slightly lower than rural roads (see Box 6.1 for the road quality measures used in New Zealand), although the rural–urban gap has reduced for some measures (Figure 6.20 to Figure 6.22).

Box 6.1 **Road quality measures in New Zealand**

Condition Index (CI) is a combined index, a "weighted sum", of the surface faults in sealed road surfaces. CI combines alligator cracking, scabbing, potholes, pothole patches and flushing. The higher the CI number, the better the condition.

Pavement Integrity Index (PII) is a combined index of the pavement faults in sealed road surfaces. It is a "weighted sum" of the pavement defects divided by total lane length. PII combines surface faults (CI) with rutting and shoving.[56] The higher the PII number, the greater the pavement integrity.

Smooth Travel Exposure (STE) measures the proportion (percentage) of vehicle kilometres travelled in a year that occurs on "smooth" sealed roads and indicates the ride quality that motorists experience. A "smooth" road is a smoother road than a predetermined threshold set down by National Association of Australian State Road Authorities. The thresholds used vary with traffic density and road location. Heavily trafficked roads have a lower (smoother) threshold. High-volume urban roads have lower roughness thresholds than low-volume rural roads.

Source: Land Transport New Zealand, 2007.

Figure 6.20 Condition Index performance, by type of road, 2006–2015

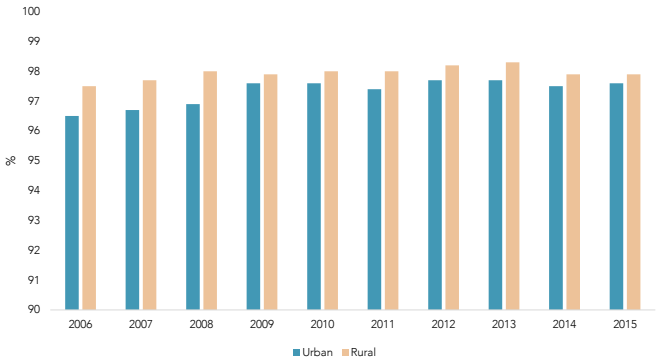
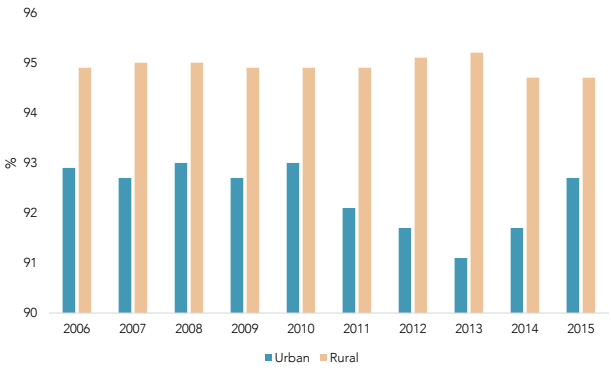
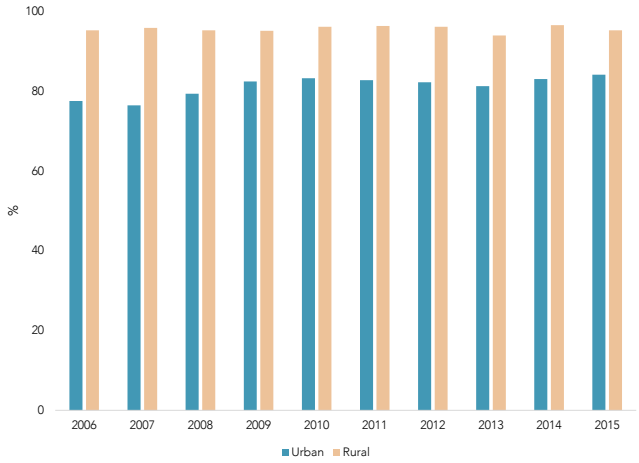


Figure 6.21 Pavement Integrity Index performance, by type of road, 2006–2015



[56] "Shoving occurs when material is displaced to form a bulge or heave alongside a depressed area" (Transfund New Zealand, 1997, p. 41).

Figure 6.22 Smooth Travel Exposure performance, by type of road, 2006–2016



Source: New Zealand Transport Agency.

Managing wastewater and stormwater

A slightly higher proportion of New Zealanders are connected to a sewage treatment plant than the OECD average, although the growth in connections since 1990 has been much slower in New Zealand compared with other developed countries (Figure 6.23).

Figure 6.23 Percentage of population connected to wastewater treatment plants, early 1990s to 2013

Source: OECD, 2015c.

Connection levels are higher in cities than in provincial or rural areas. According to Water New Zealand's 2013–14 National Performance Review (NPR) survey of local authorities,

> [a]verage water services coverage was 56% for rural sector participants and 96% for metropolitan. Average service coverage for wastewater was 45% across rural sector participants and 96% for metropolitan. (Water New Zealand, 2015, p. 21)

The absence of long-term comparable data makes it difficult to judge trends in the quality and performance of waste and stormwater systems in New Zealand. The 2013–14 NPR findings suggest that New Zealand systems currently compare unfavourably against international benchmarks for customer complaints, unplanned interruptions and daily residential water consumption (Water New Zealand, 2015). The 2014–15 NPR report notes issues with the treatment and discharge of wastewater:

> Resource consents for effluent discharge have expired for 26 of the 190 wastewater plans covered by the review…Additionally, of the 18% of treated wastewater that is discharged into freshwater bodies, nearly 10% received only primary treatment. (Water New Zealand, 2016, p. 4)

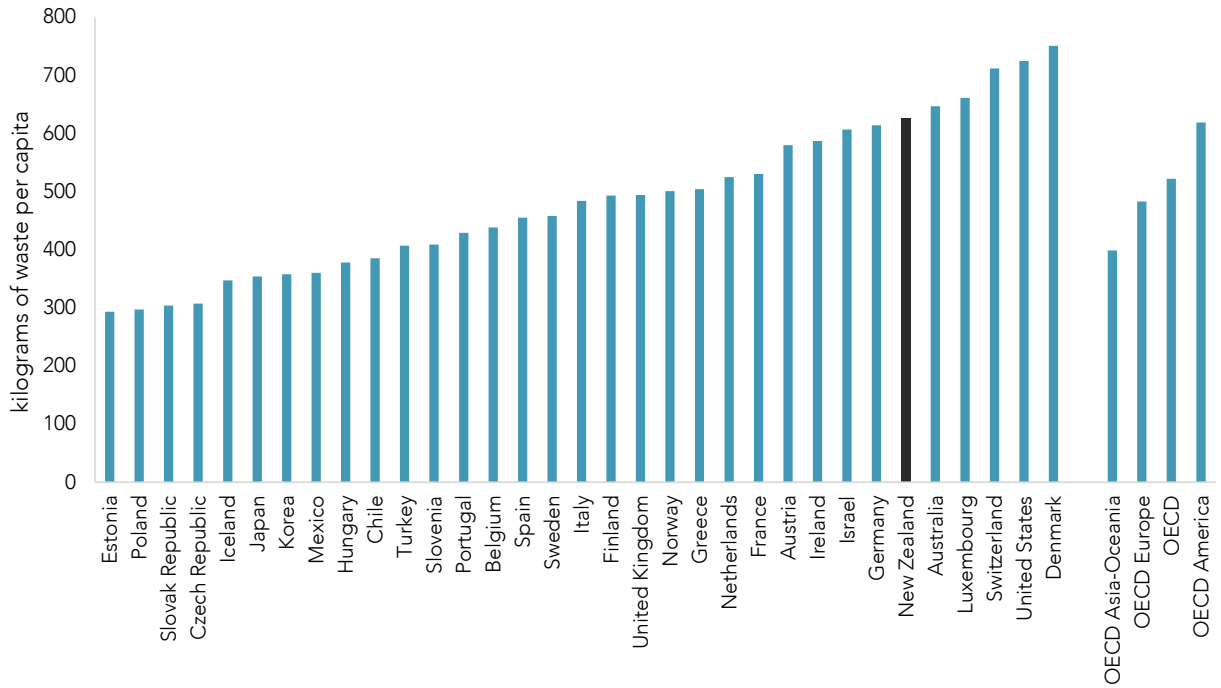
Repeated references in regional council monitoring reports to stormwater and wastewater outflows and leaks contributing to poor river and coastal water quality further indicate room for improvement.

F6.9 A slightly higher proportion of New Zealanders live in dwellings connected to sewage treatment systems than OECD averages. Available comparative information suggests that New Zealand sewerage systems compare unfavourably against a number of international performance benchmarks.

Managing waste

On a per capita basis, New Zealanders produce large amounts of municipal waste (Figure 6.24). New Zealand seems to have no reliable long-term data on its per-capita waste generation. Approximately 43% of municipal waste in New Zealand is recycled (which is higher than OECD averages), with the rest going to landfill (Frykberg, 2015).

Figure 6.24 Municipal waste generated per capita, 2013



Source: OECD, 2015c.

An MfE analysis (2014c) of territorial authority waste infrastructure and services found that two-thirds of surveyed councils in 2013 offered both refuse and recycling collection, while 8% provided no services.

The same survey found an increase in the proportion of councils offering both refuse and recycling collection between 2011 and 2013.[57]

More stringent regulation and enforcement has seen a reduction in the number of landfills in New Zealand, and more prevalent use of measures to prevent water and soil pollution from waste management facilities. As MfE (2009d) note,

> [t]he proportion of landfills with liners designed to prevent groundwater contamination rose from 4 per cent in 1998, to 52 per cent in 2006, and the proportion of landfills with leachate collection systems rose from 35 per cent in 1998 to 77 per cent in 2006. (p. 6)

A recent MfE report attributed a 0.5% reduction (from 1990 levels) in greenhouse gas emissions from the waste sector to "improved landfill management practices, particularly methane recovery. These improvements offset an increase in the amount of solid waste disposed on land and increases in emissions from industrial and domestic wastewater handling" (2016c, p. 3).

6.7 Affordability of infrastructure and services over time

To support access, wellbeing and productivity on an ongoing basis, cities need to be able to maintain their infrastructure and services and replace assets at the end of their lives. Doubts exist about whether some urban infrastructure and services are being maintained to the desired levels, and about the ability of councils to maintain some service or asset levels over the longer-term.

One key area where questions have been asked about affordability is three waters (drinking, wastewater and stormwater) infrastructure. In a 2014 report, the Office of the Auditor-General (OAG) raised concerns about planned council capital expenditure:

> During the period we reviewed (2007 to 2013), local authorities consistently spent less than they intended on capital works, including on asset renewals. There are often explanations and good reasons for under-spending, such as project delays.
>
> However, the ratio of forecast renewals expenditure to depreciation in local authorities' 2012-22 long-term plans also shows a downward trend in asset reinvestment. If actual spending trends continue to match those forecast, we estimate that, by 2022, the gap between asset renewals expenditure and depreciation for the local government sector could be between $6 billion and $7 billion. (p. 4)

These concerns are not universally shared. For example, the Institution of Professional Engineers New Zealand (IPENZ) and Local Government New Zealand (LGNZ) have argued that judgements about depreciation/renewals gaps should be treated with care, given the difficulties predicting the useful lives of long-lived assets and the lumpy nature of infrastructure expenditure (NZPC, 2015a, pp. 180–181).

The OAG also highlighted variable asset management systems and practices among councils. Councils had better and more reliable information about assets located above ground (especially roads) than those below ground, were more likely to know more about newer assets than older ones, and were more likely to renew their roading assets than three waters infrastructure (Table 6.6). The OAG (2014) attributed the better performance around roading infrastructure to the requirements attached to NZTA funding, and the fact that expenditure on roads was less reliant on rates revenue. The Commission made similar findings in its *Using Land for Housing* report (NZPC, 2015a).

[57] As only 53 of the 67 (79%) territorial authorities responded to the survey, its results must be treated with some caution.

Table 6.6 Average renewals expenditure to depreciation, by asset class: 2012–2022

Asset class	Average renewals expenditure to depreciation
Roading	91%
Water supply	72%
Wastewater	58%
Stormwater	32%

Source: OAG, 2014.

The OAG's most recent summary of matters arising from Long-Term Plans (LTPs) was somewhat more positive in its assessment of council spending plans, but continued to sound a note of caution:

> When we compare the spending on capital as forecast in the previous LTPs with that forecast in the latest LTPs, it is clear that an increasing proportion of total spending is being directed towards renewal of infrastructure assets. However…although there is an increase in the level of renewal and replacement spending compared to depreciation in 2015, from 2019 onwards the level returns to almost mirror the level forecast in the previous LTPs. We note that a large amount of the increase relates to Christchurch City Council rebuild work…Individual local authorities need to consider whether the renewal and replacement spending they have forecast for 2019 onwards is adequate or will need to be increased when the next LTPs are produced in 2018. (2015, pp. 10–11)

A report prepared for LGNZ on the state of council three waters assets pointed to inadequate depreciation allowances and planning:

> [D]epreciation allowances appear to be lower than the level needed to replace existing assets at the same cost. This is particularly evident for wastewater and stormwater assets in metro councils, although the reason for this difference is unclear…. some councils appear to have a high proportion of either their water or wastewater assets depreciated, but do not have a fully funded renewals profile to deliver the investment programme. The fact that not all councils have renewals profiles in place is concerning. (Castalia Strategic Advisors, 2014, p. 14)

Water New Zealand's National Performance Reviews of local authority water services has raised similar issues about the quality of asset information and the adequacy of expenditure. The 2013–14 survey found that confidence in asset condition grading data – which "provides an indication of pipes' overall condition and underpins decisions on pipe renewals and expenditure" – was low (2015, p. 22). Over half of the data "was categorised between 'less reliable' and 'no data confidence'" (2015, p. 21). The survey also found that capital expenditure was lagging budget expectations, and that revenue was "not covering cost for most participants" (2015, p. 32).

Questions have also been raised about the ability to sustain current central government expenditure levels on land transport services and infrastructure. In its Briefing to the Incoming Minister, the Ministry of Transport (MoT, 2014) notes that

> New Zealand's current level of investment in roading is the highest it has been since the 1960s. New Zealand is now spending a higher percentage (1.3 percent) of its GDP on roading compared to other developed countries. Over the next 10 years, expenditure on transport is expected to increase at 3.3 percent per year, well above the forecasted 2 percent annual increase in inflation for the economy as a whole over the same period. (p. 19)

The Ministry goes on to identify a number of pressures on the current funding model, including

- the rising cost of finding solutions to urban congestion;
- smaller regional centres facing growing difficulties maintaining their existing services and infrastructure, with growing costs and fewer ratepayers; and
- more fuel-efficient vehicles, which will "will slowly erode the effectiveness and fairness of FED [Fuel Excise Duty] as a means of collecting revenue from transport users" (p. 18).

6.8 To what extent has the planning system contributed to these outcomes?

The planning system has had some impacts, both positive and negative…

The inherent dynamism of cities means that it is impossible to definitively attribute urban and environmental outcomes to the planning system. A range of other contributing and confounding factors have, or may have, led to the outcomes described above. However, the planning system has likely played a role in affecting these results, particularly air quality, the supply of development capacity, and housing affordability.

The introduction of tougher national standards through the planning system has been cited as contributing to improvements in air quality. Heitzmann (2007) notes that, by "barring local authorities from authorising new polluting activities without pollution offsets", the National Environmental Standards for Air Quality introduced "an implicit cap on cumulative emission in areas in non-compliance" (p. 167). The introduction of the NES also led a number of regional and district councils to set local emissions standards and rules that were more stringent than the national standards, to enable compliance with the NES. In some cases, local authorities used Local Government Act powers to tackle air quality problems. For example, Rotorua District Council introduced a bylaw in 2010:

- requiring that only approved woodburners and pelletburners could be installed in homes within the Rotorua airshed;
- prohibiting from 1 May 2012 the sale of houses with a working open fire or non-compliant burner; and
- prohibiting from 1 May 2015 the use of indoor open fires.

Several councils also brought in non-regulatory programmes to promote compliance with the new rules and standards. For example, Environment Canterbury and Nelson City Council provided financial assistance to help homeowners upgrade their heating systems to lower-emitting or non-polluting appliances. In the case of Christchurch, regional council interventions appear to have helped to reduce emissions. A section 32 report prepared for the proposed Canterbury Air Regional Plan noted:

> Christchurch has seen the most significant effort (including the investment of $42 million, over 10 years, in a clean heat scheme that reduced the number of solid fuel burning devices in use in the City by approximately half. Improvement over that time was achieved but multiple exceedances of the standard still occur each year. Timaru has had very little regulatory intervention and has seen no significant improvement over the past decade. (Environment Canterbury, 2015, p. 3-1)

Local government is the dominant actor for the supply of development capacity. With a few exceptions, new development capacity cannot be brought on stream without the express permission of councils. [58] Similarly, most local roading and water infrastructure is either laid by the council or council-controlled organisations, or with the agreement of councils, to their standards (eg, through development agreements). The planning system is therefore highly likely to have contributed to a shortfall in, and the rising cost of, development capacity and housing over the past 20 years. Infrastructure-serviced land is a key input to new housing. Land prices now account for 40% to 60% of the total cost of dwellings in New Zealand. As a result, the Commission found in its *Housing affordability* inquiry that "appreciating land prices have been a key driver of house price inflation in New Zealand over recent years" (2012, p. 35).

Key factors that have led to the shortfall in development capacity are the political economy of planning, and inadequate governance of infrastructure providers:

- Growth in cities imposes additional costs on councils and existing ratepayers who consequently resist it. As discussed by the Commission in its *Using land for housing* report (2015), the shortfalls in development capacity reflect a "democratic deficit", by which incumbent homeowners and ratepayers use the

[58] Examples of exceptions include where the Environment Court overturns a council decision not to rezone land, or where central government uses extraordinary powers to require the release of land. One example of use of extraordinary powers is where the Minister for Canterbury Earthquake Recovery used powers (under the CER Act) to make changes to the Canterbury Regional Policy Statement obliging territorial authorities to ensure that sufficient land will be available to meet the region's residential and commercial needs to 2041.

planning system to contain the growth in local rate and debt levels, at the expense of new or aspiring households and firms.

- The statutory and legal frameworks for water supply, wastewater and stormwater in New Zealand are unclear, leaving the provision and pricing of water services susceptible to political interference. In Auckland, fees to connect to the council's water network provider only recover two-thirds of growth and do not reflect the true costs of supply, which vary by location. This inhibits the efficient and responsive provision of water infrastructure to support urban growth, and contributes to problems funding the maintenance of existing networks. (NZPC, 2015a)

…and the planning system has failed to deliver some desired goals

Increasing evidence and concern about the poor state of freshwater bodies in New Zealand has raised questions about the performance of the RMA in protecting this natural resource. Many agree that point-source water pollution has been better controlled as a result of the RMA. Even so, many believe that the planning system has struggled to manage pollution from diffuse sources and deal with cumulative effects (EDS, 2016; OECD, 2007; Heitzmann, 2007; Peart, 2007). Indeed, some argue that the failure to manage diffuse-source and cumulative pollution has negated the benefits of better managing point-source water pollution (Brown et al., 2015). The New Zealand Planning Institute notes urban streams as an example of how poor management of cumulative effects has led to environmental deterioration:

> This is particularly evident in recent Auckland urban development on what was previously rural land, where relatively pristine streams have been silted up to the point they don't support natural ecosystems, due to clay and runoff accumulation from a sequence of permitted subdivision site works enabling development. (sub. 27, p. 11)

The failure to achieve better water quality through the planning system has been linked to the lack (until recently) of national standards, and local or political resistance to tighter environmental regulation. For instance, in its report evaluating environmental outcomes of the RMA, EDS (2016) noted that

> [t]he case study of point source pollution management compared with diffuse pollution demonstrates many of the key themes found in analysis of RMA outcomes.... Weak national direction, poor agency performance, the influence of political pressure towards enabling development with weak regard environmental bottomlines and an absence of flexible tools that could smoot the way for better outcomes have all forced water quality decline (p. 32)

Without the pressure from national policies or standards, councils face few incentives to establish hard environmental standards or limits. This is particularly where their imposition would create costs or losses for residents and ratepayers. In 2010, the Land and Water Forum (LAWF) reported that only four regional councils had

> a complete set of operative or proposed water quality limits for surface and groundwater, allocation regimes for surface and groundwater, and flow regimes for surface water across their regions, and there is debate about whether these limits are appropriate or effective. (2010, p. 12)

And, as the LAWF commented, without limits

> it is hard to manage diffuse discharges – nutrients, microbes, sediment and other contaminants that wash into water from the land – and impossible to deal with the cumulative effects on water bodies of water takes on the one hand and diffuse and direct discharges to water on the other. (2010, p. viii)

Local or political resistance has manifested itself in an unwillingness to impose tighter controls on land-use activities (EDS, 2016). Less stringent controls have contributed to water pollution, a reliance on arguably less effective non-regulatory approaches, and patchy monitoring and enforcement. Some councils have been reluctant to impose more stringent controls because of concerns about their impact on the economic wellbeing of constituents. A 2006 report on freshwater management practices commented:

> While in theory the RMA and Freshwater Plans can provide for the management of both freshwater resources and nutrients loads, Councils are concerned that this unprecedented pressure for growth is placing unsustainable demands on natural resources in some localities. They are also concerned that there is a looming conflict between economic growth and development of the farming sector and the

> state of freshwater resources….If Councils seek to apply greater controls on landuse activities, economic growth may be severely constrained. (Hill Young Cooper, p. 14)

The influence of agricultural interests may have limited the range and stringency of tools that councils applied in managing pollution. Memon (2000) noted that, while run-off from fertiliser applications and animal effluent could be controlled through greater use of resource-consent conditions and further regulation of farm activities,

> this level of regulation does not, however, appear politically acceptable at present to the farming industry. Regional councils are therefore being forced to rely on advocacy and education to improve land-use practices as a means to manage non-point sources of pollution in anticipation of more stringent regulatory approaches. (p. 241)

McNeill's (2008) analysis of the role of regional councils found that some councils (especially those in rural and provincial areas) were "not representative of the regions' populations, with many councils consisting predominantly of farmers":

> Some 51 (38%) of the 134 regional councillors excluding the unitary authorities, in 2007 are farmers. This is nearly double the 20% of all local government elected members….Agricultural and fisheries workers made up only 7.9% of the national workforce (2001 census) by comparison. As a consequence farmers make up at least half the total number of elected representatives on five of the twelve regional councils. (p. 143)

McNeill posited that this overrepresentation by farmers "may serve to explain the slow response by councils to dairying impacts" (p. 250).

The decentralised nature of monitoring and enforcement under the RMA potentially limits its effectiveness. The OECD observed in 2007 that the devolved structure "engenders a risk of development interests overriding environmental considerations, particularly where responsibility for the issuance of resource consents and the inspection and enforcement of compliance lies with a single authority" (p. 126). Frieder (1997), Memon (2000) and Day et al. (2003) have argued that the ability of councils to effectively monitor environmental trends has been limited by their dependence on local rates and charges and the reluctance of residents, especially farming and business groups, to bear these costs. However, political factors have also constrained the robustness of monitoring and compliance efforts. Brown et al. (2015) argue that "agency capture and the political power of private landowners" has led to low levels of monitoring and compliance with environmental plan rules or resource consent conditions.

In some cases, compliance and enforcement activities have been subject to inappropriate interference or oversight by elected representatives. In their 2011 review of how four regional councils managed fresh water, the OAG expressed concern that

> councillors in all the regional councils we audited had some involvement either in deciding whether the council should prosecute or investigating cases after the decision to prosecute had been made. (2011a, p. 60)

F6.10 The absence of national standards in combination with local and political resistance has limited the planning system's ability to manage pollution of fresh water or cumulative pollution.

Poor environmental outcomes, including the declining quality of water bodies, particularly affect Māori communities due to their unique kaitiaki relationship with the natural environment (Chapter 7 & Chapter 9). Ngā Aho & Papa Pounamu said that

> These findings reinforce our concerns that the current planning system is not fully delivering the outcomes that Māori communities expect and aspire to (for example, water quality standards that sustain mahinga kai). We believe that the Commission's findings substantiate support for greater involvement from central government in any new planning system through developing and implementing national policy statements and environmental standards under Part 5 of the RMA (p. 39).

Ngā Aho & Papa Pounamu went on to recommend:

> A future planning system should improve requirements to measure and monitor environmental outcomes against a framework which includes indicators based in mātauranga Māori (p. 39).

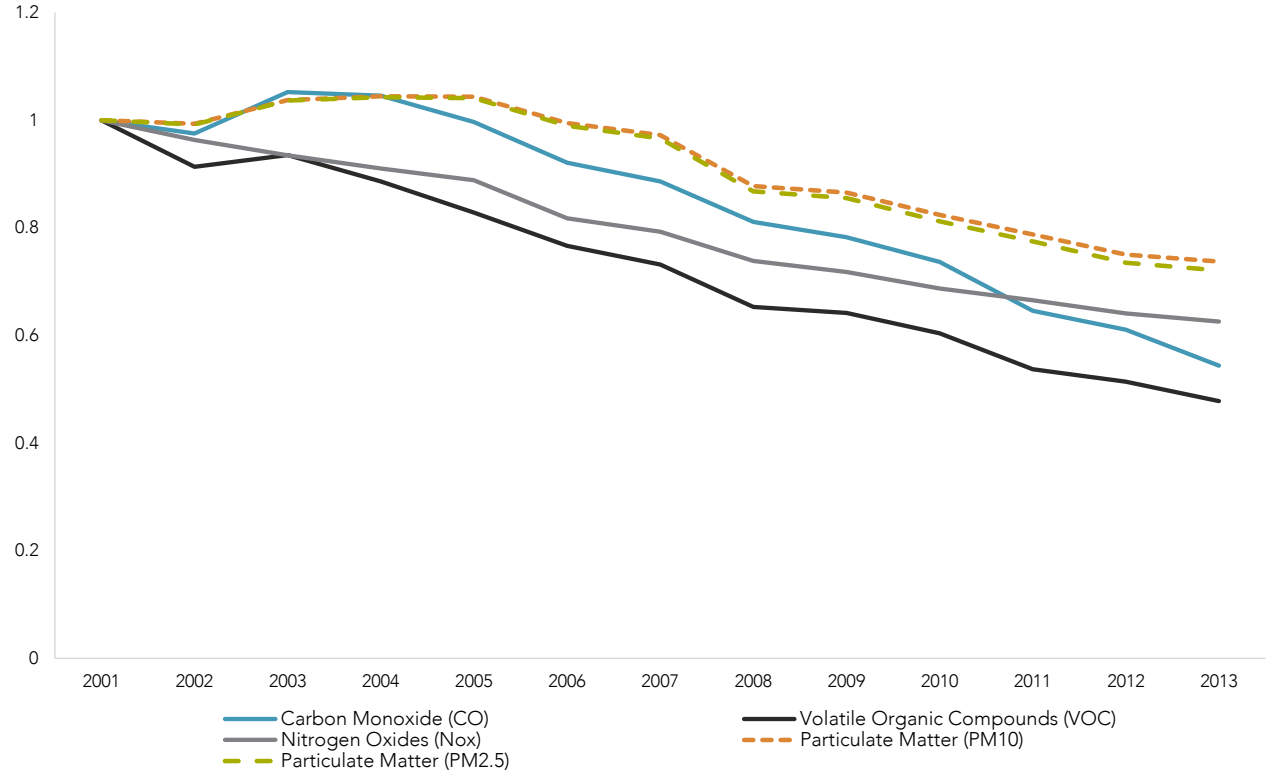
In Chapter 13, the Commission recommends that a future planning system should give greater recognition to tikanga Māori and mātauranga Māori in monitoring environmental outcomes.

But the planning system is only one factor among many

The planning system is just one factor among many affecting the development of cities and the natural environment. Other factors include wider central government policy, technological change and changing consumer preferences. Decisions made under earlier regimes have also constrained the ability of the current planning system to significantly change some outcomes.

The influence of other factors on outcomes is seen in air quality. While more stringent planning rules and policies played a part in reducing the flow of pollutants into the air, two key factors that also contributed to better air quality are reduced emissions from transport and household heating. For example, emissions from road motor vehicles are estimated to have fallen by 26% to 52% between 2001 and 2013, despite a 12% increase in road vehicle use (Figure 6.25).[59]

Figure 6.25 Estimated yearly emission index of key pollutants from road transport, 2001–2013



Source: Ministry for the Environment / Statistics New Zealand.

Note: Data adjusted to reflect changes from a 2001 base year.

These estimated reductions in vehicle emissions have been attributed to improvements in fleet and fuel quality (Ministry for the Environment / Statistics New Zealand, 2015). Central government regulations unrelated to the planning system have contributed to most of these improvements. Permissible levels of sulphur in petrol were lowered from 500 parts per million in 2002 to 50 parts per million from 1 January 2008, leaded petrol was phased out in 1996, and petrol additives containing lead were removed from sale in 2002.

[59] As measured by vehicle kilometres travelled.

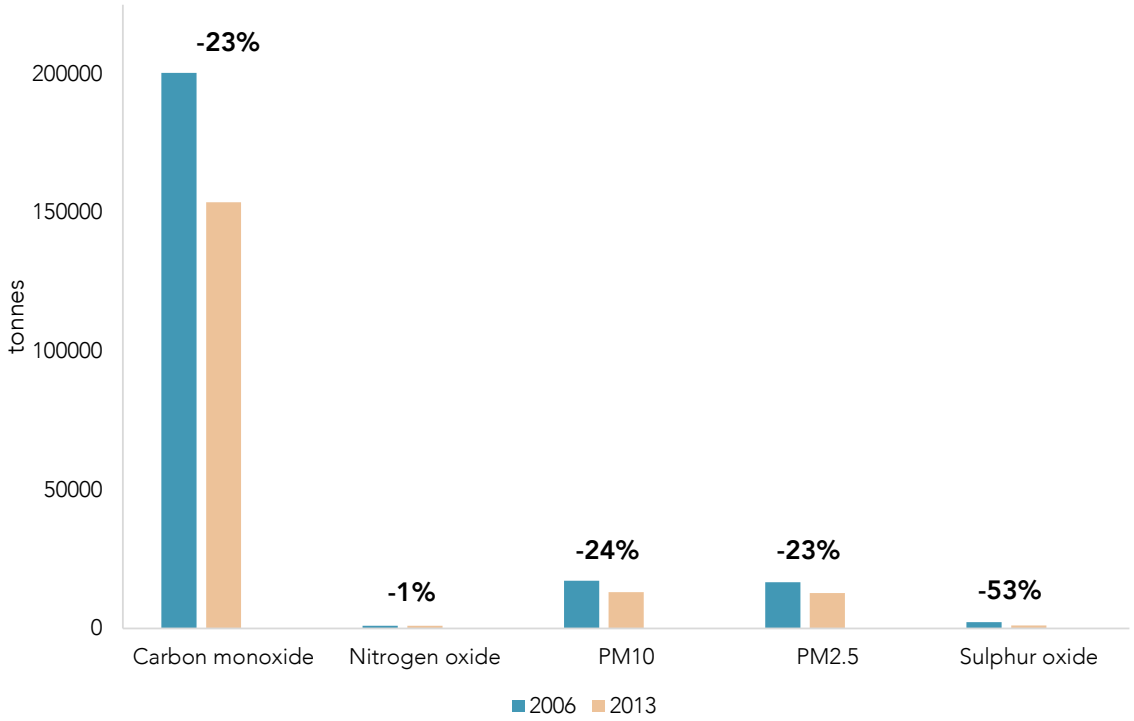
An emissions rule was introduced in 2003, setting minimum standards for vehicles entering New Zealand. Emission standards were tightened in:

- 2006 (to add a visible smoke check to the Warrant of Fitness and Certificate of Fitness tests for all vehicles, including those already in the fleet),
- 2007 (to update the emissions standards to reflect international practice, tighten standards for used vehicles, and require testing of used vehicles entering the fleet), and
- 2012 (to introduce more stringent minimum standards for new vehicles, and align them with Australian practice).

Reviews of vehicle emissions in Auckland conducted for the NZTA (Bluett et al., 2011) and Auckland Council (Kuschel, Bluett & Unwin, 2012) concluded that the "introduction and improvement of emissions standards have significantly reduced mean emissions of CO [carbon monoxide], HC [hydrocarbons], NO [nitrogen oxide] and uvSmoke for petrol vehicles" (2011, p. v). However, they also noted that an ageing fleet and congestion were eroding the benefits of higher standards, with mean emission levels plateauing from 2009 after earlier improvements.

Similarly, emissions of pollutants from home heating fell between 2006 and 2013 (Figure 6.26), as fewer households used coal or wood for heating. The number of private households using coal for heating fell by 50% between the 2001 and 2013 Censuses. Some of this reflects efforts by local authorities to encourage shifts in household behaviour. However, central government policies are likely to have contributed to this shift in household heating and reductions in emissions. Particular policies are the nationwide Warm Up New Zealand insulation and clean heating retrofit programme, and the EQC-funded scheme of replacing home heating sources damaged during the Canterbury earthquakes with cleaner units.[60]

Figure 6.26 Yearly emissions from burning wood or coal for home heating, 2006 and 2013



Source: Ministry for the Environment / Statistics New Zealand, 2015.

In the case of deteriorating housing affordability, while councils have had a significant impact on the supply of key inputs (ie, development capacity), they have no control over demand. In its housing affordability

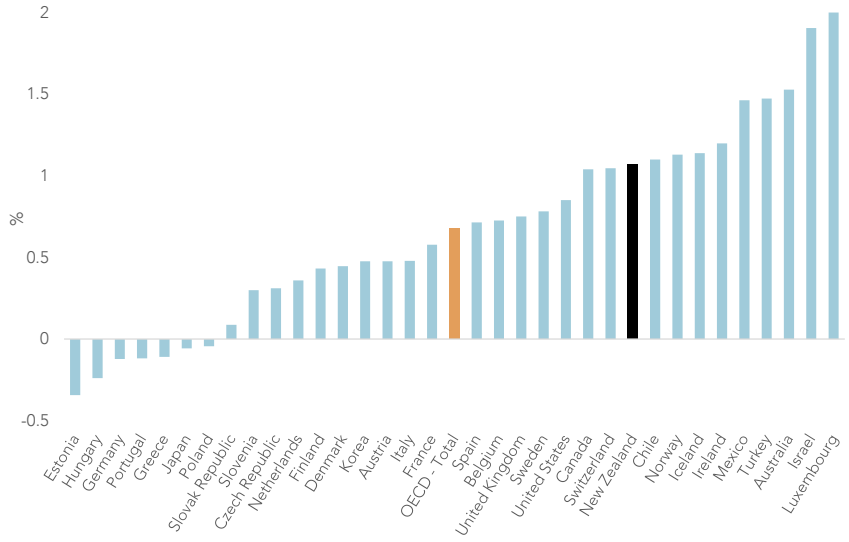
[60] The Warm Up New Zealand: Heat Smart programme (which ran between 2009/10 and September 2013) led to the installation of 39 578 low-emission heating units. EQC funded the installation of approximately 20 000 clean household heating units in Canterbury.

report the Commission noted the two forms of demand, both of which have played a part in rising house prices in recent years.

- *Underlying* housing demand is driven by household formation, which reflects population growth and changes in household size. In turn, population growth is a function of natural increases (births minus deaths) and net migration. Household size is essentially determined by demographic and social factors, although new household formation is also determined by economic factors, as higher incomes and access to finance enables new households to form.
- *Effective* housing demand reflects the combined effect of consumer and investor aspirations to rent or buy a dwelling and their financial ability to do so. As such, it is influenced by the prevailing set of economic factors, including incomes, availability of finance, the prospect of capital gains, and the economic situation more generally. (NZPC, 2012a)

Population and demographic influences have been particularly important drivers of household formation, with implications for the quantity and type of dwelling required in the New Zealand market. New Zealand population growth has been strong when compared to the OECD average, with main population growth and migration focused on Auckland (Figure 6.27 and Chapter 4).

Figure 6.27 Yearly average population growth for OECD countries, 2004-2015



Source: Productivity Commission analysis of United Nations data.

Changes in effective demand have also been significant. Although income growth has been relatively weak, it has still led to housing demand pressures as households "trade up" to higher-quality living environments. Increased access to credit, low interest rates and innovations in financial instruments have increased the "borrowing capacity" of households and have been a key source of increased effective demand for housing (NZPC, 2012a).

In other areas, non-planning factors are likely to have played a larger role in achieving outcomes. For example, the urban planning system is likely to have contributed to improvements in road safety, but only in a limited way. Econometric analysis of the downward trend in road fatalities since 1990 commissioned by the Ministry of Transport concluded that 19% of the decline in deaths could be attributed to improvements in roading (as measured by real net investment in roading per unit of travel) (Infometrics, 2013). Most of the reductions in fatalities were due to improvements in the ability of vehicles to withstand crashes, fewer motorcycles on the roads (45%) and better driver behaviour (36%).

The current planning system is similarly likely to have made an insignificant contribution to greenhouse gas reduction, for a couple of reasons. First, the drafting of amendments to the RMA and subsequent court cases have restricted the ability of councils to consider the effects of greenhouse gases on climate change when making rules to control discharges into the air and when considering applications for discharge

permits (Baillie, 2012; Palmer, 2015b). Second, the main climate change response policy in New Zealand is the Emissions Trading Scheme (ETS). A current government review of the ETS has noted that a fall in the price of carbon units and the effective carbon price since 2011 has "reduced the price incentive for businesses to invest to reduce their emissions in New Zealand" (MfE, 2015c, p. 8).

Finally, some current outcomes reflect land-use decisions taken under previous regimes. The high levels of access to green space in New Zealand cities reflect a series of planning decisions by successive councils taken over many years. And the relatively low use of public transport by international standards has been attributed to distributed housing and employment patterns in many New Zealand cities (especially Auckland), and decisions taken back in the 1950s by Auckland's regional planning body to abandon the rail network and invest instead in highways (Mees & Dodson, 2007; Coleman, 2010; MoT, 2014).

6.9 Conclusion

In dynamic environments like cities, the ability of councils to change behaviour and outcomes through the planning system will necessarily be constrained, and will depend to a large degree on whether local government is the primary actor. The experience with urban and environmental outcomes over the past 20 years tends to bear this out. Where councils have veto rights over the supply of a good or service (eg, development capacity), they can have a significant effect on outcomes. But where they are merely one actor among many, the effects are more muted. The performance of New Zealand cities in terms of green space availability and the uptake of public transport also point to the impact of path dependence (ie previous decisions affecting and limiting current choices) on city development and on council strategies and decisions. There are inherent limits to what can be expected from planning systems.

However, muted effects on urban and environmental outcomes also point to weaknesses in the design and operation of the planning system. In both urban and environmental outcomes, underlying political dynamics have constrained the effectiveness of the planning system. For environmental outcomes, these dynamics include pressure from some commercial interests not to regulate pollution stringently. In the urban environment, they include pressure from incumbents not to raise rates or debt to pay for the infrastructure required to enable new development. Any new planning system needs to consider, and manage, these dynamics.

7 Urban planning and the Treaty of Waitangi

Key points

- Māori have diverse interests in urban development, arising from:
  - cultural connections with ancestral lands, expressed through rangatiratanga and the obligation of kaitiakitanga;
  - a desire to "create great urban spaces and places for Māori to be Māori";
  - being owners and developers of urban land; including being collective owners as a result of Treaty settlements over the last several decades; and
  - being urban residents with a desire for prosperity and wellbeing.
- Māori designers and planners have developed and promoted a set of principles for a "Māori cultural landscape strategy" that reflect values and knowledge based in Māori culture and custom.
- New Zealand's planning law contains diverse provisions that recognise and protect Māori interests arising from the Treaty of Waitangi. Planning legislation requires local authorities to engage with iwi and Māori communities in developing and administering plans. Other never- or little-used provisions allow devolution of planning to iwi and hapū authorities, or for them to join with councils in managing particular areas or aspects of planning.
- Some recent Treaty settlements have provided for iwi, local authorities and central government agencies to co-govern the management of natural features such as rivers and mountains. Such arrangements have helped build relationships between iwi and local authorities and develop capability on both sides. Engagement of these iwi in other planning processes has strengthened.
- Over the last 25 years, Māori engagement in planning processes and the protection of Māori interests has grown through practice guided by legislation and case law. From a Māori perspective, engagement has been most successful when based on building positive relationships that allow Māori to participate early and strategically in planning.
- Despite ongoing development in the relationships between councils and Māori on planning, practice remains uneven across the country. A significant barrier is that some councils and some Māori groups have insufficient capacity to engage effectively with each other.
- The current framework for recognising and actively protecting Māori Treaty interests in the environment should be carried forward and strengthened by:
  - giving Māori a statutory role in the stewardship of the planning system through a National Māori Advisory Board on Planning and the Treaty of Waitangi;
  - providing clearer guidance (through a National Policy Statement on Planning and the Treaty of Waitangi) on the active protection of Māori Treaty interests in the environment; and
  - providing guidance in particular on the recognition and protection of sites of significance to Māori; co-governance arrangements for such sites when appropriate; the involvement of mana whenua in spatial planning and the recognition of Iwi Management Plans; planning provision for papakāinga and other kaupapa Māori development; and support for the development of iwi and hapū capability to participate in planning.

Planning legislation in New Zealand recognises and protects Māori interests arising from the principles of the Treaty of Waitangi. More broadly, Māori have interests in urban development that flow through into planning. These interests are diverse and developing rapidly. This chapter identifies the main interests that Māori have in urban development and more particularly in urban planning. It describes the current legislative framework for protecting Māori interests in environmental and urban planning, and how this has played out in practice. The chapter identifies some of the growing successes and enduring weaknesses in local authority engagement with Māori in environmental and urban planning. This chapter and other chapters (in particular Chapter 13 and Chapter 14) make recommendations to address these weaknesses.

This chapter and other parts of the report dealing with Māori perspectives on and interests in urban planning have benefited from engagement with iwi and other mana whenua groups and with Māori urban planning and design professionals. In particular, the Commission has benefited from ongoing engagement with Ngā Aho, the network of Māori design professionals, and Papa Pounamu, the Māori interest group within the New Zealand Planning Institute. Ngā Aho and Papa Pounamu led and reported on a wānanga on urban planning in June 2016 (Ngā Aho & Papa Pounamu, 2016a) and subsequently reviewed the Commission's Draft Report (Ngā Aho & Papa Pounamu, 2016b). The Commission met with Ngā Aho and Papa Pounamu in October 2016 to discuss their review and its implications for this final report, and as a result commissioned a further review of relevant drafts.

The Commission received extensive comments on Māori issues in submissions, in particular from councils and from Ngāti Whātua Ōrākei (sub. DR76). The Commission has considered all these views in the context of the wider inquiry to arrive at the findings and recommendations on Māori interests in urban planning in this chapter and elsewhere in this report.

7.1 Māori and urban development

The land now occupied by most New Zealand cities, particularly the largest, was inhabited or otherwise used by Māori before European settlement (Ryks et al., 2014). Some, such as Maungakiekie (One Tree Hill in Auckland) were substantial settlements of 5 000 to 7 000 people (Blair, 2010, p. 51). Yet competition for valuable land close to ports and trading opportunities, and an arable hinterland led to most Māori land in these places passing into the hands of settlers soon after their arrival (Ryks et al., 2014). Ngāti Whātua, for instance, no longer possessed most of its lands on the Auckland isthmus by 1850 (Blair, 2010).

Yet Māori did not lose their connections with the lands occupied by the new settlements. Professor Hirini Matunga, for instance, talked of the connections between Ngāi Tahu and land in Christchurch.

> Imagine a Ngai Tahu woman in Christchurch, walking up Colombo Street, avoiding the traffic, oblivious to the people around her, striding determinedly past the Christchurch Cathedral. She walks up Hereford Street and then rests by the Otakaroro (Avon River) where her ancestors caught tuna, and where tourists now go punting. Rested, she follows the banks of the river through Victoria Square, past the Town Hall to Otautahi (originally a kainga near the Kilmore Street Fire Station). She then walks up to Papanui, where her ancestors for centuries extracted syrup from the ti or cabbage tree… She traverses the same path her ancestors travelled over one hundred and fifty years earlier, [temporally] separated, but spatially linked. Multiply this story a thousand times across all the cities in Aotearoa and one gets a fuller sense of the two histories, and two realities that permeate our cities. One dominating, the other dominated. (Matunga, 2000a, p. 66)

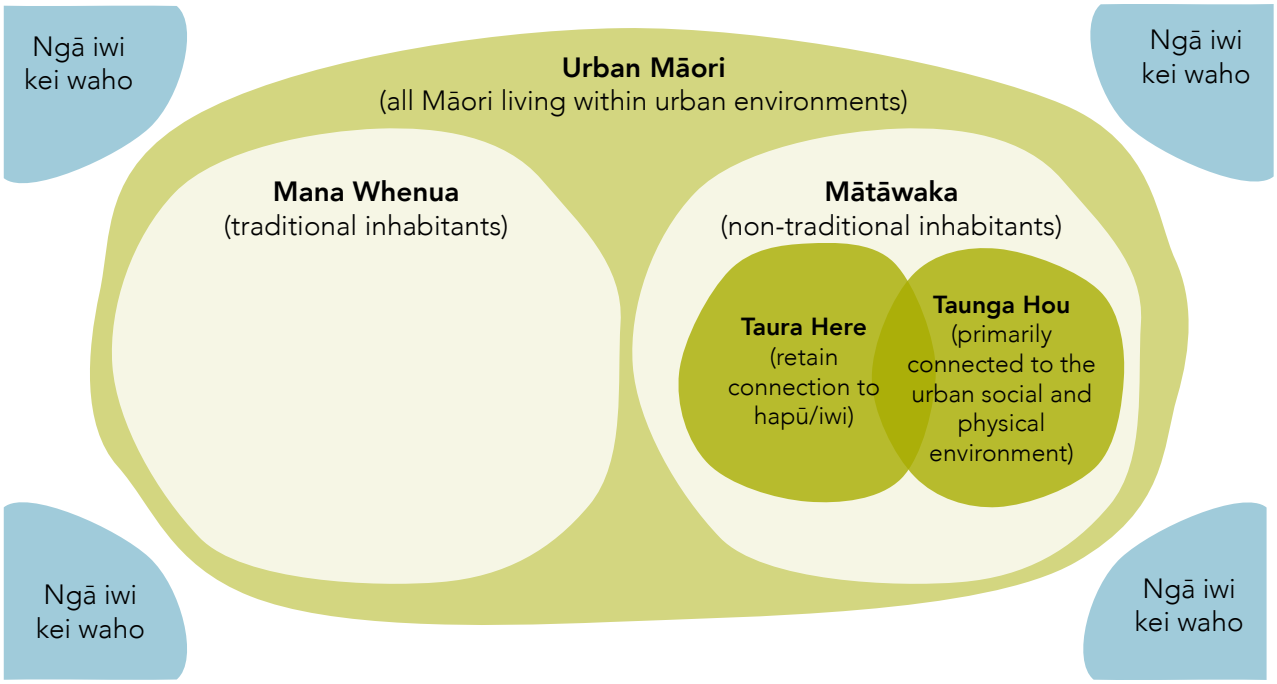
Most Māori lived outside the developing colonial settlements during the 19th century and first half of the 20th century. By 1896 the total Māori population, at around 42 000 and largely rural, was greatly outnumbered by a settler population of over 700 000 (Ryks, et al., 2014; Statistics New Zealand, 2016). In 1926 84% of Māori lived in rural areas. As the Māori population recovered, and with their rural land base already mostly lost, Māori began migrating into the cities from the 1950s to look for better living opportunities and employment. By 2006 85% of Māori lived in urban areas (Statistics New Zealand, 2006).

Urban Māori are a diverse group

Substantial Māori migration into New Zealand cities and the differing development experiences of migrants have created a highly heterogeneous urban Māori population. Understandably, Māori have a wide range of aspirations for how cities will contribute to their wellbeing.

Ryks et al. (2014) identify three main groups among urban Māori (based on migration patterns and relationships with iwi and hapū of origin) (Figure 7.1).

Figure 7.1 Conceptualising urban Māori



Source: Ryks et al. (2016) p. 30.

Notes:

1. Ngā iwi kei waho – iwi whose rohe is outside the urban area in question.

Briefly, urban Māori (all Māori living in urban areas) comprise mana whenua (iwi and hapū who hold traditional mana over the land they reside in) and mātāwaka (those who do not hold traditional mana over the land they reside in). In turn, mātāwaka comprise taura here (those who retain a link with iwi and hapū outside the area in which they reside) and taunga hou. Taunga hou ("new anchorage") is a coined term that refers to "those people who are of *Māori* descent and *Māori* ethnicity but who, through choice or circumstance, do not link back to their own *iwi/hapū*" (Ryks et al., 2016, p. 31).

In 2013, the proportions of mana whenua and mātāwaka (comprising taura here and taunga hou) varied greatly across New Zealand's main cities (Table 7.1). In Auckland and Wellington, in particular, taura here greatly outnumber mana whenua. In two cities, Hamilton and Christchurch, mana whenua mostly comprise members affiliated to a single iwi. In contrast, the Māori Plan for Tāmaki Makaurau (Auckland) recognises 19 mana whenua groups – each with different but overlapping interests in the urban environment (Independent Māori Statutory Board, 2012).

Table 7.1 Urban Māori within Auckland, Hamilton, Wellington and Christchurch, 2013

	Mana whenua	Mātāwaka		Total
		Taura here	Taunga hou	
Auckland	19 527	84 633	18 279	122 439
	16%	69%	15%	100%

	Mana whenua	Mātāwaka		Total
		Taura here	Taunga hou	
Hamilton	14 136	17 571	5 286	36 993
	38%	48%	14%	100%
Wellington	3 009	37 833	6 168	47 010
	7%	80%	13%	100%
Christchurch	8 151	15 003	4 290	27 444
	30%	55%	16%	100%

Source: Ryks et al. (2016).

Notes:

1. Due to rounding, numbers may not total to 100%.

Many Māori have affiliations across a number of iwi; many also identify as members of other ethnic groups in addition to being Māori. The depth and extent of their engagement with te ao Māori (the Māori world) also varies considerably (Cunningham, Stevenson & Tassell, 2005). While Māori are overrepresented in poor social and economic outcomes, they collectively cover a wide range of economic, social and educational backgrounds.

In sum, urban Māori, like the broader population, are likely to have a variety of interests in urban development. Because of the connection with specific locations, differences in approach across mana whenua groups, and differences in the scope of their kaitiakitanga interests (Box 7.1), Māori interests in urban development tend to be local.

Māori have a variety of interests in urban development

Different groups of urban Māori have both different and common interests in the urban environment. This section discusses some of the more prominent interests.

Mana whenua interests in urban development

Mana whenua have a particular set of interests because of their ancestral occupation and longstanding relationship with the landscape. These interests give rise to ongoing rights and responsibilities as kaitiaki (Box 7.1). The Resource Management Act 1991 (RMA) specifically recognises this relationship (section 7.3). Similarly, the Court of Appeal has recognised a Treaty principle that Māori retain rangatiratanga over their resources and taonga; while the Waitangi Tribunal has recognised the Crown has a duty to act reasonably, honourably and in good faith to protect rangatiratanga in exchange for the Māori cession of sovereignty (Box 7.3).

Box 7.1 **What is kaitiakitanga?**

Kaitiakitanga "denotes the obligations of stewardship and protection … [and] is most often applied to the obligation of whānau, hapū and iwi to protect the spiritual wellbeing of natural resources within their mana" (New Zealand Law Commission, 2001, p. 40).[61] Kaitiakitanga, in turn, is closely linked to

> …mana, which provides the authority for the exercise of the stewardship or protection obligation; … tapu which acknowledges the special or sacred character of all things and hence the need to protect the spiritual wellbeing of those resources subject to tribal mana; … [and] mauri, which recognises that all things have a life-force and personality of their own. (p. 40)

[61] The New Zealand Law Commission (2001, p. 40) noted that "Kaitiakitanga is a term coined in relatively recent times to give explicit expression to an idea which was implicit in Māori thinking but which Māori had hitherto taken for granted".

Kaitiakitanga forms one of two foundational and interlinked concepts within Māori thinking on environmental management. The other is whanaungatanga – the organisation of concepts and relationships through whakapapa or familial connections. As the Waitangi Tribunal explains:

> Kaitiakitanga is really a product of whanaungatanga – that is, it is an intergenerational obligation that arises by virtue of the kin relationship. It is not possible to have kaitiakitanga without whanaungatanga. In the same way, whanaungatanga always creates kaitiakitanga obligations. (Waitangi Tribunal, 2011, p. 105)

Because the relationship Māori have with the environment is described in terms of whakapapa, the claim that particular Māori groups have to kaitiakitanga is based on this sense of relationship. In Māori cosmology, no distinction is made between human ancestors and whenua, maunga or awa from which one descends or (to put it in the appropriate cultural context) "can whakapapa to".

Because of ancestral relationships, Māori may have a kaitiaki relationship with an environmental feature that they have no legal title to (native title claims excepted) (Box 7.4).

Ryks et al. noted of mana whenua interests that:

> A pressing theme for mana whenua has been attempts to regain their distinct status, to build new social and economic institutions, and to preserve remaining traditional resources, such as land and waterways. (2014, pp. 6–7)

Similarly the Waikato District Council submitted:

> [One of the] greatest interests that Māori have expressed [is] in the care of the natural and cultural environment and the resources. In particular in our district there is a focus on protecting and restoring water quality in our waterways and surface water bodies, as well as safeguarding our remnant natural areas and the coast. (sub. 2, p. 10)

Of particular, but not sole, importance to mana whenua is the expression and active protection of Māori values, rights and interests in mahinga kai, wāhi tapu and wāhi taonga (Ngā Aho & Papa Pounamu, 2016b). Lenihan (2014) explained that "mahinga kai" refers to the "customary gathering of food and natural materials and the places where those resources are gathered" (p. 4). Wāhi tapu are sites imbued with an element of sacredness or restriction, such as sites associated with creation stories, rituals, historical occupation, human remains, and geographical markers of identity. "Wāhi taonga are 'places treasured' due to their high intrinsic values and critical role they have in maintaining a balanced and robust ecosystem (e.g. spawning grounds for fish, nesting areas for birds, freshwater springs)" (p. 11).

As a result of Treaty settlements, mana whenua groups have again become significant owners of land and buildings in some New Zealand cities. They have often separated their commercial and iwi development interests into different entities under the umbrella iwi organisation. The high value of some urban land has placed a premium on iwi commercial interests as a means to provide a return for iwi members on resources transferred as part of settlements.

Auckland Council submitted:

> A high proportion of Māori land and Treaty settlement land also has important environmental elements within the sites. It will be important within any future urban planning framework that an appropriate balance is achieved between enabling development on these sites, recognising the need for land to be developed to support social, cultural and economic wellbeing and protecting environmental tāonga. (sub. DR86, p. 18)

The broader interests of urban Māori

The Independent Māori Statutory Board (IMSB) has identified the aspirations of Māori in Auckland. In particular, the Māori plan for Tāmaki Makaurau sets out a vision: "Te Pai me te Whai Rawa o Tāmaki Māori – Healthy and Prosperous Tāmaki Māori" (IMSB, 2012, pp. 12–13). Key directions and desired outcomes are set

out under five Māori values that cover four domains (environment, economic, social, and cultural). The five values are:

- whanaungatanga – expressed through the relationships developed between whānau and their communities;
- rangatiratanga – expressed through autonomy, leadership and participation;
- manaakitanga – expressed through the responsibility to provide hospitality and protection;
- wairuatanga – expressed as distinctive identity or the spirituality of a place; and
- kaitiakitanga – expressed as guardianship to ensure a sustainable future for all.[62]

Professor Hirini Matunga told the Commission that the planning system needs to create places where Māori can be Māori in urban spaces (pers. comm., 26 April 2016). Waa (2014) sums up the benefits of urban development for Māori: "The key outcome of our model [for understanding how cities can promote wellness among Māori] is that 'cities are able to sustain a way of life that collectively Māori have reason to value'" (p. 1). Yet the Greater Wellington Regional Council (GWRC), recognising the diversity of Māori views, suggests that it will be challenging to secure a *collective* view on a preferred way of life (sub. DR80).

Auckland Council submitted:

> Māori are increasingly becoming urban based, with Auckland having the world's highest Māori population. Auckland is home to nearly 25% of New Zealand Māori. With a youthful demographic (half of the Auckland Māori population are under the age of 20), the future design of the urban planning system will have a significant impact on how Māori live, work and play, but also on how Auckland and New Zealand reflects Māori identity and recognises their valuable current and future contribution towards the continued growth and progress of the country.
>
> A recent engagement survey of Auckland rangatahi [youth] made it clear rangatahi are proud of their culture and identity. They want to see it becoming more visible and better reflected in their communities and they need improved accessibility to the full range of opportunities Tāmaki Makaurau offers. A fit for purpose future urban planning framework would better enable these outcomes (sub. DR86, p. 5).

Improving social and economic outcomes for Māori

Unsurprisingly, urban Māori, like other groups, are interested in improving a wide range of social and economic outcomes associated with the urban environment. Many have a particular focus on addressing Māori overrepresentation among individuals and families experiencing socio-economic and educational disadvantage. Often central government policies and services have a major influence on outcomes in these areas, while urban planning makes a lesser, though not negligible, contribution. Land-use planning may have an even more minor role than broader urban planning in shaping these outcomes (Chapter 2 and Chapter 3). Yet hard distinctions between environmental and social and economic outcomes seem to run against the grain of Māori values:

> …ecological restoration in the city should not be separated from the social and cultural restoration of the human communities that inhabit the city, particularly those who have been most disenfranchised by it. (Matunga, 2000a, p. 70)
>
> For Māori (and other indigenous peoples) their interest in urban development is not solely, or even largely, economic, but includes other dimensions of wellbeing. This is because the negative impacts of colonisation and migration have not just been felt in economic terms but in social and health terms as well … Therefore, a major driver for full Māori participation in urban planning and development is achieving equity across the social, economic, and political spectrums. Love (2010) conceptualises this as a desire among Māori for a 'cultural footprint' in the city. (Ryks et al., 2014, p. 12)

[62] Different Māori sources on urban development use varying sets of values or principles. For instance, Awatere et al. (2008) use four of the IMSB's five values (omitting rangatiratanga) and adding kotahitanga (unity and collaboration), mauritanga (mauri means "life-force" and design should take into account the existing mauri of an environment and maintain or enhance the mauri within a community), orangatanga (protection and enhancement of health and wellbeing), and mātauranga (Māori knowledge and understanding).

> …framing of discussions of urban planning in economic terms undermines the integrity of mātauranga Māori as a conceptual underpinning to urban planning which aims to respect environmental, cultural and social outcomes. (Ngā Aho & Papa Pounamu, 2016a, p. 9)

Similarly, Matunga (2016) identifies the broad outcomes of Māori resource management and planning as:

- environmental quality and quantity;
- Māori social cohesion and wellbeing;
- Māori economic growth and distribution;
- Māori cultural protection and enhancement; and
- iwi Māori political autonomy and advocacy.

Regional Public Health and the New Zealand Centre for Sustainable Cities submitted:

> In our view, attention should also be paid to how planning processes can reinforce or address existing inequities, including the marginalisation of Māori interests. It is reasonable for local government, in our view, to take a leadership role in this process. … Māori interests in urban planning are broad, ranging from advancing self-governance to economic development to improving environmental, social, and cultural outcomes, often through long-term, not-for-profit investment. Many Māori organisations are actively planning for urban development, using assets including land returned under Treaty settlement to meet the needs and aspirations of their people. (sub. 35, p. 3)

Auckland Council submitted:

> Development of Māori and Treaty settlement land is a high priority for mana whenua. Those living on their whenua also need to have accessible educational, recreational, employment, business, and cultural opportunities. Together these reinforce Māori identity and strengthen support networks and opportunities for achievement (sub. DR86, p. 6)

Yet, while land-use planning sets a context for and can influence these broader social and economic outcomes, it is not the most salient instrument available to government to address them. Chapter 3 discusses how land-use planning is related to broader social and economic goals, and the broader central and local government policies designed to achieve them. The current chapter is primarily focused on Māori participating in land-use planning and on recognising and actively protecting Māori interests in the physical environment.

Mātāwaka and urban development

Mātāwaka have particular issues associated with distance from their iwi bases, and emerging affiliations in the urban environment.

> Among the challenges faced by mātāwaka (and especially taura here) has been the cultural dislocation brought about by distance from their own iwi and government policies that attempted to discourage the establishment of cultural enclaves within the urban environment … mātāwaka from the outset have created new structures that include tribally affiliated organisations, pan-tribal organisations, sports groups, churches and, for some, gangs … One of the key types of pan-tribal organisations … are urban Māori authorities that represent the interests of mātāwaka. (Ryks et al., 2014, p. 7)

Auckland Council submitted:

> Matāwaka make up approximately 84% of the Tāmaki Makaurau Māori population. Any future urban planning framework needs to provide guidance on how matāwaka will have a presence within a future urban planning framework. (sub. DR86, p. 5)

Professor Hirini Matunga told the Commission that the RMA (by shifting the focus to iwi) had, in effect, disenfranchised the large number of urban Māori who were not mana whenua. He argued that the urban–rural distinction was artificial, as taura here (mātāwaka) go back and forth between both (pers. comm., 24 April 2016). He later added that there is a need for "[r]ecognition that mataawaka and taurahere also have a desire to live 'as Maori' in the urban context and therefore must be provided for" (sub. 52, p. 2).

> [M]ātāwaka Māori, many long-standing city residents, have been excluded from Treaty settlements in the city they live in, as well [as] from … the resulting relational, economic and cultural benefits [that] settlements have brought …Durie (2009) suggests that once substantive Treaty claims have been settled there will be a shift away from claimant iwi towards collectives that reflect a broader picture of Māori society as it exists today. This would require urban authorities to interact with Māori in a very different way, requiring them to balance mātāwaka and mana whenua perspectives. Given that some local authorities are still struggling to fully include local iwi in urban development this conceptual and operational shift could pose a challenge. (Ryks et al., 2014, pp. 8–9)

Auckland Council (sub. 86, p. 10), as well as Ngā Aho and Papa Pounamu (2016b), recommended more work on the respective roles of mana whenua and mātāwaka in the planning system. The role of mātāwaka in land use and resource management planning raises issues about how to interpret Treaty principles that jurisprudence has not, to the Commission's knowledge, so far addressed definitively. Yet, as Auckland Council notes, the importance of mātāwaka in some New Zealand cities identifies them as a group who need to be effectively engaged in planning processes. Chapter 8 recommends that Councils use a wider range of consultation and engagement methods than at present, particularly to engage those whose voices and interests tend not to be heard under current practices.

Te Aranga principles for a Māori cultural landscape strategy

Māori have an interest in seeing their culture (values, narratives and aspirations) reflected in the urban landscape. Cities are home to the large majority of Māori; Māori have ancestral ties to the lands on which cities are developing; and New Zealand cities are the only urban spaces where these ties hold. Māori designers have worked for many years to develop approaches to urban design that reflect Māori values. Auckland Council has incorporated one set of principles – the Te Aranga Principles – into its Urban Design Manual (Auckland Design Manual, 2016) (Box 7.2).

Box 7.2 **Te Aranga Principles**

Māori design professionals developed the Te Aranga principles in 2006 in response to the New Zealand Urban Design Protocol (MfE, 2005a). The principles were formulated at a hui at Te Aranga marae in Flaxmere. "The resultant Te Aranga Māori Cultural Landscape Strategy … represented the first concerted and cohesive effort by Māori to articulate Māori interests and design aspirations in the built environment." The hui participants deliberately chose the term "Māori cultural landscape", as the alternative "urban design" "did not resonate with a connected Māori worldview".

The seven outcome-oriented Te Aranga principles complement core Māori values, such as rangatiratanga, kaitiakitanga and manaakitanga, which guide processes. The Te Aranga principles comprise:

1. Mana – The status of iwi and hapū as mana whenua is recognised and respected.
1. Whakapapa – Māori names are celebrated.
2. Taiao – The natural environment is protected, restored and/or enhanced.
3. Mauri Tu – Environmental health is protected, maintained and/or enhanced.
4. Mahi Toi – Iwi/hapū narratives are captured and expressed creatively and appropriately.
5. Tohu – Mana whenua significant sites and cultural landmarks are acknowledged.
6. Ahi kā – Iwi/hapū have a living and enduring presence and are secure and valued within their rohe.

Each principle describes in more detail the outcomes sought and how to apply the principles. The principles stress the importance of establishing Treaty-based relationships and providing a platform for working relationships where mana whenua values, worldviews, tikanga, cultural narratives and visual identity can be appropriately expressed in the design environment. Among other things, applying the principles entails:

- using ancestral names to enhance "sense of place" connection and re-inscribing ancestral names, local tohu and iwi narratives into the design environment;
- engaging design professionals and artists mandated by iwi/hapū;
- protecting or enhancing the presence of local flora and fauna as key natural landscape elements;
- identifying, managing, protecting and enhancing significant sites (including wāhi tapu, maunga, awa, puna, mahinga kai and ancestral kainga); and
- acknowledging the environment after the Treaty of Waitangi settlement, where iwi living presences can include customary, cultural and commercial dimensions.

Source: Auckland Design Manual (2016).

The Te Aranga principles build on mātauranga Māori (Māori knowledge and understanding). Mātauranga is knowledge generated through long-term occupation of an environment, and is specific to each whānau, hapū and iwi. Like all bodies of knowledge, Mātauranga Māori is evolving and dynamic. At all times, however, mātauranga Māori is founded upon tikanga, Māori worldviews, and an intimate relationship with the environment. As a result "Māori creative practitioners can play a central role in translating concepts of mātauranga Māori into the contemporary context" (Ngā Aho & Papa Pounamu, 2016a, p. 20). The GWRC supported the Te Aranga principles (sub. DR80).

Māori are reporting successful outcomes from processes that draw on mātauranga Māori in urban design, often as an adjunct to Māori engagement in more formal planning processes (eg, Ngā Aho & Papa Pounamu, 2016a). The boundary between what is covered by land-use planning legislation and what is not is inevitably somewhat blurry. Chapter 8 discusses the place of urban design in land-use planning, including approaches that reflect Māori values.

Other approaches to evaluating urban development from a Māori perspective

Māori designers and planners have developed a number of approaches to evaluating urban development from a Māori perspective. Awatere et al. (2008, p. 55) noted that "a one size fits all" model or tool is not appropriate as tangata whenua "want to assert their own values and traditions in relation to their built environment and see themselves reflected in the contemporary landscape".

Awatere et al. used Kepa Morgan's mauri model as an example of an assessment tool. Broadly, mauri refers to the life-force that every natural and physical object contains. The mauri model provides a flexible tool to assess whether a proposed development enhances or denigrates the mauri of an environment. The model uses a five-point scale to assess change on a range of dimensions selected for the purpose of the particular assessment (Mauriometer, 2016). Awatere et al. recommended undertaking any assessment as a collaborative process that allows whānau/hapū/iwi values to be incorporated.

Papakāinga and other kaupapa Māori developments

A number of participants explained the interest that Māori (both mana whenua and mātāwaka) have in developing papakāinga and other kaupapa Māori housing, marae areas and associated community facilities (Waikato District Council, sub. 2; Greater Christchurch Urban Development Strategy, sub. DR83; Auckland City Council, sub. DR86; Christchurch City Council, sub. DR90; Whanganui District Council, sub. DR95; Bay of Plenty Regional Council, sub. DR111; LGNZ, sub. DR113; Te Matapihi He Tirohanga mō Te Iwi Trust, pers. comm., 12 January 2017). As Hoskins explained:

> 'Papakāinga' refers to 'papa' or Papatuanuku as the ancestral earth mother and 'kainga' as the village communal living environment. Today the term is used to define both an ancestral land base as well as a collection of dwellings occupied [by] Māori connected by common kinship or kaupapa, located in reasonable proximity to each other and normally relating to a marae or other communal area or building. While traditionally papakāinga are generally conceived of as being rural in nature, with 83% of

> Māori now urbanised, increasingly such developments will desirably be developed in urban and peri-urban areas. (2012, p. 1)

Planning regulations and the reluctance of some councils to provide infrastructure (and the nature of some Māori land title) have posed barriers in the past to Māori aspirations to develop papakāinga and other kaupapa Māori residential developments. For instance, the density of housing desired by Māori developers may exceed zoning provisions. However, over time, some councils have revised plans to recognise and make it easier to develop papakāinga (Awatere et al., 2008; Blair, 2010; Livesey, 2010; Hoskins, 2012). Ngāti Whātua Ōrākei, for example, have used part of the lands returned to them in Treaty settlement to begin developing a papakāinga on an ancestral site in Ōrākei. A land swap under the settlement provided suitable land for a papakāinga, and the district plan now provides for a papakāinga zone.

Other urban papakāinga or kaupapa Māori housing areas are being or have been developed in Māngere, Tauranga, Wellington and Waimakariri, for example (Awatere et al., 2008; Livesey, 2010; Hoskins, 2012; Wellington City Council, sub. DR68; Greater Christchurch Urban Development Strategy, sub. DR83; Christchurch City Council, sub. DR90; Bay of Plenty Regional Council, sub. DR111; LGNZ, sub. DR113).

Yet issues relating to papakāinga and kaupapa Māori developments remain.

Auckland Council (sub. 86, p. 11) submitted:

> The range of issues council has identified in relation to papakāinga development which may warrant further consideration include but are not limited to:
>
> - how best to enable and support papakāinga development across a range of different land types (i.e. Maori land, Treaty settlement land, general titled land)
> - how best to enable and support papakāinga development by mana whenua, matāwaka, marae, iwi, hapū and whanau where there is not necessarily an ancestral link to the land
> - the merits of enabling more consistency in approaches by local government towards papakāinga development (and how that might be effected)
> - the implications, impacts and outcomes for Māori and the wider community of treating papakāinga development as extending beyond housing, to include educational, employment, business and cultural aspects, both on and off-site
> - if additional resourcing and support for the development of papakāinga might be required. Such support could include funding, and the provision of technical and professional advice. (sub. DR86, p. 11)

Bay of Plenty Regional Council (sub. 111, p. 3) submitted:

> SmartGrowth, Housing NZ and Te Puni Kōkiri have developed a 'toolkit' and seminars to support tangata whenua [as they] navigate planning and building issues unique to the beneficiaries of multiply owned land.
>
> But there are many other challenges. BOPRC has representation on the Papakāinga housing development forum and provides ongoing resource consents pre application advice – as examples of ways we help Māori develop their land.
>
> We consider policy should be enabling. However, the challenges to developing multiply owned Māori land generally lie outside the RMA and require broader assistance. Existing tools such as the nationally recognised SmartGrowth Papakāinga Housing toolkit are supported. (sub. DR111, p. 3)

Te Matapihi He Tirohanga mō Te Iwi Trust has been conducting research on the effectiveness of papakāinga provisions in district plans. In particular the Trust has looked at provisions in six operative plans in districts in which papakāinga had recently been built. Common features of plans include provision for higher density development, provision for development across a land block or series of land blocks (rather than consenting on a house-by-house basis), and adjustments to setbacks and separation distances to facilitate communal space. The Trust identified four common limitations to existing papakāinga provisions.

- Papakāinga development is not specifically provided for in urban areas, and neither is communal house development for Mataawaka communities.

- Papakāinga development is often restricted to Māori land, and not specifically provided for on general land which may be owned by Mana Whenua.
- Some papakāinga provisions include rules relating to who may occupy dwellings.
- Many plans include a specific set of provisions relating to Māori land, but only a small number of more recent plans include specific provisions enabling development on land returned under Treaty settlement.
- Some plans only provide for marae and residential activities, but definitions of 'papakāinga' or development on Māori land in more recent plans reflect an understanding of the need for a wider range of economic and social activities to support housing. (pers. comm., 12 January 2017)

The Trust commended to the Commission the 'best practice' guide that Rau Hoskins prepared for Auckland Council as part of the development of the Proposed Auckland Unitary Plan (PAUP) (Hoskins, 2012).

The Commission recommends that a future planning system should provide for a National Policy Statement (NPS) on Planning and the Treaty of Waitangi (section 7.6). The NPS should include guidance on provisions in Plans for papakāinga and kaupapa Māori developments, to help remove unnecessary barriers to such developments. Such guidance should, nevertheless, respect differences in local tikanga and preferences and allow accordingly for appropriate local variations in practice.

R7.1

In a future planning system, the government should (through the proposed National Policy Statement on Planning and the Treaty of Waitangi) provide guidance to local authorities on planning provisions for papakāinga and other kaupapa Māori residential and non-residential developments, whether situated on Māori land or elsewhere.

Because there are differences in local tikanga and preferences, guidance should encourage local authorities to reach agreement with mana whenua and other local Māori communities in their district on planning for kaupapa Māori developments.

Summary – Māori interests in urban planning

Auckland Council provided a helpful review of Māori interests in urban planning:

> It is vital the inquiry and resulting urban planning framework recognises the direct impact it has on Māori – whether this is by enabling development of Māori and Treaty settlement land, providing healthy and affordable housing, making travel accessible to everyone, influencing Māori experiences within our communities, and how Māori values and culture is reflected in our surroundings. (sub. DR86, p. 17)

F7.1

Māori have a broad range of interests in urban development arising from connections with ancestral lands, a desire to live in spaces identifiably Māori, their individual and collective ownership and development of urban land, and their desire for prosperity and wellbeing. Some of these interests require policies that go beyond urban land-use planning.

7.2 The Treaty in legislation and jurisprudence

Māori aspirations for the built environment, expressed in the Te Aranga principles, start with the importance of establishing Treaty-based relations (Box 7.2). The Māori search for a Treaty-based partnership long pre-dated the greater recognition of the Treaty in New Zealand law over the last four decades (Durie, 2009). Before 1975, breaches of the Treaty by the Crown were not justiciable – capable of being decided by a court. In 1986 the Government determined that all future legislation should be enacted against the backdrop of the Treaty.

Provisions in statute, Treaty settlements and evolving jurisprudence have now brought the Treaty of Waitangi closer to the mainstream of government policy and administration. This section briefly describes

how statute and evolving jurisprudence recognise the Treaty and iwi and Māori interests. Section 7.3 outlines current provisions in planning laws for the recognition of iwi and Māori interests, and describes how Treaty settlements have provided for Māori engagement in planning processes. It gives some examples of how statutory provisions have played out in planning practice.

The Waitangi Tribunal

The Waitangi Tribunal was established by the Treaty of Waitangi Act 1975. The Tribunal inquires into claims that the Crown has breached the principles of the Treaty, causing prejudice to Māori (Treaty of Waitangi Act 1975, section 6(2)). The Tribunal has no binding powers of decision, but may recommend to the Crown that it make reparations where a claim is upheld (Treaty of Waitangi Act 1975, sections 6(3) and 6(4)). The Tribunal's interim and final reports often facilitate the claimants and the Crown entering into direct negotiations for Treaty settlements.

When first enacted, the Treaty of Waitangi Act covered only acts or omissions of the Crown from 1975. The Act was amended in 1985 to extend the Tribunal's jurisdiction to the signing of the Treaty on 6 February 1840. Most of the Tribunal's work concerns historical grievances.

The Tribunal has been pivotal for the airing of Māori grievances and facilitating redress for historical Treaty breaches. It has also been playing an important role in bringing to the attention of non-Māori New Zealanders "aspects of traditional knowledge about urban land and water, its deep history, uses and management …" (Ryks et al., 2014). The Tribunal determines its own procedure.

The Treaty in legislation and jurisprudence

As a result of references in statute, Treaty jurisprudence has developed as a distinct body of administrative law. In its *Regulatory institutions and practices* inquiry (NZPC, 2014b), the Commission identified 36 (at that time) principal acts with references to the Treaty or Treaty principles.[63] Three important points are noted below.

- Almost all statutes with Treaty clauses contain regulatory provisions of some kind.
- Most references to the Treaty or to Treaty principles are in statutes governing physical resources and the environment, where Māori have strong iwi and hapū relationships, often involving kaitiaki relationships – including land, water, important sites, wāhi tapu and other taonga.
- The statutes create obligations on a range of parties, and many are not the Crown, such as obligations on local government, Crown entities, Officers of Parliament and a body corporate. This reflects the view that the Crown cannot delegate its Treaty obligations and responsibilities, but is obliged to translate these into policy and procedural requirements for other bodies (including local authorities).

Even if a statute does not contain a Treaty reference, courts may find that the Treaty and its principles are a consideration that a decision maker must take into account. The courts have found that the Treaty is "part of the fabric of New Zealand society [and] is part of the context in which legislation which impinges upon its principles is to be interpreted" (*Huakina Development Trust v Waikato Valley Authority*, p. 210). The courts also apply a general presumption of statutory interpretation that Parliament will legislate in line with the principles of the Treaty (Legislation Advisory Committee, 2014).

The principles of the Treaty

Sometimes legislation refers to the "Treaty"; sometimes it refers to the "principles of the Treaty". Legislators use references to the "principles of the Treaty" for two broad reasons. First, "[I]t is the spirit and intent of the Treaty which is important, rather than its bare words …consistent with the constitutional significance of the Treaty and broad, open textured reading of such documents" (Palmer, 2001, p. 208). A focus on the spirit of the agreement, rather than a more limiting and legalistic focus, promotes a more positive relationship between Māori and the Crown. Second, reference to the Treaty principles better copes with the historical

[63] This excluded Treaty Settlement Acts or references to Waitangi Day.

nature of the Treaty. New issues and ways of managing them emerge, and the Treaty relationship between the Crown and Māori has evolved and will continue to evolve.

The Court of Appeal, the Waitangi Tribunal and the Executive have all offered their views on the nature of the Treaty principles (Box 7.3).

Box 7.3 **Treaty principles – three views**

The Court of Appeal

- A relationship of a fiduciary nature that reflects a partnership imposing the duty to act reasonably, honourably and in good faith
- The Government should make informed decisions
- The Crown should remedy past grievances
- Active protection of Māori interests by the Crown
- The Crown has the right to govern
- Māori retain rangatiratanga over their resources and taonga and have all the rights and privileges of citizenship.

The Waitangi Tribunal

- Partnership
- Fiduciary duties
- Reciprocity – being the cession of Māori sovereignty in exchange for the protection of rangatiratanga, leading to the duty to act reasonably, honourably and in good faith
- Redress for past grievances
- Equal status of the Treaty parties
- The Crown cannot evade its obligations by conferring its authority on another body
- Active protection of Māori interests by the Crown
- Options – the principle of choice
- The courtesy of early consultation.

The Executive[64]

- The Government's right to govern
- The right of iwi to manage their resources
- Redress for past grievances
- Equality – all New Zealanders are equal before the law
- Reasonable cooperation by both parties.

Source: Parliamentary Commissioner for the Environment (PCE), 2002; NZPC, 2014b.

[64] First expressed by the Fourth Labour Government.

These lists are neither exhaustive nor conclusive. The Courts are an important authoritative source on the meaning of the principles, but have also said that, in interpreting the principles, weight should be given to the opinions of the Waitangi Tribunal (*New Zealand Māori Council v Attorney-General,* 1992).

The Court of Appeal has stated that the Treaty of Waitangi enacts a relationship akin to a partnership, and its central obligation is to act in good faith and work out answers in a spirit of honest cooperation (*New Zealand Māori Council v Attorney-General,* 1987). The principle of consultation can be regarded as particularly important. Without it, Māori interests and values can be overlooked when developing and implementing legislation. In 1989 the Court of Appeal found that the principle of good faith "must extend to consultation on truly major issues" (*New Zealand Māori Council v Attorney-General*, 1989). In some circumstances the Crown's obligations will go beyond consultation to include "active steps to protect Māori interests" (*Ngāi Tahu Māori Trust Board v Director General of Conservation*, 1995).

7.3 The Treaty and active protection of Māori interests in planning legislation

The RMA, Local Government Act 2002 (LGA) and Land Transport Management Act 2003 (LTMA) are the three main statutes underpinning urban planning. This section summarises how the three statutes provide for recognition of the Treaty and active protection of Māori interests when making decisions about urban planning. The language of the requirements in the RMA, LGA and LTMA differ. While the RMA focuses on the participation of iwi in planning processes, the LGA and the LTMA talk about engagement of Māori more broadly.

Resource Management Act

The RMA was designed with objectives that include better recognition and active protection of Māori customary rights, taking into account the values and interests of Māori, and providing ways and means for Māori interests to be represented in the development of plans and in consent decisions (Gow, 2014; Sir Geoffrey Palmer & Roger Blakely, sub. 7). These objectives are reflected in numerous parts of the Act, including those listed below.

- Section 6 of the Act identifies "the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga" as a "matter of national importance", which "all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for".
- Section 7 states that "all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to" kaitiakitanga.
- Section 8 requires all persons exercising functions and powers under the Act to take into account the principles of the Treaty.
- Section 33 lets a local authority (subject to specified conditions) transfer one or more of its powers under the RMA to an iwi (among other public authorities).
- Sections 36B to 36E let a local authority (subject to specified conditions) enter into Joint Management Agreements (JMAs) with public authorities, iwi and hapū, to perform duties, powers and functions under the Act.
- Section 61 and section 66 provide that, when preparing a regional policy statement or a regional plan (respectively), a regional council must take into account any relevant planning document prepared by an iwi authority; section 74 has a similar provision for territorial authorities preparing a district plan.
- Schedule 1 of the Act requires local authorities to consult with tangata whenua through iwi authorities when developing plans and policy statements (clause 3); and to consider ways to facilitate iwi authorities engaging in consultation (clause 3B).

The Resource Legislation Amendment Bill 2015, as introduced to Parliament, would require councils to invite iwi to enter into Iwi Participation Arrangements (IPAs) every three years. The arrangements would set out "ways in which tangata whenua, through iwi authorities, participate in the plan-making processes under Schedule 1 of the RMA" (Parliamentary Library, 2015, p. 5). After further consultation, the government agreed to amend these provisions to provide for iwi to initiate the consideration of "Mana Whakahono a Rohe" – a Māori term to refer to IPAs (Freshwater Iwi Leaders Group, 2016).

Local Government Act and Land Transport Management Act

The LGA and LTMA include clauses acknowledging the Crown's obligations under the Treaty, and require councils to facilitate participation by Māori in decision-making processes. In the case of the LGA, these include obligations on councils to:

- provide opportunities for Māori to contribute to decision-making processes (section 14);
- establish and maintain processes for Māori to contribute to decision making (section 81(1)(a));
- consider ways in which they can foster the development of Māori capacity to contribute to decision-making processes (section 81(1)(b));
- provide relevant information to Māori (section 81(1)9c));
- have in place processes for consultation with Māori, in line with general principles for consultation (section 82(2));
- take into account the relationship of Māori and their culture and traditions with their ancestral land, water, sites, wāhi tapu, valued flora and fauna, and other taonga (section 77(c)); and
- set out in the Long-Term Plan the steps that the local authority intends to take to foster the development of Māori capacity to contribute to decision-making processes (clause 8 of Schedule 10).

The LTMA, "to recognise and respect the Crown's responsibilities to take appropriate account of the principles of the Treaty of Waitangi ", sets out "principles and requirements that are intended to facilitate participation by Māori in land transport decision-making processes" (section 4). In particular, the LTMA requires:

- regional transport committees to consult in line with the principles set out in section 82 of the LGA (which include having processes for consultation with Māori) (section 18);
- Auckland Council, New Zealand Transport Agency (NZTA) or other "approved organisations"[65] to "do everything reasonably practicable to separately consult Māori affected by any activity proposed … that affects or is likely to affect…Māori land; or land subject to any Māori claims settlement Act; or Māori historical, cultural, or spiritual interests"(section 18G);
- NZTA and other approved organisations must ,"with respect to funding from the national land transport fund,—

  (a) establish and maintain processes to provide opportunities for Māori to contribute to the organisation's land transport decision-making processes; and

  (b) consider ways in which the organisation may foster the development of Māori capacity to contribute to the organisation's land transport decision-making processes; and

  (c) provide relevant information to Māori for the purposes of paragraphs (a) and (b). (section 18H); and
- NZTA, if required by the Minister, to set out in its statement of intent the steps it will take to "foster the development of Māori capacity to contribute to the Agency's land transport decision-making process" (section 100(1)(f)).

[65] These include regional councils and territorial authorities.

Other legislation for Māori land and for the environment

Māori land comprises four types:

- customary land – land that Māori has always owned and that has never been assigned individual title;
- Māori freehold land - provided for and regulated under the Te Ture Whenua Act 1993 (TTWA) and its predecessors;
- general land owned by Māori; and
- Māori reserves - land officially set aside for cultural and communal purposes (Office of the Auditor-General, 2011b).

Thirty percent of Māori land is located in or near urban centres (NZPC, 2012a; OAG, 2011b). Regulatory barriers to Māori using their land to meet their aspirations, such as the development of papakāinga, are an important consideration for urban planning (section 7.1).

Te Ture Whenua Act

Māori customary and freehold land is governed by the TTWA. A key objective of the Act is for Māori land to be retained as taonga tuku iho (a treasure passed down from ancestors) in the hands of its owners and their whānau, hapū and descendants. The TTWA also aims to promote the use, development and control of Māori land by its owners (and their whānau, hapū and descendants). Yet the Act requires the Māori Land Court to examine and approve most dealings with Māori land.

A bill to reform the law relating to Māori land was introduced to Parliament in April 2016. The bill aims to establish new arrangements for the governance and use of Māori land that provide greater clarity for decisions and "more closely align legislative policy with the principle of rangatiratanga by facilitating the pursuit by Māori landowners of their aspirations for their land" (Parliament of New Zealand, 2016a, p. 2). The bill received its second reading in December 2016.

The Rangitikei District Council submitted that the Commission should consider the proposed reforms as part of its urban planning inquiry (sub. 10, p. 1). The Auckland IMSB told the Commission that the processes between the planning system and the TTWA needed streamlining (pers. comm., 16 March 2016). The Far North District Council submitted:

> Council is interested in how a new planning system could provide for the matters above [recognition and protection of Māori interests]. At a minimum, we support the greater alignment of the Te Ture Whenua Maori and Resource Management Acts to provide a streamlined process for the development of Maori land and recognition and protection of Maori interests. (sub. 45, p. 2)

Overlaps between the two areas of legislation appear to relate to the conditions under which Māori land may be developed, and by whom. Auckland Council supported work on "options for better aligning and streamlining the approvals processes for Māori land use changes". It noted: "Currently, land use changes must be approved by both the Māori Land court and councils in two separate processes" (sub. DR86, p. 12). Christchurch City Council argued that provisions under the RMA need to be flexible to accommodate processes under the TTWA, and incorporate provisions for the use of tikanga Māori to address adverse effects. Whanganui District Council (sub. DR95) and the Bay of Plenty Regional Council (sub. DR111) advocated more guidance to councils and more education on these issues; with a focus on collaboration to meet the aspirations of mana whenua and other Māori communities.

The Commission considers that legislation for a future planning system (Chapter 13) should, to the extent practicable, align with other legislation governing the use of Māori land. The proposed NPS on Planning and the Treaty of Waitangi (section 7.6) should provide guidance to local authorities on good practice in aligning processes.

Other environmental and land use legislation

In its *Using land for housing* report (NZPC, 2015a), the Commission noted provisions in the Housing Act 1955 that give the Governor-General power to use the Public Works Act 1981 (PWA) to take land required for

"State housing purposes". The taking of Māori land under this provision requires the consent of the Minister of Māori Affairs. Part 2 of the PWA has a more general provision for the taking of land (including Māori land) by the Crown or local authorities for essential works. A private members bill was introduced in Parliament in December 2015 to amend the PWA to protect Māori freehold and Māori customary land from being acquired by a Minister or local authority for public works. This would have meant that no Māori land could be taken without consent. The bill did not pass its first reading (Parliament of New Zealand, 2016b).

Other environmental legislation that contains provisions relating to the Treaty includes the Crown Minerals Act, 1991; the Housing Accords and Special Housing Areas Act, 2013; the Heritage New Zealand Pouhere Taonga Act, 2014; the Environmental Reporting Act, 2015; the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act, 2012; the Marine and Coastal Area (Takutai Moana) Act, 2011; and the Treaty of Waitangi (Fisheries Claims) Settlement Act, 1993 (Fox & Bretton, 2014).

Interpretation by the courts of Treaty and Māori interest provisions in planning legislation

The courts have generally interpreted current provisions in statute to protect Māori interests as requiring a balanced approach, which takes into account a range of possibly competing interests and considerations (Box 7.4).

> Recent trends in the Environment Court jurisprudence demonstrate an increasing sophistication in dealing with balancing Māori interests. The Court tends to override them only where the need to recognise and provide for other matters of national importance outweigh those considerations, where the purpose of the RMA under s 5 may be defeated or where there are no reasonable alternatives available as a means of mitigating any adverse effects. (Fox & Bretton, 2014, p. 9)

Box 7.4 **Jurisprudence on Māori ancestral land under the Resource Management Act**

Over the years, court decisions and legislative amendments have been clarifying the implications of recognising and providing for "the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga" under section 6 of the RMA.

The courts have found, first, that the term "ancestral lands" applies "to all land throughout New Zealand that could be regarded as ancestral by Maori, and not necessarily owned by Maori at the present day" (Palmer, 2016, p. 23, referring to *Royal Forest and Bird Protection Society Inc. v W A Habgood Ltd* (1987) 12 NZTPA 76 HC).

Yet, before 2005, the courts found they had no power to reverse planning decisions that did not recognise sites of particular importance to Māori and where the relevant plan had not recorded or notified the site (Palmer, 2016, pp. 23–24, referring to *Helmbright v Environment Court (No 1)* [2005] NZRMA 118, Baragwanath J., and *Ngati Maru Ki Hauraki Inc. v Kruithof* [2005] NZRMA 1, Baragwanath J.). Amendments in 2005 to clause 3 of Schedule 1 of the RMA required councils to be proactive in consulting iwi early in the planning process. This amendment provided Māori with better opportunities to identify sites of importance to be recorded in plans. The Resource Legislation Amendment Bill 2015, currently before Parliament, will strengthen these opportunities by requiring councils to invite iwi to enter into participation arrangements every three years (Parliamentary Library, 2015).

The courts may be required to evaluate the significance of an ancestral site and the nature of recognition under the district plan.

> A recent example of this determination is *Te Tumu Landowners Group v Tauranga City Council* [2014, NZRMA 317]. A dispute arose between the landowners and iwi as to the identification of a former pa site on an area, and the significance of the archaeological evidence. After consideration of the site, and history of usage, the Court accepted that the site was in fact an ancestral site, and approved overlay notations of a significant Maori area and an archaeological management area, on the land. This type of notation may restrict the ability of the landowner to develop the land. (Palmer, 2016, p. 24)

In several cases, the courts have declined to approve the siting of telecommunications equipment or windfarms on sensitive hilltops, especially where alternatives acceptable to iwi were available (Palmer, 2016). In one case, at least, Māori no longer owned the land (*Mason-Riseborough RM v Matamata-Piako DC* (1997) 4 ELRNZ 31). Yet in another case that went to the Court of Appeal, the courts approved a requirement of designation of land at Ngawha Springs for a new corrections facility, despite iwi opposition. There was conflicting evidence on "the spiritual qualities and relevance of a taniwha, which could be affected by the construction and occupation of the land" (Palmer, 2016, p. 25).

> In summary, on matters of assessing the relationship of Maori with their ancestral lands, and incorporating this relevant matter of national importance into the context of plan policies and rules, and resource consent applications, the [Environment] Court has been relatively successful in determining reasonable and acceptable outcomes. (Palmer, 2016, p. 25)

Justice Joseph Williams gave a somewhat different assessment of jurisprudence in this area, reviewing three cases, including the Ngawha Springs case (Williams, 2013). In the cases reviewed, Williams considers that the courts in the end, and on appeal, failed to take appropriate account of Māori cultural sensibilities (about the location of sewer pipes; the taking of water from the Whanganui river; and the recognition of spiritual concerns). Williams argued in relation to Ngawha Springs:

> [A]fter two decades of jurisprudence in these matters the courts can still, with respect, demonstrate relatively limited understanding of the techniques that Māori custom would use to assess the veracity of conflicting evidence on spiritual matters, still less of the metrics from within Māori custom by which effects on spiritual interests might be properly and objectively measured. (p. 21)

In *Marr v Bay of Plenty Regional Council* ([2010] NZEnvC 347, [2011] NZRMA 89) an Environment Judge and a Māori Land Court Judge sat together to consider the renewal of consents for discharges from the Tasman Mill into air, and into the Tarawera River.

> The discharges had adverse effects on the relationship of iwi to their lands and the river, but the economics of the capital investment in mill, employment opportunities, and social benefit to the Kawerau Township, were held to constitute special circumstances justifying approval. That type of outcome confirms the pragmatic approach of the Court in these complex situations. (Palmer, 2016, p. 26)

Treaty settlements and co-governance and joint management arrangements

A number of groups and individuals have observed that the most substantive advances in Māori participation in environmental planning decisions have occurred through the Treaty settlement process rather than the RMA (Waitangi Tribunal, 2011; Williams, 2007; Miller, 2011; Fox & Breton, 2014; Matunga, 2016). Williams argued that

> the process that is setting innovative templates for Māori participation in environmental management is not the usual law and policy path. It is the more *ad hoc* Treaty settlement process which relies far more on pragmatic political do-ability than policy symmetry and which is less adaptable over time. (2007, p. 64)

Compared to the RMA, Treaty settlements are more likely to set up co-governance and joint management agreements (JMAs) that specifically provide for management and operations in accordance with tikanga Māori (the Māori system of law and custom) and as determined by Māori. Matunga (2000b) argued that Treaty settlement processes were inherently likely to focus on environmental management authority:

> Acknowledging the correlation between alienation of Maori lands and resources and the extinguishing of Maori administrative and management control over resources is vital. Many claims to the Waitangi Tribunal have been initiated out of concern at the failure of natural resource law and policy to protect resources valued by Maori and the level of environmental degradation that resulted…Predictably, the current Treaty settlement process is seeking redress in the form of environmental restoration and transfer of actual ownership of natural resources. However, the reinstatement of iwi management and planning authority over these resources and financial compensation to facilitate economic recovery is equally as important. (p. 40)

Fox and Bretton (2014, pp. 19–20) followed Coates (2009a) in arguing that JMAs arising out of Treaty settlements are more likely than those provided for under the RMA. Treaty settlement JMAs give potentially reluctant councils little choice but to participate. Questions of efficiency (a statutory test under the RMA) and political consequences are taken out of their hands. JMAs under Treaty legislation usually relate to land vested back into iwi, and so reduce the potential for perceived conflicts of interest; and iwi are not obliged to balance other matters of national importance, as would be required under the RMA. These statutory arrangements often or usually prevail over RMA plans and policy statements, should conflict arise (Box 7.5).

Box 7.5 provides examples of co-governance and JMAs arising from Treaty settlements. Such arrangements usually provide for the management of circumscribed parts of the natural landscape, and usually do not exclude enjoyment and use by the broader public.

Box 7.5 **Treaty settlements and environmental co-governance and joint management**

Waikato River Authority

The Waikato River Authority (WRA) was established in 2010 as a result of legislation giving effect to a Treaty settlement with Waikato-Tainui; and to concurrent and subsequent agreements with Waikato River iwi (Waikato-Tainui, Ngāti Tūwharetoa, Raukawa and Te Arawa, with the addition in 2012 of Ngāti Maniapoto in relation to the Waipa River). Iwi and the Crown appoint an equal number of people to the WRA.

The main purpose of the WRA is to set directions and administer funds "to achieve the restoration and protection of the health and wellbeing of the Waikato River for future generations". The governing legislation sets out a vision and strategy for the Waikato River that is deemed to be part of the Waikato Regional Policy Statement and which prevails over any NPS or Coastal Policy Statement under the RMA. Local authorities must amend regional and district plans to give effect to the vision and strategy.

The legislation also provides for JMAs between the various local authorities and iwi authorities relating to the content of planning documents under the RMA. Waikato-Tainui, for instance, has a JMA with each of the local authorities in the Waikato and Waipa river catchments. The Waikato Regional Council and Waikato-Tainui began early discussions in 2016 on the content of the next Regional Plan.

Te Urewera

The Te Urewera Act 2014 established Te Urewera as a legal entity, managed by a Board to act on its behalf. The Board initially comprised equal membership of Tūhoe and the Crown, but after 3 years will have six members appointed by Tūhoe and three by the Crown. The Act provides for the Chief Executive of Tūhoe Te Uru Taumatua and the Director-General of Conservation to be responsible for the operational management of Te Urewera. The Board is directed to reflect Tūhoe customary values and law. Work undertaken in Te Urewera does not, subject to certain conditions, require resource consent.

Tūpuna Maunga o Tāmaki Makaurau Authority

As part of the negotiation of Treaty settlements in Tāmaki Makaurau (Auckland), the Ngā Mana Whenua o Tāmaki Makaurau Collective Redress Act 2014 transferred ownership of 14 Auckland maunga (mountains) to mana whenua. At the same time, the Act established the Tūpuna Maunga o Tāmaki Makaurau Authority (Maunga Authority), with equal membership from mana whenua and Auckland Council, and a non-voting member appointed by the Crown. The Authority provides a means for mana whenua to exercise kaitiakitanga over maunga. The Authority must prepare an integrated management plan for maunga and set out the conditions under which an authorised cultural activity (defined under the Act) can be performed. The Authority and Auckland Council are to prepare a yearly operational plan. Auckland Council is responsible for the operational management of maunga. Maunga are to be held in trust for the common benefit of the iwi/hapū of Ngā Mana Whenua o Tāmaki Makaurau and the other people of Auckland.

Source: Auckland Council, 2016; Ngati Tuwharetoa, Raukawa, and Te Arawa River Iwi Waikato River Act 2010; Ruru, 2014; Waikato River Authority, 2016; Waikato-Tainui Raupatu Claims (Waikato River) Settlement Act 2010.

The Waikato District Council submitted on the importance of JMAs arising from Treaty settlements, to the Commission's *Towards better local regulation* inquiry (NZPC, 2013).

> Another regulatory innovation is that of co-governance and co-management with iwi regarding the protection and enhancement of the Waikato River. This has had the positive effect of iwi working alongside the local authorities and developing a healthy joint working relationship … For the Waikato District Council it is not the Treaty of Waitangi that has had the greatest influence but the subsequent raupatu settlement acts. This has positive effects for both parties in being able to cut costs of consultation and appeals to the Environment Court because iwi are now formally at the beginning of the decision-making process. This has led to the inclusion of a new Vision and Strategy to the District plan for the protection and restoration of the health and well-being of the Waikato River and the signing and implementation of a Joint Management and Governance Agreement. (sub. 16, pp. 3–4)

Ryks et al. (2014, p. 8) noted that settlements have "significantly strengthened the resource base of urban iwi and hapū, [allowing them] to employ people with planning and resource management expertise, so that iwi and hapū can participate in urban planning". At the same time, some iwi have become major urban landowners. Provisions for cultural redress in some Treaty settlements provide for recognition of, and restoration of, traditional waterways and ancestral names. More resources have enabled iwi "to collect and record history and traditional knowledge about their ancestral area".

Other arrangements arising from Treaty settlements, although not formally JMAs, are similar to them. The Ōrākei Reserves Trust is an example where Māori own the reserve, but the Trust has a balance of councillors and Ngāti Whātua Ōrākei members.

F7.2 Treaty settlements have often given iwi and hapū a significant role in the governance and management of environmental features and resources. At the same time, the settlement process has strengthened iwi and hapū capabilities and provided resources that enable stronger participation in environmental planning under the Resource Management Act.

7.4 The current law: meshing two traditions

Matunga (2000b) argued that, by recognising "the right of the chiefs, subtribes and people to manage and therefore plan for the[ir] land, villages and treasures", the Treaty had instituted a dual planning tradition (p. 38). What this means in practice today is shaped by the statutes and jurisprudence that frame New Zealand's planning system.

Justice Joseph Williams traversed how, over the last 40 years, tikanga Māori (a term sometimes used interchangeably with "Māori customary law") has progressively entered mainstream New Zealand law through statute and developing jurisprudence. He wrote of a decade-long "grand conversation," beginning in the mid-1980s, between iwi, the courts and the legislature, which accelerated this change (Williams, 2013):

> Outside the Treaty settlement process … the Resource Management Act 1991 was the most important and impressive result of this grand conversation … It was the first genuine attempt to import tikanga in a holistic way into any category of the general law. (p. 18)

The way in which tikanga Māori is incorporated into statute has a strong impact on the extent to which, in practice, Māori are able to make decisions in accordance with tikanga. A reference, for example to kaitiakitanga, might provide for "unqualified exercise of the relevant Māori custom, or much weaker consequences might follow" depending on the wording (Coates, 2009b, p. 43).

The scheme of the RMA, combined with the jurisprudence outlined in Williams (2013), recognises an approach to planning arising from tikanga Māori. In particular, the RMA provides for the transfer of powers to an iwi (section 33); and for JMAs involving iwi and hapū to perform duties, powers and functions under the Act (sections 36B to 36E). The Act also requires councils, in preparing plans, to take into account any relevant planning document prepared by an iwi (sections 61, 66 & 74). Yet the RMA places recognition of a Māori planning tradition within a broader framework shaped by planning traditions based in the general law.

Tikanga Māori and the British legal tradition come from what were, at the time of the Treaty, and still remain, very different cultural norms, values and social relations (Williams, 2013). It is natural to ask how approaches to planning based on each might mesh.

Characteristics of tikanga Māori

Tikanga Māori is the Māori system of law and custom. A key characteristic of tikanga Māori is that it is dynamic and not fixed to a set time or time period or based on a strict application of precedent. The dynamism of tikanga Māori stems from its foundation on principles rather than rules. Yet the same principles mean that interpretation of tikanga Māori does not rely just on the personal views of a particular individual (New Zealand Law Commission, 2001, p. 5).

In the context of urban planning, managing something according to tikanga means applying Māori customary law to the management of an environmental feature or resource. Although tikanga Māori is a Māori way of doing things, it is not exclusively Māori. That is, many of the principles involved are consistent with the values that the broader community holds towards environmental management. The Te Aranga principles, for instance, are an expression of tikanga Māori (Box 7.2).

Importantly, tikanga varies across different mana whenua groups, though in ways that are "guided by the fundamental values that underpin tikanga" (New Zealand Law Commission, 2001, p. 4).

The rule of law – tikanga Pākehā

Most conceptions of the rule of law agree on certain "procedural" principles as being essential to the rule of law. These procedural principles are focused on issues such as how law is made, how known and accessible it is, and who applies it and how.

Lord Bingham (a Law Lord and judge in the House of Lords) identified the core principle of the rule of law in this way: "[A]ll persons and authorities within the state, whether public or private, should be bound by and entitled to the benefit of laws publicly made, taking effect (generally) in the future and publicly administered in the courts" (Bingham, 2011, p. 8). Lord Bingham identified eight principles that together make up the rule of law.

- The law should be accessible and, so far as possible, intelligible, clear and predictable.
- Questions of legal right and liability should ordinarily be resolved by applying the law rather than exercising discretion.
- The laws of the land should apply equally to all, except to the extent that objective differences justify differentiation.
- Ministers and public officers at all levels must exercise the powers conferred on them in good faith, fairly, for the purpose for which the powers were conferred, without exceeding the limits of such powers and not unreasonably.
- The law must provide for adequate protection of fundamental human rights.
- Means must be provided for resolving, without prohibitive costs or inordinate delay, bona fide civil disputes that the parties are unable to resolve on their own.
- Adjudicative procedures by the state should be fair.
- The rule of law requires the state comply with its obligations in international law as in national law.

Reconciling tikanga Māori and the rule of law

In its inquiry on local government regulation, the Commission identified potential challenges in meshing tikanga Māori and the rule of law (NZPC, 2013):

- Decision makers should be independent from those affected and should approach the decision with an open mind. Potential conflicts of interest are a particular issue in JMAs [joint management agreements], where an iwi authority has a role in the decision-making process in respect of a resource in which they have a direct interest.
- The law must be accessible and, as far as possible, clear and predictable. Tikanga Māori is by its nature flexible and dynamic, which means its meaning and application will not always be clear and predictable. Tikanga Māori is also not very accessible to many New Zealanders, as there is a general lack of knowledge and understanding about tikanga Māori. (NZPC, 2013, p. 185)

The Commission also acknowledged a view that "recognising tikanga Māori might depart from the general rule … that the laws of the land should apply equally to all". For instance, "Māori might have an interest in a regulatory matter or environmental feature that is not a property right under the general law of New Zealand, but would be a recognised interest under tikanga Māori" (NZPC, 2013, p. 90). In practice the courts have interpreted the current law in a way that recognises the special interests of Māori, but balances these with other interests (Box 7.4).

Meshing two traditions in practice

A large majority (over 90%) of councils responding to the Commission's survey said they could use the planning system to recognise and protect the special interests that Māori have in the environment, such as kaitiakitanga. Of these, almost 50% of respondents thought they could use the planning system to have a *major* influence in recognising and protecting Māori interests (Colmar Brunton, 2016).

Giving effect to the law requires a council to exercise leadership, to have good internal policies and processes, and to provide guidance for staff and stakeholders (NZPC, 2014b). These things cannot be legislated for. Each urban centre has its own combination of geographic features (land and water), mana whenua, mātāwaka and tauiwi (non-Māori) populations, development history and relationships, and traditions. These unique combinations of circumstances require local actors to work out how to incorporate tikanga Māori into planning practice. Unsurprisingly, different ways of doing this have emerged across the country – some apparently more successful than others. Environment Canterbury supported the idea that recognising and working in the context of local circumstances is important (sub. DR70).

Building relationships

Treaty principles involve a relationship between Māori and the Crown that is in the nature of a partnership (Box 7.3). Incorporation of Treaty principles into legislation brings a strong expectation that local authorities and iwi will establish effective and enduring relationships based on acting reasonably, honourably and in good faith. Māori engagement in environmental management and urban planning will be successful only to the extent that both sides work to secure the mutual benefits arising from that engagement. Developing a culture and capabilities that support such relationships is important on both sides (Chapter 14):

> Developing, building and maintaining relationships between iwi/hapū, property developers and local government are essential, particularly for helping local government and property developers recognise the relevance of Mātauranga Māori for contemporary urban planning. A positive relationship … is more likely to create greater opportunities for Mātauranga Māori to be incorporated into urban planning. Conversely, an adversarial relationship … stymies Mātauranga Māori based design elements from being implemented. (Awatere et al., 2011, p. x)

> The key to successful implementation of kaitiakitanga in urban settlements is positive relationships between iwi/hapū/whānau, property developers, community groups, and local government that have beneficial outcomes for all agents involved. (Ngā Aho & Papa Pounamu, 2016a, p. 25)

Mechanisms to include Māori in decision making and to protect Māori interests

Mechanisms currently used by local authorities to include Māori in decision making and to protect Māori interests include:

- Māori committees and Māori representation on council committees;

- JMAs;
- statutory consultation;
- iwi management plans (IMPs);
- Māori representation on councils;
- registers of Māori interests; and
- requirements for cultural impact assessments (CIAs).

Māori committees and Māori representation on council committees

Māori committees (often mandated by memoranda of understanding between councils and iwi) are a fairly common response to the requirements of section 14 and 18 of the LGA to include Māori in decision making, and to build their capability to do so (NZPC, 2013). The role of committees and particularly the scope of decisions they are involved in varies extensively between local authorities.

The GWRC, for example, has a memorandum of understanding with six iwi in the region (GWRC, 2013). A leadership advisory body, Ara Tahi, with joint membership from the Council and iwi, provides a vehicle to set shared directions for the ongoing relationships. Among other roles, Ara Tahi selects and supports tangata whenua representatives on the Council's standing committees. These representatives have voting rights on the committees.

Separately, the GWRC has, with iwi, established Te Upoko Taiao (Natural Resource Management Committee) to oversee the development of its new regional plan. The Committee comprises seven elected councillors and seven appointed members from the region's mana whenua.

The Proposed Natural Resource Plan for the GWRC area (notified in July 2015) identifies five distinct catchment areas (whaitua) within the region. The GWRC is setting up whaitua committees with iwi, local authority and community representation to establish priorities and programmes within each whaitua.

Selwyn District Council and the Greater Christchurch Development Strategy Partnership submitted on their inclusion of iwi representatives on local government committees:

> Selwyn District Council already has in place a number of agreements with iwi in terms of engagement in planning and other environmental processes…Selwyn District Council is currently underway with its District Plan Review and preparation of its second generation plan. The governance structure of the District Plan Committee includes a representative from Te Taumutu Rūnanga on the committee for the duration of the review. These are some examples of the many arrangements already in place for various governance committees and partnerships with local iwi within Selwyn District and should be viewed as examples or case studies in developing a new urban planning model which embraces Maori participation in urban planning processes. (Selwyn District Council, sub. 33, p. 7)

> Te Rūnanga o Ngāi Tahu has representation at the UDS [Urban Development Strategy] Implementation Committee and council partners have worked collaboratively with Ngāi Tahu to establish many fruitful initiatives in recent years to build relationships and put in place agreements with iwi and papatipu rūnanga in terms of engagement in planning and other environmental processes. (Greater Christchurch Urban Development Strategy Partnership, sub. 44, p. 8)

In some districts, Māori representation on council committees, especially with voting rights, has been controversial (Stuff, 2016).

Joint management agreements and co-governance arrangements

JMAs create, to varying degrees, joint Māori and local authority management of the environment (usually natural features). Treaty settlement processes have established most JMAs to date (section 7.4).

The Commission knows of only two JMAs established under sections 36B to 36E of the RMA. In 2008, Taupō District Council and Ngāti Tūwharetoa, entered into a JMA with limited scope. Under this JMA, owners of multiply owned Māori freehold land may apply to have their resource consent application for that land heard

by a joint committee from the district council and Ngāti Tūwharetoa (Taupō District Council, n.d.; Coates, 2009a).[66]

More recently, Ngāti Porou and the Gisborne District Council entered into a JMA for the management of the Waiapu catchment. The agreement is focused on restoring the health and wellbeing of the Waiapu and its many tributaries through sustainable freshwater and land management (Te Rūnanganui o Ngāti Porou, 2015; Gisborne District Council, 2015).

Voluntary co-governance agreements outside the RMA framework can have a similar character. Selwyn District Council submitted:

> Selwyn District Council along with Canterbury Regional Council and Te Runanga o Ngai Tahu have signed the Te Waihora Co-Governance Agreement to record the commitments of the parties to share the responsibility for Te Kete Ika a Rakaihautu and the wider Te Waihora [Lake Ellesmere] catchment. (sub. 33, p. 7)

In its draft stocktake of council-iwi participation agreements in November 2015, Local Government New Zealand (LGNZ) identified a total of 18 councils with JMA-like arrangements across New Zealand (LGNZ, 2015c). This includes arrangements arising out of Treaty settlements, those made under the RMA, and other voluntary agreements such as joint committees.

Statutory consultation processes

The RMA requires consultation with iwi during the formation of plans (section 7.3). Māori participants in the inquiry frequently told the Commission that they wanted early engagement with councils, to give them ample opportunity to identify their interests that might be affected by plans. District plans may also identify sites of significance to Māori and require consultation with Māori as part of the consent process for developments that may affect these sites.

Effective protection of Māori interests requires their participation in plan formation, not just consultation about already formed plans. Ngā Aho and Papa Pounamu report:

> Plans that have more successfully integrated tikanga Māori and mātauranga Māori have often involved Mana Whenua and Māori planners as part of the plan development team (e.g. Proposed Auckland Unitary Plan; Kaipara District Plan: Christchurch City Plan). (2016b, p. 22)

Some councils submitted that they welcomed Māori involvement in planning.

> Our view is that our council already regard Maaori as a partner and would involve them specifically and integrally in any strategic vision forming exercise as well as in the subsequent drafting of any new regulating plan. (Waikato District Council, sub. 2, p. 10)
>
> We … note that engagement [with Māori] is a crucial part of the planning process. (Horizons Regional Council, sub. 25, p. 3)
>
> The Council remains committed to adopting best practice in engaging with iwi Maori as demonstrated by the He Waka Eke Noa (Effectiveness for Māori Framework, EFM) which was launched in 2015. The framework aims to create a pathway to enable the Council to strengthen Māori communities, create innovative ways to facilitate Māori participation in our decision making and empower our organisation's capacity to respond effectively to our Māori stakeholders and communities. (Wellington City Council, sub. DR61, p. 22)

Yet the Waitangi Tribunal has earlier commented:

> It is fair to say that the system is designed to facilitate Māori reaction to priorities being set by local councils and applicants. While this in itself is an advance on the pre-RMA position, there are obvious structural shortcomings in this approach. Other than the almost entirely unused control and partnership mechanisms … there are few opportunities for Māori to take the initiative in resource management. Māori are usually sidelined in the role of objectors. (2011, p. 115)

Māori participants in the Commission's *Towards better local government* inquiry confirmed that their involvement in planning was largely as objectors (NZPC, 2013). Both Māori and council participants in the

[66] Ngā Aho and Papa Pounamu (2016b) also note that section 188 of the RMA enables iwi to be approved as a heritage protection authority, but has never been used for Māori authorities.

current inquiry said that effective consultation depends on the quality of the ongoing relationship between the parties. For instance, the Waikato Regional Council and Waikato-Tainui told the Commission that the relationship that they had established as a result of their participation in JMAs for the Waikato River had provided a positive base for early consultations on the next Regional Plan (pers. comm., 20 April 2016; section 7.3).

Identifying and making a record of sites of significance to Māori is not always straightforward. Māori, for instance, may be unwilling to make public the existence and location of culturally sensitive sites (wāhi tapu) and urupā (burial places). Some councils use "silent files" to protect this information:

> From a planning perspective, the use of 'silent files' to better recognise and protect wahi tapu and other taonga is a tool that requires greater consideration, consistency of use, and implementation guidance. In Council's experience mistrust from tangata whenua has limited the use of this mechanism although there has been successful implementation for particular groups. Greater awareness, understanding and certainty is required so that this mechanism can be used confidently by Council and tangata whenua. (Far North District Council, sub. 45, p. 2)

Ngā Aho and Papa Pounamu advise that "[c]lear protocols are required to manage sensitive information" (2016b, p. 7):

> [P]oor past relationships mean that Mana Whenua do not always trust planners or resource consent applicants to protect and respect information about their sites of significance. It is appropriate that this knowledge is held by Mana Whenua, not councils, and in many places, this lack of trust has resulted in little if any protection for sites and places of significance to Mana Whenua in planning documents. (2016b, p. 24)

Identification of sites of significance can be controversial. Auckland Council initially identified 61 sites of significance to mana whenua in its PAUP. A second protective overlay identified a further 3 600 sites "of value" to mana whenua. After public debate and criticism, the Council later decided to remove more than 600 of the sites "of value" located on private land, because it was unable to confirm that they were in fact of value to mana whenua (Stuff, 2015a; Stuff, 2015b).

The IMSB told the Commission that there was a misconception that Māori are decision makers through requirements for CIAs related to sites of significance and of value to Māori. Cultural provision in the PAUP attracted a large number of submissions in opposition (IMSB, pers. comm., 20 April 2016). The Independent Hearings Panel (IHP) considering the PAUP later recommended deleting all the identified sites of value from the Plan because "…those sites have not been appropriately identified and evaluated to determine if they are indeed a site of value"(Auckland Unitary Plan IHP, 2016a, p. 14). The decision of Auckland Council to accept this recommendation was appealed by the IMSB on points of law (IMSB, 2016). The IHP envisaged that future identification of sites of value to Māori would follow "appropriate consultation and research" (Auckland Unitary Plan IHP, 2016b, p. 14) and be given effect through a Plan change (Auckland Unitary Plan IHP, 2016a).

Ngā Aho and Papa Pounamu (2016b) note a particular risk for Māori interests with fast-tracked planning processes, compounded, in many locations, by the lack of "a robust evidence base of culture values associated with places"(p. 28). They recommend that councils should place a priority on developing such an evidence base, and otherwise take a precautionary approach to planning that affects places where evidence is currently lacking. Further, they argue that councils should give mana whenua meaningful opportunities to be involved in fast-tracked processes, and that councils should provide a streamlined approach to identify and protect the interests of mana whenua.

Cultural impact assessments

Planners and developers use CIAs to determine the effect of proposed developments on sites of significance or value to Māori:

> A CIA is a report documenting Māori cultural values, interests and associations with an area or a resource, and the potential impacts of a proposed activity on these. CIAs are a tool to facilitate meaningful and effective participation of Māori in impact assessment. A CIA should be regarded as technical advice, much like any other technical report such as ecological or hydrological assessments. (Quality Planning, 2016)

While CIAs are not formally required by the RMA, they may facilitate consenting processes, and district plans may require applicants to obtain them. Participants have differing views on how well they operate in practice. Participants in the Better Urban Planning Wānanga in Auckland in June 2016 reported positive experiences:

> Positive examples of proactive engagement mechanisms include the development of Cultural Impact Assessments (CIA) which recognise development impacts on mana whenua values. [Examples also include] engagement with mana whenua to develop the Proposed Auckland Unitary Plan…which emphasised 'early, effective and meaningful engagement'; and the Regional Policy Statements, all recognising that mana whenua are experts in their own values. In each of these examples mana whenua are paid for their time, knowledge and expertise and respected for the intrinsic benefits that they collectively bring to the process. (Ngā Aho & Papa Pounamu, 2016a, p. 25)

Auckland Council (sub. DR86), Canterbury District Health Board (sub. DR59) and the New Zealand Association of Impact Assessment (sub. DR105) also supported the use of CIAs. The Bay of Plenty Regional Council cited its Regional Policy Statement to emphasise that mana whenua have a central role in determining whether CIAs are required and their content: "…only tangata whenua can identify and evidentially substantiate their relationships and that of their culture and traditions with their ancestral Lands, waters…" (sub. DR111, p. 4). Ninety-one percent of iwi and hapū participants in Te Puni Kōkiri's 2012 Kaitiaki Survey reported that CIAs were either "useful" or "very useful" (Te Puni Kōkiri, 2013).

Other submitters variously reported that, across councils, the thresholds for CIAs were unclear, the way in which they were carried out was variable, and the basis for fees charged was not always transparent (Federated Farmers of New Zealand, sub. 21; Trustpower, sub. DR61; Horticulture New Zealand, sub. DR73). Federated Farmers and Trustpower each found that some iwi authorities lacked the capacity to carry out CIAs well and appropriately and in scope. They also found frequent delays in deciding whether a CIA was required and in completing one in a timely manner. Trustpower identified a need for each CIA to be "fit for purpose relative to the scale of the development proposed" (sub. DR61, p. 6). Yet the Wellington City Council (sub. DR68) reported that CIAs (in its area) are only requested in clearly defined circumstances; while the Bay of Plenty District Council said that CIA fees were "set by the author in line with standard consultancy rates" (sub. DR111, p. 4). The Bay of Plenty District Council added:

> Tangata whenua face many challenges preparing CIAs including addressing multiple Māori interests in an area, concurrently dealing with multiple CIA requests and translating concepts and ideas across cultural divides. (p. 4)

The GWRC has found that lack of early consultation with iwi increases the risk for applicants of delays in CIAs being completed (sub. DR80).

A number of submitters noted that many iwi lack the resources to carry out CIAs appropriately and that councils and central government can play a role in helping to build capacity (Federated Farmers of New Zealand, sub. 21; Trustpower, sub. DR61; Whanganui District Council, sub. DR95; GWRC, sub. DR80; New Zealand Association of Impact Assessment, sub. DR105). The GWRC runs workshops with mana whenua to increase mutual understanding about information requirements for CIAs and how, at the discretion of iwi, information might be shared. The Christchurch City Council and Ngāi Tahu "have sought to address the barriers to undertaking [CIAs] through agreements with and financing of the environment agency Mahaanui Kurataiao Ltd, along with early engagement in the planning process" (Christchurch City Council, sub. DR90, p. 11). Whanganui District Council identified a risk that if councils were too closely involved they could hinder the growth of iwi technical expertise.

CIAs can provide a valuable means to identify Māori interests in, and the potential impact of, developments on sites and resources of significance to Māori. Yet it appears that CIA practice, including the charging of fees, the thresholds for requiring a CIA, and the timeliness of assessments, has developed unevenly across the country. This reflects variable capabilities both in councils and among iwi authorities, and a lack of clear guidance on CIA practices.

Horticulture New Zealand submitted:

> Horticulture New Zealand considers that clear guidelines and a more consistent approach as to when cultural impact assessments are required would be useful…In terms of timing, if clear guidance is available as to when such assessments are required this will enable applicants to start the process rolling early. It will also assist iwi/hapu with knowing when their services may be required – as would early notification of the application to iwi/hapu…Greater clarity around the scope of such assessments, what they need to cover and the detail for this, would assist iwi/hapu to determine resourcing as well as likely costs associated with producing such assessments. (sub. 73, p. 12)

Trustpower also argued the need for more guidance on "[t]he appropriate protective measures to be applied to historic sites on private land" and the thresholds for, and contents of, CIAs (sub. DR68, p. 14).

More guidance on CIAs practices would help develop capability and greater clarity and consistency across the country. The Commission is proposing that, in a future planning system, the Government should issue a National Policy Statement on Planning and the Treaty of Waitangi (section 7.6). The NPS should include guidance to local authorities on how to work with mana whenua to identify and protect sites and environmental features of significance to mana whenua, and on reaching agreement with mana whenua on the conduct and resourcing of CIAs. Local authorities should be encouraged to respect local tikanga and mātauranga, while working constructively to find processes and practices that work well for all parties in resource use decisions.

Reaching an agreement on a transparent and fair way to set fees will help secure confidence in the conduct of CIAs. While not directly applicable to fees charged by mana whenua for CIAs, the Auditor-General's guidelines for charging fees for public sector goods and services sets out relevant principles (OAG, 2008).

R7.2

In a future planning system, the government should provide clear guidance (through the proposed National Policy Statement on Planning and the Treaty of Waitangi) to local authorities on how to work with mana whenua to identify and protect sites and environmental features of significance to mana whenua.

Guidance should cover processes to reach agreement with mana whenua on the threshold for, the conduct of, and fee setting for cultural impact assessments for proposed developments that may impact on such sites and features.

Iwi management plans

Sections 61, 66 and 74 of the RMA require that District and Regional Plans and Regional Policy Statements take into account "any relevant planning document recognised by an iwi authority" and lodged with the council, where that document is relevant to the resource management issues of the region. The legislation does not prescribe the form or content of such planning documents.

Ngā Aho and Papa Pounamu reported:

> Iwi Management Plans and Iwi Planning Documents are a valuable way for Mana Whenua to identify, record and disseminate specific values, rights and interests they have in any given environment. Iwi planning documents assist Mana Whenua to determine a consistent approach to the multiple planning processes they are asked to participate in. (2016b, p. 24)

Matunga argued that IMPs

> represent perhaps the most significant Maori development in environmental planning in the last 20 years as articulations of tribal thought …Most iwi and hapu recognise their importance and have either prepared or are preparing one. The first-generation plans have tended to cover broad policy across the iwi social, economic, cultural, environmental and justice spectrum. Some iwi are preparing second-generation plans and further refining preparation methodology, scope and policy detail, while others are preparing hapu or iwi environmental plans as a subset of broader tribal planning …Already, second-generation plans are showing a greater implementation focus, or action orientation, and are targeting specific iwi resource issues and problems. (2000b, p. 45)

The Te Puni Kōkiri 2012 Kaitiaki Survey of iwi and hapū organisations participating in RMA processes reported that 92% considered that iwi/hapū management plans were either "useful" or "very useful" (Te Puni Kōkiri, 2013). Yet at the time of the survey only 23 groups out of 79 respondents had lodged IMPs with councils, most commonly because they were incomplete or under review.

IMPs complement other consultative processes for iwi to participate in resource management plan making. Under current law, councils decide how they will take IMPs into account in formulating plans and policy statements. Ngā Aho and Papa Pounamu note that "the effectiveness of iwi planning documents is hindered by limited resources and limited recognition in the existing planning system" (2016b, p. 24).

The Ministry for the Environment identified 190 IMPs lodged with local authorities throughout New Zealand in 2015 (MfE, 2016i).[67]

Māori representation on councils

The Local Electoral Act 2001 provides that local authorities may establish Māori wards or constituencies. A local referendum may be held to confirm or rescind such a decision. To date, two regional councils (Bay of Plenty Regional Council and Waikato Regional Council) have established Māori constituencies to elect councillors. Attempts to establish Māori wards for other councils have failed to gain support from incumbent councillors, or decisions to establish such wards have been rescinded as a result of referenda.

A number of commentators have proposed that electing Māori representatives to local authorities become mandatory (eg, Matunga, 2016). This raises issues about the form and purpose of local democracy that go beyond the inquiry's terms of reference (Chapter 1).

The Independent Māori Statutory Board model

As an alternative to Māori representation on Auckland Council, the Local Government (Auckland Council) Act 2009 established the IMSB.[68] The board has nine members – seven representing mana whenua and two representing mātāwaka. The Minister of Māori Development invites mana whenua to form a selection body, which then selects the board members. The Māori plan for Tāmaki Makaurau (Auckland) recognises 19 mana whenua groups.

Section 81 of the Act charges the IMSB with assisting Auckland Council to make decisions, perform functions and exercise power by promoting issues of significance to Māori in Tāmaki Makaurau and ensuring the council complies with statutory provisions referring to the Treaty of Waitangi. In particular, the IMSB has:

- issued a schedule of issues of significance to Māori in Tāmaki Makaurau (IMSB, 2012a);
- consulted on and published a 30-year Māori plan for Tāmaki Makaurau (IMSB, 2012b); and
- undertaken two audits (the most recent in 2015) of how well the Council and council organisations comply with statutory provisions referring to the Treaty of Waitangi (IMSB, 2015).

The IMSB must appoint up to two persons to sit on each Auckland Council committee that deals with natural and physical resources. Auckland Council may ask the IMSB to appoint members to other Auckland Council committees and boards.

The New Zealand Council for Infrastructure Development (NZCID) proposed that the Auckland IMSB model is applied more widely (NZCID, 2015a, p. 50). In their model, the number of unitary councils across the country would be relatively small. Elected local boards under those councils would represent communities of interest in overseeing the provision of local amenities and community services. IMSBs would have a similar status and equivalent powers to the Auckland IMSB.

The IMSB model is suited to some regions – particularly those with a large number of mana whenua groups. The model provides a mechanism to identify and voice common interests. In other regions, particularly those

[67] This may include double-counting some IMPs lodged with more than one local authority.

[68] The Royal Commission on Auckland Governance had recommended that Auckland Council include two councillors elected by voters on the Māori electoral roll and one councillor appointed by a Mana Whenua Forum (Royal Commission on Auckland Governance, 2009b).

with a small number of well-established mana whenua groups, direct participation in planning processes is logistically easier.

The Commission is proposing the establishment of a National Advisory Board on Planning and the Treaty of Waitangi. One of the Board's functions will be to carry out a Treaty of Waitangi audit of the planning system every five years (Chapter 13). The experience of the IMSB in Auckland with its Treaty audit will usefully inform this function at a national level. The Wellington City Council's Effectiveness for Māori framework similarly provides "key performance indicators and steps to assist the Council and its officers to meet its statutory obligations to Māori/Treaty of Waitangi across a range of Council functions" (sub. DR61, p. 21).

7.5 How well does the planning system recognise and protect Māori interests?

Commentators consider that the planning system has had mixed success in recognising and protecting Māori interests in planning decisions. However, practice and capability have been developing over time, supporting a more positive assessment. This has been stimulated by arrangements arising from Treaty settlements; and by many councils and Māori establishing positive ongoing working relationships (section 7.3 and section 7.4).

Commentators provide a mixed picture of progress under the RMA

In 2003 Neill highlighted poor understanding by councils of Māori interests and differing views about the purpose of council–Māori engagement.

> Councils seldom have such a well-developed analysis of the strategic position of Māori… As a consequence, the rationale for allocating resources, or developing and maintaining structures, processes and people to facilitate the relationship and make effective use of the information that is gathered is unclear, and this becomes a real impediment to productive relationship building….
>
> In general, for local government, the momentum for involving tangata whenua is seen as a legislative requirement, or an imperative in relation to a particular environmental issue. Continuity of the relationship is not emphasised. Through my conversations with iwi and hapū representatives and Māori practitioners involved in relationship building with councils, I have come to understand that they value these relationships as an ongoing process, part of nurturing Māori self-determination, and asserting cultural preferences and processes, themes widely noted by others (see for example, Coates, 1998; and commentaries from Durie 1998; Maaka 1998), as well as a way to address environmental matters. (Neill, 2003, pp. 3-4)

Professor Hirini Matunga had argued in 2000 that "[t]he imagery of the Act eight years on is of the Māori Treaty partner on the outside, looking in on a passing parade of environmental decision and policy processes controlled by the other" (Matunga, 2000b, p. 45). Matunga pointed out that, "despite various applications by iwi", even the section 33 provisions allowing a local authority to transfer one or more of its powers had not been implemented in practice. Yet Matunga also argued that the RMA gives tacit recognition to a Māori iwi-based planning system, the most prominent manifestation of which is the IMP (section 7.4).

In 2016, in an address to the New Zealand Planning Institute conference, Matunga made a relatively more positive assessment of the success of the RMA from a Māori perspective (Matunga, 2016). In terms of providing for Māori participation in planning decisions, he rated the RMA as 7 out of 10, compared to 9 out of 10 for Treaty settlements, and only 4 or 5 out of 10 for local government legislation.

Unfinished business

Joseph Williams (at the time Chief Māori Land Court Judge) had concluded in 2007 that the RMA had succeeded in bringing the "traditional and spiritual landscape of iwi and hapū" into focus (Williams, 2007, pp. 61–62). Yet, from a Māori point of view, regulatory agencies had only imperfectly translated these perspectives into policies and effective practice:

> [T]he RMA story remains a 'could be'; a 'not yet achieved' in National Certificate of Educational Achievement (NCEA) terms, 'some room for hope with more effort', some progress but not enough to say thorough ongoing systemic change has been achieved. (Williams, 2007, p. 62)

The Waitangi Tribunal (2011), in the indigenous flora and fauna inquiry (for a time presided over by Williams), also argued:

> The RMA … has not fulfilled its promise. It has not delivered appropriate levels of control, partnership, and influence for kaitiaki in relation to taonga in the environment. (p. 273)

Williams' assessment remained much the same in 2013:[69]

> What has changed in environmental regulation over the last 20 years is that Māori issues that were never on the table are now on the table for discussion at council level and in court, even if they must compete for air with a dozen or more other considerations, are highly defeasible and only rarely decisive ….[yet the Act] has not over the last two decades produced examples of any significant step change in the *structural* relations between the necessary players under the Act. (Williams, 2013, p. 22)

Williams referred in particular to the lack of use of provisions under the Act to transfer decision-making powers to iwi and hapū. He also argued that, in practice, IMPs "have not enabled iwi and hapu to take the resource management initiative on matters of significance". Williams concluded, "[t]he RMA is frankly not pulling its weight. Instead, such modest advances as iwi and hapū are achieving in these structural areas are almost exclusively the result of Treaty settlement negotiations with the central Crown" (2013, p. 22).

Miller (2011) found that

> although the RMA ha[s] improved the planning system in terms of the recognition of Maori cultural and spiritual concerns and the inclusion of structures for Maori participation in planning processes, there is still much more that can be done to ensure that the participation is effective. (p. 162)

Yet Miller later submitted to the current inquiry that "[w]hile not perfect [the RMA] has made Māori issues and a Māori world view much more prominent parts of planning processes and the act's enforcement provisions work well" (Associate Professor Caroline Miller, sub. 50, p. 9).[70]

Henderson (2011) took a similar position to Matunga (2000b) in noting that the RMA represents a limited commitment to including the rights and values of Māori in resource management planning. Yet he also noted that "[k]nowledge of Maori values is advancing, and iwi are becoming more involved and better resourced, in some instances, to play an increasingly significant part in resource management" (p. 17). Henderson identified positive developments including:

- more JMAs;
- case law and Waitangi Tribunal deliberations that have allowed a greater investigation into many cultural ideas and practices;
- more awareness among policymakers and decision makers of the need to include consideration of, and recognition of, the legitimacy of Māori values;
- greater capability among iwi to engage in planning processes and decisions; and
- considerable development of the case law on consultation (2011).

The Auckland IMSB, in its second Treaty of Waitangi 3-yearly audit of Auckland Council, provided further evidence of improving capability and practice – though tempered by slow progress in implementing recommendations from the 2012 audit (IMSB, 2015). The audit, conducted by PwC, found:

> In contrast to the first audit, there is:
>
> - good awareness of legislative obligations to Māori, Te Tiriti principles and the audit, its purpose and importance
> - executive and senior level interest and support in securing a clear and readily implementable work programme, that dovetails into existing projects and initiatives, without delays

[69] Joseph Williams was appointed as a judge of the High Court in 2008.

[70] Caroline Miller is Associate Professor of Planning at Massey University, Palmerston North.

- a number of instances where good practice is occurring, and this is by design, rather than due to the institutional knowledge held by certain individuals. (p. 10)

The audit found that "engagement with Mana Whenua and Mataawaka continues to be a work in progress" (p. 10).

Wellington City Council submitted:

> The challenge for local authorities is to establish robust mechanisms that fulfil, in a meaningful manner, the statutory obligations designed to protect Māori interests. On a national basis the capability of local authorities to fulfil statutory obligations to Māori/Treaty of Waitangi is inconsistent and ad-hoc, and this means that the active protection of Māori interests continues to be at risk. (sub. DR68, p. 21)

Professor Hirini Matunga summed up:

> …the basic architecture or framework for recognising, providing for and protecting Māori interests in the environment *at this point in NZ's history,* is sound, but in need of significant strengthening to reflect evolution in the Treaty partnership, growth in iwi management planning, progress on Treaty settlements over the last 25 or so years and complexity in the urban Māori context…the 'potential' of the Resource Management Act 1991 to recognise and provide for Māori interests in the urban context has only been partially realised. Various national, regional and district planning and policy 'opportunities' and instruments built into the Act to provide for Māori and indeed Treaty interests, have had limited uptake [and been inconsistent in application]. (pers. Comm., 30 January, 2017)

What the Commission heard

The Commission has met with iwi groups; Māori design and planning professionals; and councils to discuss Māori engagement in planning and active protection of Māori interests in planning. Participants confirmed the picture of uneven performance around the country, with patches of good and excellent practice. They spoke of areas where progress had been made in recognising and protecting Māori interests in the environment, often as a result of Treaty settlement processes and the development in capability that this has brought.

Almost universally, Māori participants spoke of their desire to establish good working relationships with councils that would provide opportunities for early engagement in planning processes. This way they could identify their interests early enough for them to receive adequate protection. At the same time, they welcomed approaches that sought to provide the mutual benefits for councils, local communities and iwi that arise from Māori engagement.

Some iwi participants told the Commission that they were careful to prioritise the issues that they engaged on, to make the best use of their resources. They saw a need to filter a potentially large volume of routine requests for consultation.

Māori participants were also keen to see approaches to urban design that would "[c]reate great spaces and places for Māori to be Māori – in the urban environment" (Ngā Aho & Papa Pounamu, 2016a, p. 31). Many see the Te Aranga cultural landscape principles, based as they are on mātauranga Māori, as a good starting point (Box 7.2). The IMSB told the Commission that a key objective is for Māori to see themselves in Auckland – including the return of customary Māori place names, a bicultural waterfront and bilingual signage (pers. comm., 16 March 2016). The IMSB promoted inclusion of the Te Aranga principles in the Auckland Design Manual (Box 7.2).

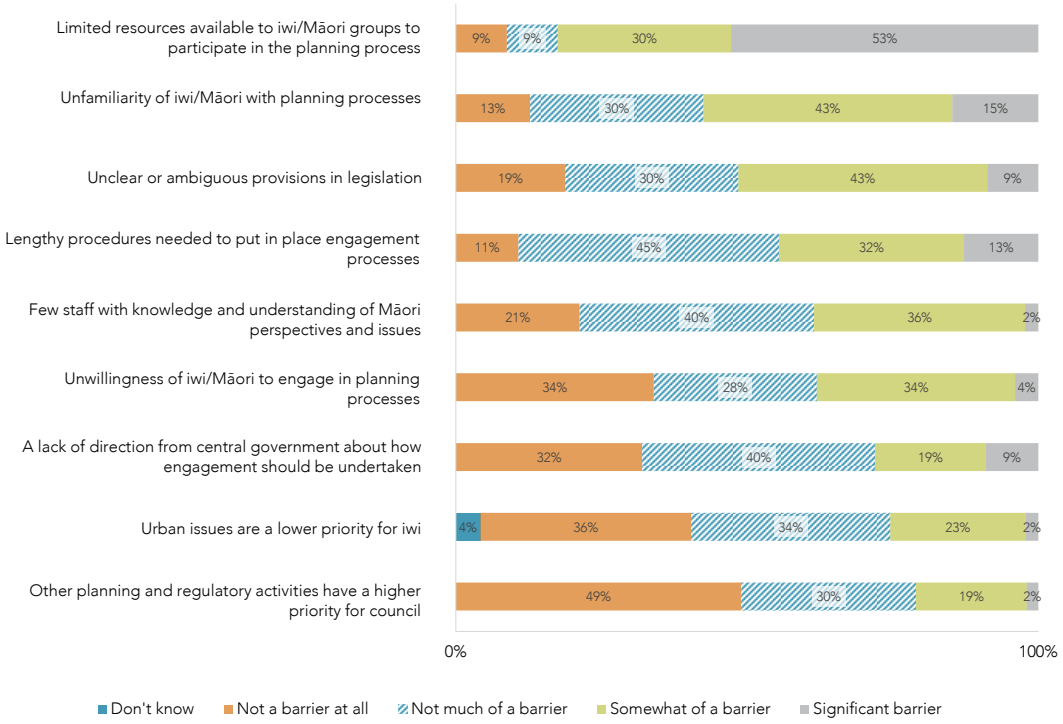
This positive picture was complemented by the perspectives of developers. Some Auckland developers told the Commission that they welcomed the contribution that mana whenua made to design choices based on the Te Aranga principles.

Explanations for mixed success recognising and protecting Māori interests

Commentators have identified a number of reasons for mixed success in recognising and giving effect to Māori interests in the planning system. Reasons offered include capacity gaps, differing expectations about the purpose of engagement, a lack of central government guidance, and lack of support from some elected representatives.

In its survey of councils, the Commission asked about what they saw as the barriers to engagement with iwi on planning. Councils saw limited resources available to iwi/Māori groups to participate and their unfamiliarity with planning processes as the most significant barriers. Forty percent of councils also identified lack of staff with the required knowledge and understanding of Māori perspectives as an issue. More than 50% thought that legislative provisions were unclear or ambiguous, though only 28% thought lack of direction from central government was a significant problem (Figure 7.2).

Figure 7.2 Councils' perceptions of barriers to engagement with iwi/Māori on planning



Source: Colmar Brunton, 2016.

Notes:

1. Responses to the questions "To what extent is each of the following 9 things a barrier for your council?"
2. Due to rounding, numbers may not total to 100%.

Council and Māori capabilities to engage

Many inquiry participants confirmed shortfalls in capability to engage. This applied to some councils and some Māori groups (eg, IMSB pers. comm., 20 April 2016; Ngā Aho & Papa Pounamu, 2016a). This confirms the view that the Commission reached in its *Towards better local regulation* inquiry (NZPC, 2013).

The Commission's survey of councils for the current inquiry found that councils perceived the capability of iwi and Māori communities to engage as a major barrier; while the knowledge and skills of their own staff was a lesser barrier (Figure 7.2). Caution is needed in interpreting this data. Allowance needs to be made for differing perceptions of capability. For instance, Backhurst et al. (2003, p. 12) found that "although planners and other council staff … felt that their knowledge of the treaty and kaitiakitanga was good, iwi ranked it much lower" (reported in Miller, 2011, p. 161).

Consistent with this, Ngā Aho and Papa Pounamu reported:

> [I]n our experience, many planners and decision-makers do not know how to meaningfully integrate tikanga Māori and mātauranga Māori into planning processes. This lack of capability may mean that information provided through submissions from Mana Whenua and Cultural Impact Assessments is not integrated into the decision-making process. (2016b, p. 22)

Likewise, 38% of iwi and hapū participants in Te Puni Kōkiri's 2012 Kaitiaki Survey reported that council's capability to engage was either "poor" or "very poor." Problems related to poor attitudes, lack of iwi and

hapū influence at the policitcal level, a history of poor relationships, and low levels of understanding about iwi and hapū. Unsurprisingly, around 30% of Iwi and hapū participants in Te Puni Kōkiri's 2012 Kaitiaki Survey thought that their input into regional and district plans and policy statements was "poorly" or "very poorly" reflected in the final document; though 31% thought their input was "very well" or "well" reflected (Te Puni Kōkiri, 2013).

Yet a picture is now emerging of capability for engagement growing over time. This is partly the result of Treaty settlement processes building Māori capability and of settlements providing iwi and hapū with more resources. Consistent with this, the Rangitikei District Council submitted that it "is aware that those Iwi who are still in the Treaty claim process lack the capacity to engage with planning processes" (sub. 10, p. 1). Growing capability is also partly the result of learning and relationship building from increasing engagement on planning issues.

Williams (2007) implied that without any change in the current legal framework

> [a] stronger iwi presence in environmental matters will be an inevitable result of the treaty settlement process. That presence will be more sophisticated and better resourced. It will have access to networks and templates among other iwi. It will have access to Wellington. We can expect the tribal role to shift from a reactive objection-based mode of participation to a proactive mode. Iwi will rely on iwi management planning techniques. They will have their own proposals to advance and their own resource management solutions…All local government will need strong strategic relationships with iwi. The current patchy situation will not be sustainable in 2021. (p. 64)

The Commission's survey found that 45% of councils thought the necessary lengthy procedures were a barrier to successful engagement. The Rangitikei District Council submitted on the pressures involved:

> [T]here is considerable tension between allowing public participation (including engagement with Maori) and ensuring reasonable timeframes for those seeking to use land in different ways. (Rangitikei District Council, sub. 10, p. 1)

Yet many inquiry participants told the Commission that early investment in developing successful relationships smoothed the path for subsequent planning and consenting processes.

> A further issue relating to capability is the responsibility that councils have under the LGA to consider and take steps to "foster the development of Māori capacity to contribute to decision making-processes" (section 81(1)(b)). Almost 60% of councils provide support in kind or financial support for iwi/hapū involvement in plan-making processes; 43% of councils do so for resource consent processes. (MfE, 2016h)

Some participants identified a need for proactively building and resourcing mana whenua capability to engage (Box 7.6). Just over half of iwi and hapū participants in Te Puni Kōkiri's 2012 Kaitiaki Survey reported that their capacity (defined as time money and resouces) to engage was "poor" or "very poor", while around 19% of groups rated their capacity as "good" or "very good" (Te Puni Kōkiri, 2013).

Box 7.6 **Inquiry participant views on capability building**

> Often the need to provide the capacity for mana whenua to be involved and participate meaningfully in Resource Management Act processes has not been considered. It is up to the discretion of the council involved to provide the funding and often this is considered too late in the process for mana whenua to engage meaningfully. (Ngā Aho & Papa Pounamu, 2016a, p. 11)
>
> Preparing an iwi-planning document requires resources, skills, and time. Iwi or hapū that have not prepared an iwi planning document, or have yet to update their iwi planning document are disadvantaged in the planning processes which must often meet short timeframes. Without the robust evidence base provided by an iwi management plan, decisions are made that impact on Māori values, rights and interest without appropriate consideration of tikanga Māori and mātauranga Māori… sufficient support is required for Mana Whenua to prepare, review and update these documents. (Ngā Aho & Papa Pounamu,2016b, p. 25)

> Disparity of resources between councils and Māori is another significant issue that limits their ability to participate in planning process…Government should invest in programmes that educate council planners and decision makers on the importance of long-term planning partnerships with Māori. This commitment will enable barriers to implementation of legislation to be addressed. A prerequisite of effective partnership is that the partners have an awareness and understanding of each other's values. To this end it is important that councils invest in educating themselves on mātauranga Māori. (GWRC, sub. DR80, p. 16)
>
> Practical support and resourcing are needed to grow Iwi capacity. This is more important than more guidance. In practice CIAs are being requested and many applications are being considered by Iwi; but their ability to respond is limited by stretched administrative resources and limited human resource. Government should provide training, help with standards and audit applications to ensure responsibilities are being met. (Bay of Plenty Regional Council, sub. DR111, p. 4)
>
> We support the comments in the draft report (pp. 272, 302) that capabilities are a key factor in developing and supporting effective relationships with iwi and hapū and local authorities. Building capacities within Environment Canterbury and supporting the Papatipu Rūnanga in Canterbury to develop practical skills and experience are core components of the Tuia programme. For example, Environment Canterbury assistsentities set up to deliver cultural impacts advice to councils on resource consent applications. (Environment Canterbury, sub. DR72, p. 10)

Chapter 14 discusses the need to strengthen councils' capability to engage with Māori.

Unclear legislative provisions and lack of guidance

Just over a half of councils responding to the Commission's survey reported that unclear or ambiguous provisions in legislation were a barrier to mana whenua engaging in planning. Although the current legislative framework provides ample room for stronger engagement between councils and mana whenua, practice is uneven across the country. This is partly because of differences in capability and willingness to take opportunities; but lack of clarity about statutory expectations may play a role.

Lack of guidance from central government is a related issue. While, in the Commission's survey, this was not raised by many councils as a barrier, participants in the Better Urban Planning Wānanga in Auckland in June 2016 considered:

> There has been little guidance provided by central government on how these provisions [in the RMA] should be implemented in practice. It has been left up to individual councils to determine their own approach, but often they do not have people with the right skills or understanding of Te Ao Māori and tikanga to be able to translate these concepts into planning documents, processes, and outcomes. (Ngā Aho & Papa Pounamu, 2016a, p. 11)

The GWRC submitted:

> Council attitudes to implementation of legislative requirements to recognise and protect Māori interests in planning lack consistency. Māori planning perspectives are informed by mātauranga Māori (indigenous knowledge). The precepts that underpin mātauranga Māori are not widely understood by council planners and decision makers meaning that the inclusion of Māori perspectives in planning process is uncertain and often reactive. Of greatest concern are the lost opportunities resulting from lack of Māori involvement in processes, especially the opportunity to support the development of Māori planning and its contributions to urban design.
>
> It is important that councils have an understanding of mātauranga Māori in order to provide for the inclusion of Māori perspectives throughout the planning cycle. (sub. DR80, pp. 15–16)

Section 7.6 recommends that, in a future planning system, the government provides guidance on enabling the expression and active protection of Māori values, rights and interests though a National Policy Statement on Planning and the Treaty of Waitangi.

Useful guidance on Māori participation in planning needs to be sufficiently flexible to address and respect the wide variety of local circumstances, capabilities, environmental features, social and cultural mixes; and differences in tikanga and mātauranga (Christchurch City Council, sub. DR90). General direction in legislation is unlikely to fulfil this requirement. Auckland Council submitted:

> The Tāmaki Makaurau mana whenua governance landscape is very unique; it is rich and complex in the nature and number of groups and relationships present. Further, Auckland's Treaty settlement landscape is evolving as iwi and the Crown enter into settlements. Such settlements influence the ability and nature of iwi to be involved in various aspects of the urban planning frameworks and in the nature and focus of specific relationships with local government and the Crown. Any future urban planning framework needs to provide for this level of rohe-specific complexity. (sub. DR86, p. 5)

Mixed political support

In some local authority districts, political support for deeper engagement of Māori in planning may have been lacking. For instance, Fox and Bretton (2014, pp. 12–13) follow Coates (2009a) in suggesting that one reason why JMAs under section 33 of the RMA may be few in number is because of fear of political consequences and perceived conflicts of interest on the part of iwi.

Ngā Aho and Papa Pounamu, similarly argue:

> We suggest that the limited use of co-governance mechanisms indicates a lack of political will. Based on our experience, we suggest that it is often politically difficult for councils to include Mana Whenua representatives on council decision-making committees without strong direction from Central government requiring Māori representation. (2016b, p. 23)

This is an issue that will take time and a growing understanding from experience of the mutual benefits of engagement to overcome. For instance, evidence on successful JMAs is growing and points to the importance of establishing good relationship-building processes (OAG, 2016). Stronger guidance on engagement through the proposed National Policy Statement on Planning and the Treaty of Waitangi should accelerate progress (section 7.6).

F7.3

Māori engagement in urban land-use planning is growing as a result of improving capability in local authorities and Māori groups, experience from successful practice (often stimulated by Treaty settlements) and strengthening relationships. Yet the system's performance has proven uneven, due to factors such as:

- constraints on the capability of some councils and some iwi to engage with each other;
- lack of clarity about how to implement legislative requirements for Māori participation in planning; and
- varying expectations about the nature of council–Māori relationships.

7.6 Better recognition and active protection of Māori interests

Māori have diverse interests in the urban environment, some of which more closely involve land-use planning than others (section 7.1). In particular, mana whenua have cultural connections with ancestral lands expressed through the obligation of kaitiakitanga. Māori are landowners and many wish to be able to develop their land in line with tikanga Māori, for instance in the form of papakāinga. More broadly, Māori want to see themselves reflected in the urban cultural landscape. They would like to see urban design recognise, value and draw on mātauranga Māori (Ngā Aho & Papa Pounamu, 2016a).

The current legislative framework provides for recognition and active protection of Māori interests in urban land-use planning (section 7.3). Many examples exist of successful and productive engagement of Māori in planning processes (section 7.3; section 7.4). Yet implementation of this framework has been uneven because of varying capability across councils, iwi and hapū; lack of clarity about what councils should do; and differing expectations about the nature of council–Māori relationships (section 7.5).

There is support for effective Māori participation in a future planning system

A range of submitters supported, in general terms, current progress towards effective Māori participation in a future planning system. The support was sometimes tempered by reference to the interests of other parts

of the community (Box 7.7). The Rangitikei District Council stressed the importance of an increased understanding of Māori interests in the wider community, as well as the diversity of ethnic communities (sub. DR70). LGNZ supported proposals for enhanced participation arrangements in the Resource Legislation Amendment Bill 2015, "as it reflects the current practice of the majority of councils" (sub. DR113, p. 9) (discussed in section 7.3).

Box 7.7 **Support for effective Māori participation in a future planning system**

A new urban planning system needs to explicitly integrate Māori interests through the whole planning process, from the vision building right through to the way we regulate development. What we as planners must do is ensure a robust, fair and flexible process that honours Māori interests and achieves a regulating plan that has both their support as well as that of the rest of our increasingly diverse community. (Waikato District Council, sub. 2, p. 10)

A unique feature of planning in New Zealand is the special significance set aside for addressing Maori interests. This consideration should be retained as a key principle in any revised planning system. (Hamilton City Council, sub. 4, p. 2)

The policy gains and approaches that are in play in New Zealand now increasingly recognise and provide for the protection of Maori interests. These processes need to be continued in any new planning system. (New Zealand Planning Institute, sub. 27, p. 10)

Selwyn District Council supports greater Maori involvement in developing a new integrated urban planning model. Maori need to carry sufficient weight in decision making and be appropriately resourced to allow their involvement in the planning process. Improving consistency in iwi engagement in plan development and consenting processes is a very important step forward in a new urban planning model. (Selwyn District Council, sub. 33, p. 7)

Trustpower supports iwi authorities having a role in the development of statutory planning documents and for this role to be focussed at the 'front end' of statutory planning processes. (sub. DR68, p. 7)

The UDS Partnership supports moves to enable greater Māori participation in urban planning matters. (Greater Christchurch Urban Development Strategy Partnership, sub. DR83, p. 13)

Environment Canterbury supports the conclusions reached in Chapter 11 of the draft report regarding continued provision for and emphasis on the participation of iwi and hapū in planning and other local authority work…[O]ur Tuia Relationship Agreement with the ten Papatipu Rūnanga of Ngāi Tahu in Canterbury and the tribal authority, Te Rūnanga o Ngāi Tahu, is a fundamental commitment for the whole organisation, led by Dame Margaret Bazley and our Commissioners over the last six years. (sub. DR72, pp. 9–10)

Federated Farmers agrees that any new planning system must recognise and protect Maori interests, as it must recognise and protect any private interests. Equally, democratic decision making requires councils to clearly identify how and when iwi and other groups will be consulted when plans are developed and resource consent decisions are made. (Federated Farmers of New Zealand, sub. 21, p. 10)

We agree that carrying forward the current general framework is sensible based on the ongoing growth in both local authority and Māori understanding and capacity that we are observing in our Region. (Horizons Regional Council, sub. DR97, p. 1)

F7.4 Strengthening the current broad framework for recognition and active protection of Māori interests in land-use planning has broad support and aligns with the Crown's Treaty of Waitangi obligations.

R7.3 A future planning system should carry forward and build on current regulatory provisions to give effect to the Crown's Treaty of Waitangi obligations by enabling the expression and active protection of Māori interests in the built and natural environments.

Active protection of Māori interests across the planning system

In its draft report, the Commission questioned whether further strengthening or tightening of legislative provisions was required to maintain progress in actively protecting Māori interests in the planning system. It pointed to:

- the steady introduction of new models for Māori engagement in the last decade, and the likelihood that their success would stimulate further innovations and strengthening of capability (section 7.3, section 7.4 and Ryks et al., 2014);
- uneven capability across local authorities and across some iwi and other Māori groups being a major barrier to good practice, and evidence that capabilities had been improving (section 7.5);
- the challenge of designing guidance from the centre to adequately reflect differences in local circumstances; and
- the impossibility of legislating for the trust and recognition of mutual benefits that was the necessary base for productive relationships between mana whenua and other Māori communities and local authorities.

Participants comments on the Draft Report

A number of submitters and commentators argued that the Commission's draft report did not go far enough in considering the implications of its recommendations for actively protecting Māori interests in the environment. The Auckland District Law Society submitted that "some of the Commission's recommendations have significant unexamined impacts for Maori as a Treaty partner, and may limit the interests of Māori" (sub. DR70, p. 3). Ngāti Whātua Ōrākei submitted:

> Consideration of Māori issues in the Report remains compartmentalised (even to the extent of containment in a specific chapter). Treaty principles, notably partnership, need to be "mainstreamed" into [the] planning system. This is not just a matter of Treaty of Waitangi obligation, but should be seen as a positive enhancement in terms of broader sustainable development principles with major benefits to all. In this regard spatial planning is an ideal primary vehicle, while urban design offers huge and largely untapped potential. (sub. DR76, p. 8)

In a similar vein, other submitters stressed the importance of tangata whenua participating in the development of national environmental regulations (Environment Canterbury, sub. DR72) and of "monitoring the level of influence of Māori participation in decision-making on final outcomes" (Auckland Council, sub. DR86, p. 12). Auckland Council noted that

> [t]he commission's draft report … does not discuss or identify opportunities for Māori influence on central government direction or decision making. Introducing central government direction or oversight powers which fail to recognise the Crown-iwi on-going partnership may limit opportunities for Māori participation in the urban planning framework. Where such changes significantly reduce or alter the nature of the partnership between Crown and Māori such changes may raise Treaty issues. (sub. DR86, p. 4)

Auckland Council was concerned in particular that "the draft report indicates there seem to be reduced opportunities for meaningful participation in the proposed national Independent Hearings Panel processes at the policy setting and consenting stages" (sub. DR86, p. 5).

Environment Canterbury submitted that any national effort to encourage best practice in plan development should be established "as a partnership process involving central government, the local government sector, iwi and hapu, relevant professional organisations and academic expertise" (sub. DR72, p. 20).

Ngā Aho and Papa Pounamu (2016b), in their review of the draft report, criticised the lack of recommendations to strengthen the recognition and provision for Māori rights, values and interest in urban planning. They also argued that the Commission had not adequately considered the implications of its broad framework and of some of its specific proposals, for the active protection of Māori interests. In particular, Ngā Aho and Papa Pounamu held

> strong concern that Māori values, rights and interests must be recognised and provided for in fast-tracked planning processes within a future planning system …It is not clear how Māori values, rights and interests will be managed in any future planning system, given a number of recommendations in … the DRAFT report that focus on reducing the level of engagement, limiting appeal rights and fast-tracking planning processes. (2016b, p. 28)

Ngā Aho and Papa Pounamu recommended

> a new national planning authority with specific expertise in Māori values, rights and interests in urban planning and the management of natural, physical and spiritual resources, [and] a new category of planning document that connects iwi planning documents and local government plans. (2016b, p. 25)

Auckland Council went further and said that the draft report gave "no consideration of learnings from Te Ao Māori that could help shape a future New Zealand urban planning framework" (sub. DR86, p. 10). Ngā Aho and Papa Pounamu further recommended that local and central government

> develop assessment and monitoring methodologies and frameworks that integrate tikanga Māori and mātauranga Māori, in order that a culturally responsive and robust evidence base can be developed to inform urban planning processes and decision-making. (2016b, p. 34)

A number of submissions and other commentators have also argued the need for more guidance through statutory instruments on Treaty issues in urban planning (Horticulture New Zealand, sub. DR73; Trustpower, sub. DR68; Waitangi Tribunal, 2011; Fox & Bretton, 2014). Horticulture New Zealand identified a need for national guidance on "how to balance conflicting or competing values and interests in certain circumstances or for certain types of development" (p. 15). Other submitters favoured better informal guidance, for instance through strengthening the material on the Quality Planning website (LGNZ, sub. DR113; Whanganui District Council, sub. DR95); or thought that building capability was more important (Bay of Plenty Regional Council, sub. DR111). Wellington City Council argued for more guidance through a central government Centre of Excellence (sub. DR61).

The Commission's response

In response to these comments, the Commission has thought further about the Treaty issues set out in its draft report. It acknowledges evidence of uneven and inconsistent practice across local authorities, and deficiencies of capability in some councils and in some Māori organisations (section 7.5). While practice has improved over time, the Commission accepts that current provisions to recognise and actively protect Māori interests in the environment should be strengthened to accelerate progress. The Commission also agrees that Māori should have a role based in statute in the national stewardship of the planning system; and that decision making at all levels within the system should be adequately informed by relevant Māori tikanga and mātauranga.

The Commission recommends a comprehensive approach to strengthening the recognition and active protection of Māori Treaty interests in land-use and resource management planning. These recommendations are described in more detail later in this section, in earlier parts of this chapter, and in Chapters 13 and 14. Together they cover the following proposals. In a future planning system:

- a *National Māori Advisory Board* [NMAB] *on Planning and the Treaty of Waitangi*, established under statute, will:
  - monitor how the planning system gives effect to the principles of the Treaty of Waitangi;

  - advise central government agencies with stewardship responsibilities for the planning system on policies, regulations, processes and methods that will best give effect to the principles of the Treaty of Waitangi; and
  - carry out a triennial Treaty of Waitangi audit of the planning system (Chapter 13);
- the government, with the advice of the NMAB, and after consulting widely with Māori interests, should issue a National Policy Statement on Planning and the Treaty of Waitangi, to provide guidance to and set expectations for local authorities and other decision makers about how they should give effect to the Crown's Treaty obligations to recognise and actively protect Māori interests in the built and natural environments;
- the proposed National Policy Statement on Planning and the Treaty of Waitangi should, with the advice of the NMAB, include guidance to local authorities on:
  - policies and methods to help mana whenua develop the capability to participate effectively in planning processes;
  - how to work with mana whenua to identify and protect sites and environmental features of significance to mana whenua; and the conduct of CIAs for proposed developments that may impact on such sites and features (section 7.4);
  - how to identify opportunities for and put in place agreements with mana whenua for the co-governance and joint management of sites and environmental features of significance to mana whenua; and
  - planning provisions for papakāinga and other residential and non-residential developments to give effect to tikanga Māori (section 7.1).

The Commission also recommends that, in a future planning system:

- mana whenua should have a statutory right to participate in spatial planning (referred to as Regional Spatial Strategies or RSSs); local authorities would be required to engage in good faith with mana whenua, have regard to the relevant provisions of IMPs in their region, endeavour to reach agreement with mana whenua on how the RSS can give effect to relevant provisions of IMPs; and include a Chapter on actively protecting Māori Treaty interests in land use planning in the RSS and district plans (an integrated approach to the development of the RSS and plans should ease the burden for mana whenua of engaging with multiple local authorities) (Chapter 13);
- central government agencies with stewardship responsibilities for the planning system should monitor and promote the capability of local authorities to engage effectively with mana whenua and Māori communities in planning (Chapter 14); and
- central government agencies with stewardship responsibilities for the planning system, in collaboration with the NMAB, should develop ways to introduce tikanga Māori and mātauranga Māori into methods to monitor and assess the performance of the planning system at the national, regional and local levels (Chapter 13).

The Commission's proposals for independent review of RSSs, Regional Policy Statements for the Natural Environment and District Plans (Chapter 8, Chapter 9, Chapter 10 and Chapter 13) provide further protection of Māori interests in the environment. IHPs will be guided by statutory principles and the proposed National Policy Statement on Planning and the Treaty of Waitangi, and will be required to include panel members with knowledge of tikanga Māori. Any provisions for "event-based" rezoning will be subject to the provisions of the RSS. The RSS, in turn, developed with the participation of mana whenua and other stakeholders, will identify sites and environmental features of significance to mana whenua. Councils will need to use a wider range of engagement and consultation tools than at present, to ensure they hear the views of some groups, such as mātāwaka, more effectively than at present (Chapter 8).

Independent review of policy statements and plans should also ease the concerns of other submitters that iwi participation in land-use planning should "not favour one landowner over others due to their direct involvement in the preparation and decision-making on statutory planning documents (or via decision-making on the grant or review of resource consents" (Trustpower, sub. DR61, p. 7).

The Commission has also revisited its account of the rationale for planning (Chapter 3) and the place of urban design in planning (Chapter 8) to reflect the views of submitters, including those expressing a Māori perspective.

A National Policy Statement on Planning and the Treaty of Waitangi

In their review of the Commission's draft report, Ngā Aho and Papa Pounamu strongly recommended that more guidance be provided through a National Policy Statement on Planning and the Treaty of Waitangi. Ngā Aho and Papa Pounamu sketch out, by way of illustration, what such guidance could comprise, though they stress that an NPS should be developed in collaboration with mana whenua and mātāwaka representatives (Ngā Aho & Papa Pounamu, 2016b).

The Commission considers that more guidance through a National Policy Statement on Planning and the Treaty of Waitangi would strengthen accountability for Treaty issues in a future planning system. Such an NPS would complement other measures the Commission is recommending as ways to strengthen national stewardship of the planning system (Chapter 13). In particular, the Commission is recommending a National Māori Advisory Board on Planning and the Treaty of Waitangi is established under statute, to work with central government agencies responsible for the planning system. It is proposing that one role of the NMAB will be to oversee a periodic Treaty of Waitangi audit of the planning system. A National Policy Statement on Planning and the Treaty of Waitangi will help establish a metric against which such an audit would be conducted. Given the central importance of Māori Treaty interests in land use planning and resource management, the proposed NPS should be mandatory.

The Commission agrees with Ngā Aho and Papa Pounamu about collaborating with mana whenua and matāwaka interests to develop a National Policy Statement on Planning and the Treaty of Waitangi. Ngā Aho and Papa Pounamu provide an illustrative example of what such an NPS could cover (2016b). Without attempting to pre-judge the results of future collaboration, the Commission has also identified some matters that such an NPS could usefully cover. The Commission has based its recommendations in this chapter on submissions and other evidence from inquiry participants, and on commentary about how well the current planning system actively protects Māori interests in the environment.

It will be important for national guidance to respect and leave room for the large variety of different local circumstances, tikanga, environmental issues and preferences. In many cases, guidance will be around how councils can engage with mana whenua to reach agreements on local approaches to actively protecting Māori Treaty interests in the environment.

R7.4

In a future planning system, the government should, with the advice of the proposed National Māori Advisory Board on Planning and the Treaty of Waitangi, and after consulting collaboratively with Māori communities more generally, provide clear guidance to local authorities through a mandatory National Policy Statement (NPS) on Planning and the Treaty of Waitangi. The NPS should set out the Crown's expectations on recognising and actively protecting Māori Treaty interests in the natural and built environments.

That NPS should respect and provide scope for local differences in tikanga, environmental and planning issues and community preferences.

Strengthening capability

Uneven capability across both councils and some iwi and hapū is a significant barrier to Māori engagement in planning and the active protection of Māori interests in the environment (section 7.5). Building the capability of local authorities to engage effectively with Māori is discussed further in Chapter 14.

Mana whenua organisations vary greatly in size. Some have completed Treaty settlements and acquired both expertise in engaging with government agencies and substantial resources to build organisational capability. Others are at different stages of the settlement process and often lack such experience and resources. Whatever their size and resources, all mana whenua groups have Treaty interests in the natural environment, and are necessarily involved in planning processes to actively protect those interests. It is in the interests of all participants in urban planning (private developers, local authorities and mana whenua) that mana whenua are well-placed to participate effectively and efficiently in planning processes (Box 7.6).

Councils currently have responsibilities under the LGA to identify and set out in their Long-Term Plans ways to develop Māori capacity to contribute to decision making. The RMA has a similar provision in relation to tangata whenua participation in consultations on Plans and Regional Policy Statements (section 7.3).

Assistance to develop capacity can and does take a variety of forms. Councils or central government can provide resources in kind through training and workshops, secondments of staff (in both directions) and technical expertise; and funding perhaps tagged to particular capability development initiatives. The Christchurch City Council helped to finance the operation of the Ngāi Tahu environment agency Mahaanui Kurataiao Ltd (sub. DR90). The Whanganui District Council (sub. DR95) recommended some combination of central and local government funding to support Māori engagement in planning processes, particularly to help with preparing IMPs.

Once adequate capability has developed, and with appropriate pricing, some aspects of mana whenua participation in planning processes, such as CIAs, should be self-funding.

R7.5

In a future planning system, central agencies with stewardship responsibilities for the system should, with the advice of the proposed National Māori Advisory Board on Planning and the Treaty of Waitangi, establish policies and methods to help mana whenua develop the capability to participate effectively in planning processes.

Policies and methods should include training; secondments of staff between mana whenua, central government and local government agencies; assistance with technical issues; and grants.

The Government should provide clear guidance (through the proposed National Policy Statement on Planning and the Treaty of Waitangi) to local authorities on their responsibilities to help mana whenua develop the capability to participate effectively in planning processes. The National Māori Advisory Board should review local authority initiatives to develop mana whenua capability as part of its triennial Treaty of Waitangi audit.

Stronger prospects for co-governance and joint-management

Current provisions in the RMA for mana whenua participation with local authorities in co-governance and JMAs of environmental features have been rarely used (section 7.4). Yet a number of successful arrangements have been set up as a result of Treaty settlement legislation and more informally (section 7.3; OAG, 2016). One barrier to establishing more such arrangements may be lack of local political willingness to do so (section 7.5).

The Auditor-General has identified "the factors that need to be considered when setting up and maintaining effective co-governance arrangements" (OAG, 2016, p. 6). Better guidance on setting up and conducting co-

governance arrangements, as well as information on successful arrangements, may increase the willingness to establish them.

Ngā Aho and Papa Pounamu (2016b) recommend that, in a future planning system, the government should direct councils to establish co-governance arrangements. This is, in effect, what has sometimes already happened as a result of some Treaty settlements (section 7.3). Even so, the Commission considers that local willingness to enter into such arrangements is an important ingredient in their success. Guidance through an NPS could convey a strong expectation that councils will collaborate with mana whenua to consider possible co-governance arrangement in good faith – particularly where mana whenua have raised a proposal.

R7.6

In a future planning system, the government should provide clear guidance (through the proposed National Policy Statement on Planning and the Treaty of Waitangi) to local authorities on identifying opportunities for, and putting into place agreements with, mana whenua for the co-governance and joint management of sites and environmental features of significance to mana whenua.

The guidance should set out the circumstances that favour such agreements; and the practices that make them successful.

7.7 Conclusion

Māori participation in land-use planning processes has been growing in extent and sophistication over the last twenty years. Treaty settlement processes have been a catalyst; and have stimulated growth in iwi and local authority capability. Accompanying more effective participation of Māori in planning processes is a greater recognition of the value of mātauranga Māori in shaping design choices. Yet progress is uneven and many commentators remain disappointed by poor practice and weak commitment to effective engagement in some areas.

Inquiry participants supported the broad framework for Māori engagement and participation in planning. Yet many argued the need for additional measures to address the uneven practice and uneven capabilities that jeopardise active protection of Māori interests in the environment. These include clearer guidance under statute to councils (in the form of an NPS), and measures to build the capability of councils and the capability of mana whenua groups. The Commission agrees. Among other things, guidance should provide greater clarity about the role of IMPs in planning, the possibilities for co-governance and joint management arrangements, and the recognition and active protection of Māori interests in the environment.

8 Regulating land use in the built environment

Key points

- A future urban planning system should be open to change and growth, ensure sufficient development capacity to meet demand, and enable residents to get to jobs and other activities, and enable travel between businesses and their suppliers, customers and staff.
- New Zealand's current system has a number of weaknesses, including undue regulatory burdens, poor use of discretion, and a failure to provide enough development capacity.
- The system's weaknesses can be attributed to:
  - a bias towards the status quo and risk aversion;
  - blindness to price signals;
  - slow and cumbersome processes for changing land use controls;
  - a limited suite of alternative tools; and
  - insufficiently strong checks on regulatory decision making.
- A future planning system should:
  - clearly prioritise responding to growth pressures, providing flexibility and supporting accessibility;
  - make land price information a central policy and monitoring tool, which would drive decisions on the release, servicing and rezoning of development capacity; and
  - allow for "event-based" rezoning, where land use controls are set in anticipation of predetermined triggers and activated once those triggers are reached.
- Local Independent Hearings Panels (IHPs) should be established to consider and review new plans, plan variations and private plan changes across the country. An IHP should:
  - be appointed by an independent statutory agency;
  - reflect the mix of skills, local knowledge and tikanga Māori required in each case; and
  - have the final decision on merits on plans, plan variations and private plan changes, with appeals only on points of law to the Environment Court.
- Future land-use planning legislation should:
  - give councils greater flexibility than at present to select the most appropriate and effective engagement tools for the issue at hand; and
  - place a focus on councils engaging with a full range of people affected by plan proposals.
- In a future planning system, councils should make greater use of targeted infrastructure investments to help offset any amenity loss in areas facing significant change from development.

Local governments have a number of levers to influence the development of cities, including policy, fiscal and financial measures, advocacy, provision of service (such as infrastructure) and regulation. This chapter discusses the use of land use regulation as an urban planning tool. It:

- considers the goals for urban planning discussed earlier in this report, and the implications these goals have for land use regulation;
- assesses the performance of current land use regulatory practice against these goals; and
- discusses options for a future urban planning system, in particular to:
  - ensure adequate supplies of development capacity;
  - reduce regulatory burdens and unnecessary prescription;
  - reduce uncertainty around the role of urban design in planning decisions;
  - provide for more immediate and more systematic checks on planning regulation; and
  - encourage more flexible and more representative consultation.

Although at a city level, land use regulation often needs to align with infrastructure provision, this chapter focuses primarily on regulation as a policy tool. Chapters 10 and 11 discuss issues related to infrastructure provision, funding and finance. Chapter 13 discusses the statutory framework, institutions and governance arrangements in a future planning system.

8.1 What characteristics should an urban planning system have?

Earlier chapters discussed urban trends in New Zealand, the nature of cities, the opportunities they create and the challenges they face. Chapter 3 discussed the rationale for planning that arises from the economic problems that planning is trying to solve – dealing with spillovers from land use on other people and the environment; and providing local public goods and infrastructure. Chapter 6 described how development capacity has failed to keep pace with demand in New Zealand's fastest growth cities. These chapters together establish that a future planning system should:

- be open to change and growth;
- provide sufficient development capacity to meet demand from households and businesses;
- enable residents to get to jobs and other activities; and
- enable travel between businesses and their suppliers, customers and staff.

These characteristics need to be achieved while safeguarding the natural environment and recognising and actively protecting Māori Treaty interests in the built and natural environments (Chapter 13).

Openness to change and growth

Chapter 2 discussed the importance of urban agglomeration for wellbeing, and the role that urban planning can play in managing the costs of agglomeration (eg, congestion, pollution), while protecting the beneficial elements. It highlighted the unpredictable nature of city development that results from millions of choices by individuals and firms with different preferences. It also highlighted the importance of planning practices that facilitate, or at least do not unduly hinder, people and firms making location choices based on their own judgements about the advantages and disadvantages. Overly restrictive or rigid rules can limit competition in geographic or product markets, reducing the incentives for innovation, service-quality improvements and more efficient allocations of resource. This results in less downward pressure on prices.

Sufficient development capacity to meet demand

Land use regulation affects the supply and price of land. Ensuring that a sufficient supply of development capacity is available to meet demand matters for individual wellbeing. High land (and therefore housing) prices within cities may discourage people from moving to and within urban areas where they may be more productive, or may force them to live further away from the city and employment centres than they would prefer. Both outcomes can reduce a person's employment opportunities, and a firm's access to suitably

skilled labour.[71] High house prices increase the risk of poor social and economic outcomes for groups already disadvantaged (Chapter 6). High commercial and industrial land prices can restrict the ability of productive firms to expand, or locate closer to suppliers, employees, customers and markets.

Mobility of residents to jobs and other activities

Chapters 2 and 4 discussed how spatial inequalities can be created within cities, as suburbs emerge with poor transport connections to other parts of the city and employment centres. This may mean that some segments of the community have less access to employment opportunities. Although answers to this problem lie mainly with planning and providing infrastructure and services such as roading and public transport, land use regulation can contribute by minimising barriers to development in established suburbs and areas close to existing transport networks.

Characteristics of efficient and effective land use regulation

Taken together, the three objectives or features just discussed imply that land use regulation should (simultaneously):

- avoid prescriptive requirements, except where these are necessary to manage significant negative externalities; yet
- avoid rules or policies that create high levels of uncertainty or unpredictability, as this can increase the risk and cost of development;
- be coordinated with the provision and funding of infrastructure;
- provide an efficient and fair means to resolve differences of interests in land use, and recognise the interests of all segments of a local community;
- place a high priority on providing and maintaining adequate supplies of development capacity for all potential uses, and delivering capacity of the type, location and quality demanded; and
- be able to respond to new circumstances without undue delay.

There is a tension between avoiding undue prescription and providing certainty in rule making. In practice this is a matter of judgement about when and to what extent discretionary decisions by planners will better achieve the key objectives of the planning system. Statutory objectives and principles, together with national guidance will help shape these judgements. Systematic independent review of Plans and Plan provisions will reinforce the guidance and shape practice over time (section 8.6).

A clear focus on key outcomes

An efficient and effective urban planning system requires a clear focus on key outcomes in the natural and built environments for which it has the major responsibility. The current definitions, purposes and roles given to councils under the Local Government Act 2002 (LGA) and the Resource Management Act 1991 (RMA) serve neither environment very well (Chapter 5). In the built environment, they give little guidance to councils about the importance of accommodating growth and change and supporting resident mobility, and insufficient defences against proposed rules or plan changes that unduly restrict development capacity or divert councils towards other objectives. Indeed many councils, planners and other parties, continue to pursue an unrealistically wide range of goals, through land-use planning processes (Chapter 5) Future planning legislation should clearly make specific provision for responding to growth pressures, providing flexibility in land use, and enabling mobility.

The government has already sought to provide more clarity about the role of councils in urban planning, including through amendments to the LGA in 2010 and 2012 and proposed amendments to the RMA, which would make the provision of sufficient residential and business development capacity a function of councils, and most recently through the National Policy Statement on Urban Development Capacity (NPS–UDC) (section 8.3). The key elements of these recent actions – clearer roles for councils and clear responsibilities to

[71] Bertaud (2014) argues that the "absolute limit" of the "spatial extent of a labor market" is an hour's commute (one way) (p. 9).

provide enough development capacity – should be carried over into any future system. However, they do not resolve problems with the definition of "environment" in the RMA, nor do they give much priority to the mobility and accessibility of residents and goods. Resolving these two issues will be important for the performance of any future planning system. Future statutory provisions for regulation of the built and natural environment are discussed in Chapter 13.

On the issue of growth and change, governments can make specific provision for the mobility and accessibility of cities through the Government Policy Statement (GPS) on Land Transport. The current GPS has a number of objectives related to access, such as:

- "[a] land transport system that addresses current and future demand for access to economic and social opportunities"; and
- "[a] land transport system that provides appropriate transport choices" (New Zealand Government, 2015, pp. 17 and 20).

The current GPS also notes that "the number of jobs that can be reached per hour of travel needs to increase over time if our growing cities are to become more productive and remain attractive places to live" (New Zealand Government, 2015, p. 17). However, the objectives in the current GPS have no particular weight in decisions about land use and infrastructure under the RMA or LGA. This means that the New Zealand Transport Agency (NZTA) has to rely on negotiations with councils, involvement in Plan preparation processes and appeals to align land-use decisions with its transport objectives. Placing a clear priority on mobility and accessibility in planning legislation would assist in aligning the incentives of central and local government, and in improving central government monitoring of the system's performance.

The Commission proposes that spatial plans or Regional Spatial Strategies (RSSs) be a formal part of the planning system (Chapters 9 and 13). This, strengthened by clearer legislative priorities for mobility and accessibility, will provide better opportunities for NZTA to participate in decisions about laying out and protecting future transport corridors; and to coordinate its investment plans with land-use planning in a region.

Retail New Zealand (DR74), Azeem Khan (DR116), Foodstuffs New Zealand (DR108), Habitat for Humanity Christchurch (DR114), the New Zealand Council for Infrastructure Development (DR103) and Wellington City Council (DR68) support a focus in urban planning on responding to growth pressures. A few submitters were concerned that too great a focus on responding to growth pressures risked undermining other important objectives for planning (Greater Christchurch Urban Development Strategy, DR83; Sir Geoffrey Palmer and Dr. Roger Blakeley, DR122; Whanganui District Council, DR95). Chapter 13 discusses the mix of objectives that urban planning should address.

Making specific provision for growth, flexibility and mobility in planning legislation would not mean removing other objectives, such as amenity, protection of historical heritage and outstanding natural landscapes. These make important contributions to the character and "liveability" of cities. However, it would mean that such objectives would be subordinate to the three main priorities and could not be used to frustrate their achievement (Chapter 3). In addition, as noted above, urban planning would still need to safeguard the natural environment (Chapter 9) and recognise and actively protect Māori Treaty interests (Chapter 7).

R8.1 A future urban planning system should make specific provision for responding to growth pressures, providing land-use flexibility, and supporting the ability of residents to easily move through their city.

Sections 8.3 and Chapters 12 and 13 set out specific proposals to ensure that urban planning responds to growth pressures.

8.2 The current system – the Commission's diagnosis

The New Zealand planning system has been subject to numerous analyses, including by the Commission (NZPC, 2012a, 2013, 2015a). This section introduces and expands on some key findings from these reports and discusses in more detail some underlying causes of weaknesses in the system.

The New Zealand planning system has particular weaknesses discussed in more detail in later sections. The system:

- fails to supply sufficient development capacity (section 8.3);
- imposes undue regulatory burdens and unnecessary prescription (section 8.4);
- creates undesirable uncertainty around the role of urban design in planning decisions (section 8.5); and
- lacks timely and systematic checks on decision making (section 8.6).

This section discusses some underlying explanations for these weaknesses.

Lack of clear limits

Chapter 5 identifies confusion about the purposes of the RMA, and lack of clarity about what "sustainable management" means. A very broad definition of the environment and the lack of clearly differentiated principles for regulation of different aspects of the environment add to the confusion. The scope of planning across different statutes is also unclear. As a result, and as discussed later in this chapter, the proper boundaries of land use regulation have been unclear, leading to excessive prescription, inappropriate use of discretion and scope creep. Clear principles to guide planning in the built and natural environments, and more systematic and timely checks on planning decisions, will help address this problem (Chapter 13).

Aversion to risk, and a bias towards the status quo

The way the current planning system operates has an inherent status quo bias and conservatism. This is a result of the political economy of planning, and how the RMA has been interpreted.

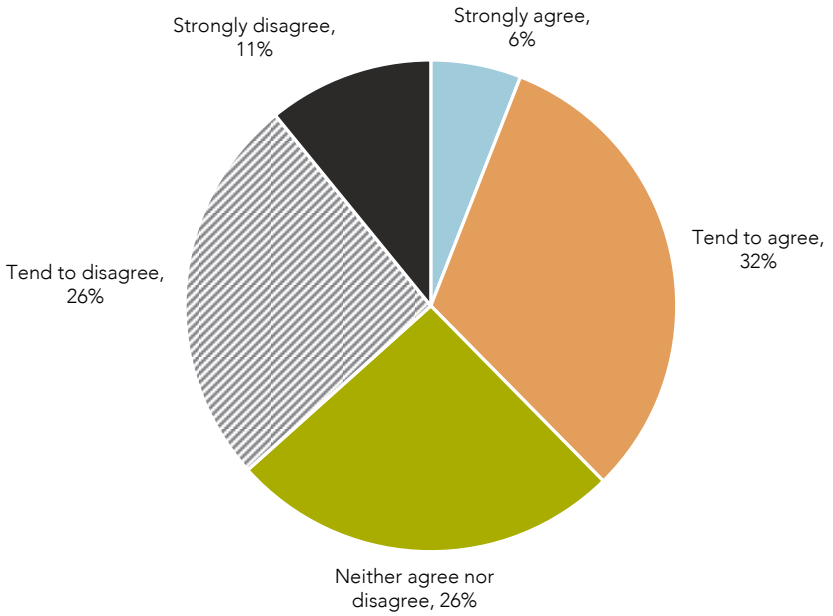
Planning and controls over the use of land are inherently contested territory, as they inevitably clash with individual objectives and private property rights, as Chapter 3 discussed. Land and property owners potentially affected by new development can have strong incentives to block or oppose it, either through lobbying for restrictive land use rules or by appealing local authority decisions that favour development. The Commission has previously discussed the nature of these incentives, which include:

- the high proportion of a person's wealth that is stored in housing and the corresponding resistance to changes that might put this wealth at risk;
- risk aversion and the endowment effect;[72]
- affinity for the existing amenities of a landowner's neighbourhood; and
- a desire not to bear the additional rate costs required to pay for new infrastructure (NZPC, 2015a).

Some 38% of respondents to the Commission's survey of local authorities tended to agree or strongly agreed that "local interest groups drive planning decisions"(Figure 8.1). Yet 37% thought otherwise. Different responses by councils may reflect real differences in the ways that interest groups in different districts present their views; or different council practices in taking those views into account.

[72] The endowment effect refers to the tendency of people to value what they already have simply because they already have it, and favour what they have over what they might gain, despite the gains from alternatives being demonstrably higher (Kahneman et al., 1990).

Figure 8.1 Survey responses to the statement "local interest groups drive planning decisions"



Source: Colmar Brunton, 2016.

Notes:

1. Because of rounding, totals may not sum to 100%.

A number of commentators and submitters have cited appeal and wide participation rights as barriers to development, and as disincentives for councils to set more enabling rules and policies (Urban Technical Advisory Group, 2010; Local Government New Zealand (LGNZ), 2011; Rhys Phillips, sub. 1; Selwyn District Council, sub. 33; David Hattam, sub. 41; Auckland Council, *Using land for housing*, sub. 71). Dodge (2016) cites Plan Change 56 in Wellington, which imposed restrictive controls on infill development in response to a "public backlash", despite the fact that most respondents to an earlier, representative survey of residents were comfortable with the more liberal District Plan rules. Much of the impetus for Plan Change 56 appears to have come from residents' associations, one of which sought to have all new development in their suburb halted (pp. 30–31).

Conversely, the planning system suffers from a "democratic deficit", with insufficient attention to the interests of new and prospective residents, workers, and businesses, those with fewer means to have their voices heard and those who are not property owners. A change in the status quo is likely in the interests of these groups, particularly planning changes that make housing more affordable; and that provide infrastructure that makes jobs more accessible (Chapter 5; NZPC, 2015a).

According to a number of submitters and commentators, a second contributor to risk aversion and bias towards the status quo is how the "effects-based" focus of the RMA has been interpreted and operationalised. Despite the fact that the RMA's definition of "effects" explicitly includes both "positive or adverse effects" (section 3) and section 5 talks about enabling people and communities "to provide for their social, economic, and cultural well-being", many believe the implementation of the RMA has been biased against the positive effects that may result from development. Catherine Scheffer said:

> An effects-based approach in my view is problematic in three key ways:
>
> - An effects-based approach inevitably privileges existing amenity over future amenity, and frequently overlooks positive effects (despite their inclusion in the RMA section 3 definition of 'effect');
> - Cumulative effects, generally speaking, are poorly dealt with in practice (despite their inclusion in the section 3 definition of effect); and
> - Some effects lend themselves better to measurement and mitigation than others.
>
> The fact that the RMA section 3 definition of 'effect' includes both positive effects and cumulative effects in my observation has not prevented practice which deals poorly with both. (sub. 39, p. 3)

David Mead of Hill Young Cooper commented that, at the moment,

> urban planning is cast as a form of competition where short run localised costs often outweigh long term benefits: the negative costs of a housing development that may change an areas amenity is identified, but the loss to housing supply from the development not proceeding is not counted. (sub. 6, p. 9)

David Totman of Waikato District Council similarly observed that planning "by its very nature is forward-looking, while under the RMA it is primarily oriented to regulating environmental effects/impacts and therefore tends to be backward-looking" (sub. 2, p. 1). Urban designer Barry Rae argued that the RMA's focus on avoiding, remedying and mitigating adverse effects "is understandable in respect of the natural environment, but is totally at odds with the reality of the built environment":

> Unfortunately, the RMA imposes the same assessment process to the built environment as it does to the natural environment. Unlike the natural environment (already created), the built environment is under constant change by planning, design and development processes. The built environment, because of social, economic, technological and political change, continually requires substantial restructuring and redevelopment. (2009, p. 17)

The Urban Technical Advisory Group (2010) concurred with Rae, commenting:

> The RMA currently has a non-urban focus and places a low emphasis on urban priorities. It is environmental protection legislation, but is applied to towns and cities where change and development are both inherent characteristics and in most cases required, if these places are to thrive. While the RMA processes explicitly describe how change is managed, on balance due to its intention to avoid adverse effects, the RMA tends to discourage the change that is often desirable and necessary. (p. 68)

Retail New Zealand agreed with the finding that the planning system suffers from risk aversion and bias towards the status quo (sub. DR74).

A number of submitters (The New Zealand Association of Impact Assessment, sub. DR105; Sir Geoffrey Palmer and Dr. Roger Blakeley, sub. DR122; and Federated Farmers, sub. DR96) questioned whether a focus on avoiding adverse effects worked against change in the urban environment. Yet there is other evidence that the broad definition of "the environment" in the RMA, combined with an effects-based approach, encourages planners to maintain the status quo. For example, arguments are advanced for controls and restrictions on out-of-centre commercial development. Centres, existing commercial distributions, and the amenity they provide are effectively considered to be resources that must be protected against adverse effects such as competition from other developments. Some court decisions have given these arguments credence, as an appendix to the section 32 report prepared for the Proposed Auckland Unitary Plan (PAUP) comments:

> Potential effects of commercial distribution are sometimes referred to as retail distributional effects and they have now been recognised by the Environment Court in a number of cases. Such effects occur where a new business (or cluster of businesses) affects key businesses in an existing centre to such a degree that the centre's viability is eroded, causing a decline in its function and amenity, and disenabling the people and communities who rely upon those existing (declining) centres for their social and economic well-being. (Auckland Council, 2013, p. 139)

In *Westfield NZ Ltd & other v Upper Hutt City Council*, the Environment Court agreed with the view that centres are "community assets":

> [61] The RMA (s.74(3)) is explicit that a council when preparing a plan must not have regard to trade competition. However references in the Act relating to trade competition are subservient to the overall thrust of the Act as set out in Part II and particularly in s.5 where community values are addressed. Thus if trade competition should reach a stage where a community asset represented by its CBD is weakened to an unacceptable degree, then a Council can intervene….Put another way, unbridled retail development at a scale and in a location driven by the whim of developers could destroy the sustainable management concept of the Act as it relates to promotion and preservation of a community.

In *Northshore Mainstreet Inc. v Discount Brands Ltd*, the High Court commented:

> [61] The key point of distinction between the adverse effects of trade competition on trade competitors and adverse effects which may properly be considered under the RMA, is that trade competition effects focus especially on the impacts on individual trade competitors. In contrast, where a proposal is likely to

> have more general effects on the wider community, then the RMA permits consideration of those effects.
>
> [62] In regard to shopping centres, I would not, with respect, subscribe to the view that the adverse effects of some other competing retail development must be such as to be ruinous before they could be considered. But they must, at the least, seriously threaten the viability of the centre as a whole with on-going consequential effects for the community served by that centre.
>
> [63] A community frequently invests substantial sums directly or indirectly in relation to shopping centres. For example, in the present case, the evidence shows that the Council itself owns much of the land associated with the Northcote shopping centre and a range of community facilities (in addition to retail shopping) has been established there. They are the kinds of facilities that provide amenity to the community in the form of a convenient location for shopping and other community activities. Indirectly, substantial sums may be spent on roading and other infrastructure to support existing centres. It follows that it is entirely permissible for a consent authority to take into account significant adverse social and economic effects on such facilities which could flow from the grant of consent to an application to establish a new retailing centre.

Section 8.4 further discusses policies that restrict commercial and retail development to existing centres.

F8.1

The planning system suffers from risk aversion and bias towards the status quo, reflecting:

- the incentives on property owners to oppose changes they perceive may put the value of their assets or character of their neighbourhood at risk, and the avenues open to them to pursue their interests;
- inadequate representation of the interests of new and prospective residents and businesses in planning decisions;
- the pressure placed on councils not to set rules and policies that enable development; and
- an overemphasis in the implementation of the Resource Management Act on managing or avoiding adverse effects on existing elements in the built environment, and insufficient attention to the positive effects of development, which does not sit well with the dynamic nature of urban environments.

Managing adverse effects in the built and natural environments is consistent with the rationale for planning identified in Chapter 3. Yet it is important that an effects-based approach is balanced by a clear focus on key outcomes that identifies which effects are most important (Chapter 13).

A dearth of, or unwillingness to use, other policy tools

As noted in Chapter 5, the architects of the RMA expected that "[r]egulatory rules [would only be] used where these were best applied, rather than just because they were an easy means to claim problems would be solved" (Gow, 2014). Simon Upton considered that the new law would only apply "tightly targeted controls that have minimum side effects" (1991, p. 3020). The corollary of this was a view that other, less coercive mechanisms such as economic tools (eg, prices, taxes or subsidies) would be used to discourage problematic behaviour or promote desired outcomes. However, alternative tools in the urban planning system have not been used much because of political barriers; and the absence of some tools may have contributed to an overuse of rules.

In their submission to a previous inquiry and engagement meetings for this inquiry, members of the Environment Court highlighted examples of highly prescriptive land use rules linked to transportation and concluded that

> the bigger cities use district plans as their primary method of dealing with traffic congestion. This often seems to us to be inefficient, but as the councils lack pricing controls and other economic instruments, they have little choice. (*Using land for housing* sub. DR92, p. 4)

David Mead of Hill Young Cooper made a similar point:

> Absent full road pricing, planning becomes the next best alternative to a pricing mechanism to deal with the inefficient allocation of resources that arise from poorly conceived transport networks. In other words, either the government needs to get on and fix transport funding and pricing, or it needs to accept that the planning system is going to tackle the resulting inefficiencies. (sub. 6, p. 1)

Under current legislation, tolls and congestion charges cannot be placed on existing roads, and tolling schemes on new roads can only be introduced under Order in Council. It is likely that, in the absence of pricing tools for roads, local authorities are resorting to rules as a "second best" approach. The Commission has previously recommended lifting the restrictions on tolling and congestion charges (NZPC, 2015a).

To some extent, the reliance on rules may reflect the fact that they are easier to introduce than other policy tools. Gow (2014) comments:

> A big problem with plans is that rules are not by any means necessarily the first or best means of achieving outcomes. But they are relatively easy to produce, and politicians like them because they appear to be costless. By contrast, economic instruments (like subsidies and incentives, or charges for resource use) present a very different picture to politicians and voters. (p. 8)

Councils do not appear to make the most use of some of their existing financial tools, such as targeted rates (NZPC, 2015a).

Even so, it is clear that some councils' reluctance to accommodate growth and change stems in part from the difficulties they face in recovering the costs of new development. Part of this is due to the relatively limited suite of tools available to them. Central government has not provided much leadership in this space, despite the Minister for the Environment having a clear function under the RMA of considering and investigating

> the use of economic instruments (including charges, levies, other fiscal measures, and incentives) to achieve the purpose of this Act. (s 24(h), RMA)

Chapters 9, 11 and 12 each discuss and make recommendations for the greater use of economic instruments in planning.

F8.2

Councils overuse land-use rules in part because:

- they lack some alternative tools (such as road congestion charges); and
- political barriers hinder the full use of existing alternative tools.

The next sections discuss in more detail selected weaknesses in the current New Zealand planning system, and how a future planning system can address such weaknesses.

8.3 Ensuring adequate supplies of development capacity

This section:

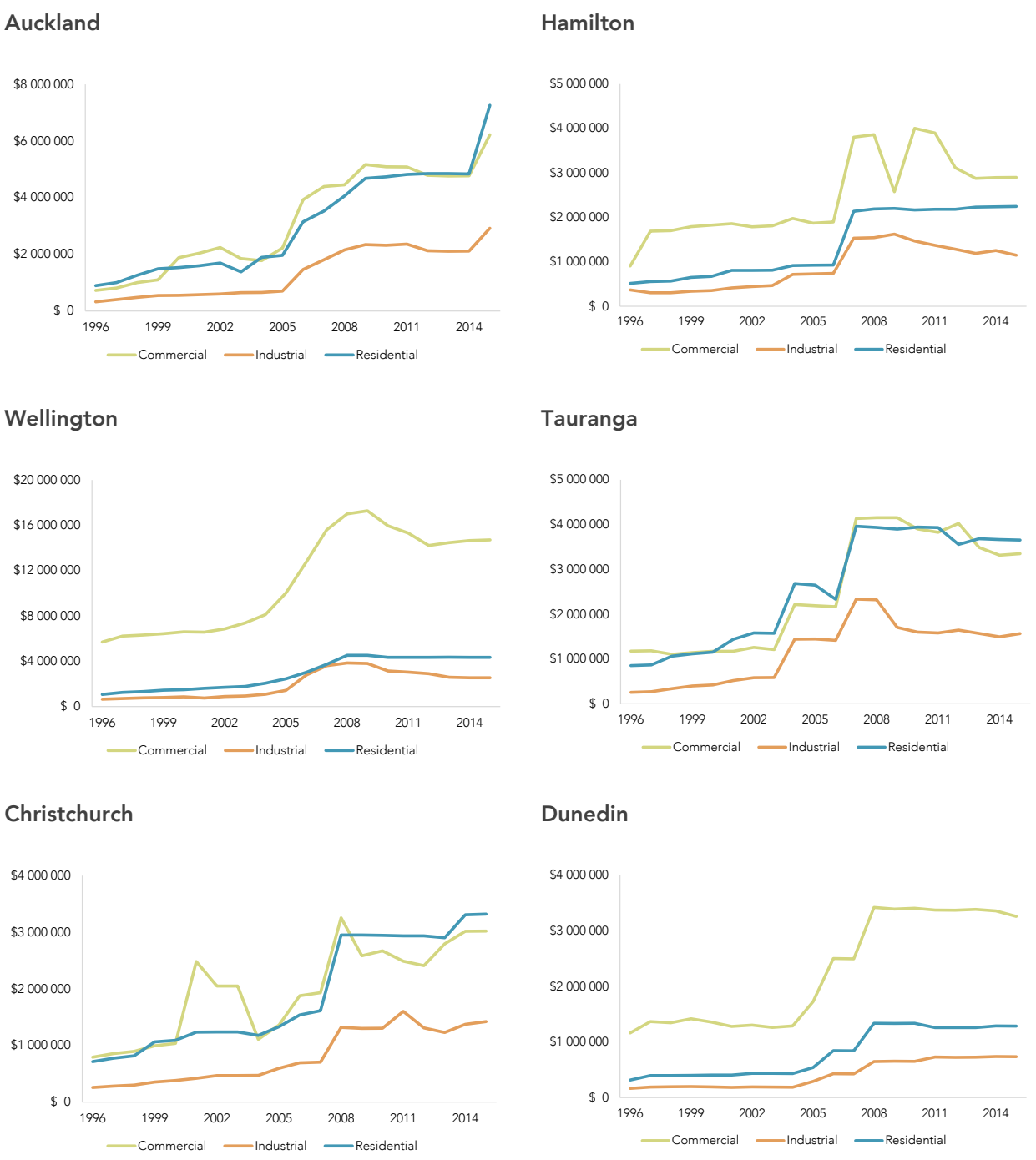
- describes how the planning system has struggled to provide adequate development capacity;
- discusses policies to increase the supply, particularly the better use of price information; and
- proposes the use of a price mechanism to trigger land release.

Chapter 6 found that the planning system as a whole had failed to deliver adequate supplies of residential development capacity, contributing to rising land and house prices (especially in fast-growing urban areas). Further investigation suggests that the planning system has struggled to ensure adequate supplies in other

areas. A common theme in many planning documents is the need to "protect" industrial land supply against use for other activities (eg, conversion for residential or retail uses) (Auckland Council, 2012; Wellington City Council, 2015). This goal often underlies the very detailed business-specific zoning rules outlined in section 8.4.

Judging by the price trends for urban land in recent years, councils would have better focused on providing more residential and commercial land. While industrial land prices in major New Zealand cities have increased over the past 20 years, rises in the price of commercial land have dwarfed the scale of that increase (Figure 8.2). Given these large price differentials, it is hardly surprising that industrial-zoned land in many cities has been used for commercial and residential purposes. For instance, in the Commission's *Housing affordability* inquiry, Fletchers expressed a view that large areas in South Auckland should be rezoned for residential purposes (NZPC, 2012).

Figure 8.2 Nominal per-hectare prices of land in major New Zealand cities, by type, 1996–2014



Source: Productivity Commission analysis of Quotable Value data.

Notes:

1. Land price data for Wellington only includes land within Wellington City area (therefore excludes Porirua City, Upper Hutt and Hutt City). This may explain the notably high values of commercial land in Wellington. The value of commercial land in Wellington's inner city is significantly greater than in the rest of the Wellington region.

F8.3 The planning system has struggled to provide adequate supplies of development capacity for residential and non-residential uses. A number of councils have tried to protect industrial-zoned land supplies, while the prices of residential and commercial land have increased at much faster rates.

Slow processes for changing land use controls

Slow processes for changing land use controls are one barrier to the timely supply of adequate development capacity. Councils face procedural barriers in responding to changing circumstances and preferences through the planning system. The current processes for changing land use controls through the RMA (except where they are required to align a Plan with a National Policy Statement (NPS) or National Environmental Standard (NES) require public consultation, and can take considerable time to complete. According to 2014/15 Ministry for the Environment (MfE) data, the average time taken to complete a private plan change was approximately three years, and more than four years for a council-led plan change (MfE, 2016g).

Under Schedule 1 of the RMA, where a change to an existing Plan is proposed, the council must seek public submissions and further submissions before reaching a decision. Submitters or applicants (for private Plan changes) can also appeal a Council decision, adding to the delay before the new controls can be brought into effect. Roughly a third of the average time taken to complete a private or council Plan change was due to action in the courts.

F8.4 Councils face procedural barriers in responding to changing circumstances and preferences through the planning system. The current processes for changing land-use controls through the Resource Management Act can take considerable time to complete.

In section 8.6, the Commission proposes more immediate, systematic and independent review of Plans and Policy Statements, with appeals available only on points of law. This on average will likely reduce the time for changes in land use controls to become effective.

Sir Geoffrey Palmer and Dr. Roger Blakeley submitted that "councils now have provisions for sped-up processes for changing land use controls, eg for Special Housing Areas" (sub. DR122, p. 5). Chapter 12 proposes that Urban Development Authorities can access streamlined planning processes in designated developments, similar to those currently provided for under the Housing Accords and Special Housing Areas Act 2013.

Previous blindness to price signals

Until the gazetting of a new NPS–UDC in November 2016, the planning system paid little attention to important price information, such as changes in land prices (NZPC, 2015a). Councils were not required to use such information in their decision-making or monitoring processes, despite the fact that land prices have a strong influence on housing affordability, particularly when rising prices are combined with restrictive land use rules. Importantly, price signals provide an indication of whether councils are successfully making enough land and development capacity available within their areas.

Instead, councils tended to rely on population projections, which are infrequent and often inaccurate. Councils often released development capacity according to a predetermined schedule. While this process offered relative certainty to infrastructure providers, developers and landowners, it was inflexible in the face of changing demand. This inflexibility broke the link between the demand for development capacity, and the supply response. As a result the planning system was slow to respond to growth pressures, tended to undersupply development capacity, lacked an important check on its activities, and could target the wrong

issues (such as the focus in many New Zealand cities on protecting industrial land supply, despite much higher demand for residential and commercial land) (NZPC, 2015a). Retail New Zealand (sub. DR74) agreed that planners do not often consider the effects of constrained land availability on prices.

F8.5 The current planning system has too often been blind to price signals, leading to poor responsiveness, and undersupply of development capacity, and misdirected effort.

Price information as a major driver of planning decisions

A responsive urban planning system needs to be able to adjust land use controls in response to changing circumstances without undue delay. The ability to change rules promptly matters because even the best Plans will fail to anticipate all developments, and land use controls that are at odds with new preferences create inefficiencies and opportunities for profiteering. Prices are a good indicator of changing demand for land for different types of uses. A future planning system should make land and house price information a central tool of council monitoring and plan development processes.

In its *Land for housing* report, the Commission discussed ways to use price information in urban planning processes, including as:

- a tool for measuring and monitoring the adequacy of the supply of development capacity;
- a mechanism for assessing the relative supplies of different types of capacity (eg, residential, commercial and industrial); and
- a mechanism to drive the release of development capacity (NZPC, 2015a).

Price information is dynamic, reflecting changes in individual and business preferences and the relative state of demand and supply. Price information is also much more up-to-date than population forecasts (which are commonly used in planning processes). When combined with mechanisms that provide a credible commitment to release land where the market is out of balance, price-based planning can also help break the expectations of future capital gains that make land banking a rational strategy.

Many submitters supported the use of prices as a policy and monitoring tool in planning (Foodstuffs New Zealand, sub. DR108; Retail New Zealand, sub. DR74; Habitat for Humanity Christchurch, sub. DR114; and Sir Geoffrey Palmer and Dr. Roger Blakeley, sub. DR122), with some arguing that they are already used for these purposes (Palmerston North City Council, sub. DR83). Other submitters were concerned about a risk of privileging price information over other factors (Greater Christchurch Urban Development Strategy, sub. DR83; Horticulture New Zealand, sub. DR73; Urban Design Forum, sub DR101; Wellington City Council, sub. DR68; Whanganui District Council, sub. DR95).

Planz Consultants Ltd. (sub. DR60), the Urban Design Forum (sub. DR101) and Auckland Council (sub. DR86) questioned the practicality of using price information to guide land-use changes. The NPS-UDC, discussed in the next section, will soon begin to provide regular information on land prices. This information will provide a firmer basis than at present for designing a policy to use price information to drive the release of land.

R8.2 Information about land prices should be a central policy and monitoring tool in any future planning system, and should drive decisions on the release, servicing and rezoning of development capacity.

The National Policy Statement on Urban Development Capacity 2016

The NPS–UDC aims to ensure that local authorities provide enough development capacity to meet demand over time for residential and business uses (New Zealand Government, 2016x). Its provisions, mandatory under the RMA, are differentiated according to whether local authorities have high-growth or medium-

growth urban areas within their district or region, or otherwise. Currently, high-growth and medium-growth urban areas are those areas with more than 30 000 residents and with expected growth over the period 2013 to 2023 of more than 10%, or between 5% (for high-growth areas) and 10% (for medium-growth areas.[73] The most stringent requirements apply to local authorities with high-growth urban areas. The NPS–UDC requires such local authorities to (among other things):

- ensure that, at any time, sufficient capacity to develop land for housing and businesses is available;
- be satisfied that the infrastructure required to support urban development is available;
- carry out, at least every three years, an assessment of the capacity for developing housing and businesses;
- monitor, among other things, prices and rents for housing, residential land and business land by location and type; and changes in these prices and rents over time;
- use information on price differentials between zones to understand how well the market is functioning;
- factor in additional margins of at least 20% in the short term and medium term and 15% in the long term, above projected demand for development capacity;
- provide further development capacity and enable development within 12 months if evidence gathered shows that development capacity is not sufficient;
- set minimum targets for sufficient, feasible development capacity for housing (targets can be re-set without going through a full consultation process as provided for in Schedule 1 of the RMA); and
- produce a development strategy that demonstrates, by identifying the broad location, timing and sequencing of development, that development capacity will be sufficient in the medium term and long term.

The NPS–UDC strongly encourages local authorities with high-growth urban areas to work together and with infrastructure providers to give effect to the NPS. The Minister for the Environment will review the implementation and effectiveness of the NPS by the end of 2021 (New Zealand Government, 2016).

Price-driven land release

The Commission acknowledges that the NPS–UDC is a useful development in requiring councils to monitor and have regard to land and rental prices in their planning decisions. Yet a credible commitment to a trigger mechanism that requires the release of development capacity in response to price differentials would have a more salutary effect on the provision of development capacity and, therefore, on affordable land prices. In its *Using land for housing* report, the Commission argued that the planning system needed a mechanism to bring the market for development capacity back into equilibrium, and recommended "event-driven" land releases. This means that new development capacity would be made available in response to significant disparities between the price of developable and non-developable land (NZPC, 2015a).

The main features of the Commission's proposal are that:

- central government, representing the national interest, would use land price information to set a trigger in terms of price differentials between developable and non-developable land; and
- if the price trigger were reached, local authorities would be required to release further development capacity (appropriately zoned land and provision for supporting infrastructure).

It is likely that price triggers will need to be specific to particular urban areas, as the relative price of developable and non-developable land will be shaped in part by varying local factors, such as the cost of converting non-developable land into developable land.

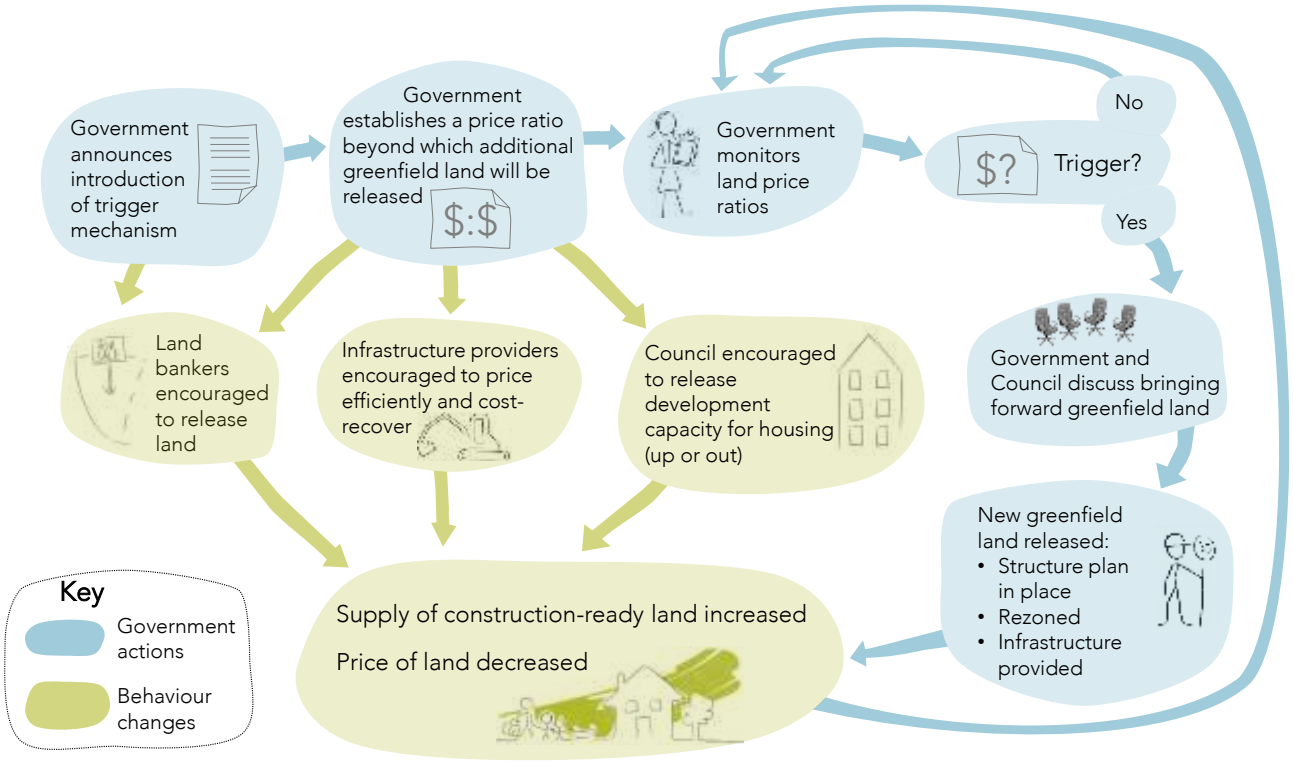
[73] The Minister for the Environment will review these definitions by 31 December 2018.

In practice, a credible commitment to a price trigger would mean early discussion between central government and the council in question about what areas are best suited to accelerated release. But, to put in place a credible commitment, a future planning system should provide a process to:

- bring forward the release of additional greenfield land where relative prices exceed the threshold; and
- ensure that the greenfield land brought forward is serviced with the necessary bulk infrastructure.

The challenge here for a planning system will be to provide councils with the means to meet their usual responsibilities for supplying bulk infrastructure. This issue is explored in Chapter 11.

Figure 8.3 How a price-driven trigger to release greenfield land would work



R8.3

In a future planning system, central government should establish thresholds (specific to particular urban areas) for the price difference beyond developable and non-developable land. A future planning system should provide a process involving the relevant council to bring forward the release of additional greenfield land where relative land prices exceed the threshold set.

Some submitters were concerned that using prices to trigger a change in land use would by-pass the usual processes of plan formation (Allison Tindale, sub. DR110; Wellington City Council, DR68; Whanganui District Council, sub. DR95). On the contrary, the Commission proposes that such changes be provided for as part of spatial planning in the form of a statutory RSS (Chapters 10 and 13). The RSS would identify land for future development and infrastructure corridors to service such land (taking account of areas of high conservation value; sites of significance to mana whenua; and designated public open spaces). While triggers would be binding, there would be ample opportunity to plan in an orderly way for their occurrence. Sir Geoffrey Palmer and Dr. Roger Blakeley submitted that councils are now actively addressing having integrated, forward-land supply and infrastructure provisions in place (sub. DR122).

Councils would continue to bear their usual responsibility for infrastructure provision, to avoid the moral hazard of passing that responsibility to central government. Regular monitoring of price differentials will give

councils and other parties ample advance warning of the need to plan for additional infrastructure provision (Figure 8.1).

Auckland Council (sub. DR86) and Horticulture New Zealand (DR68) were concerned that requiring local authorities to supply infrastructure in such circumstances would be impractical; while Water New Zealand (sub. DR67) pointed to legal and governance issues that would need to be resolved if central government had the power to direct Council Controlled Organisations. The Commission acknowledges that these are significant and difficult issues to resolve. Chapter 11 discusses options for councils to fund infrastructure to support development.

R8.4 A future planning system should provide a process for ensuring that greenfield land brought forward for development as a result of the price threshold being exceeded is serviced with necessary bulk infrastructure, to allow land to be developed. Local authorities should continue to bear their usual responsibilities for supplying bulk infrastructure.

A price-trigger mechanism for the release of developable land will complement and reinforce the Commission's proposals for competitive urban land markets described in Chapter 12. Both approaches will encourage land bankers to release land at affordable prices. In practice, a credible price trigger and competitive urban land markets together should make land prices affordable and ensure sufficient infrastructure serves development on the city fringes, without central government intervention.

In its draft report, the Commission recommended that central government should have power to override local plans in a limited (but unspecified) set of circumstances. Submitters widely opposed this recommendation, in part because they were unclear about the circumstances in which central government would use such a power (subs. DR110, DR86, DR83, DR73, DR91, DR122, DR67, DR68 and DR95). On reflection, the Commission wishes to reiterate that any central government power to intervene in local plans should be restricted to those matters with a clear and substantial national interest. In the current context this would relate to the supply of development capacity sufficient to meet demand, so as to avoid the harmful social, labour market and macroeconomic effects of high land prices (as discussed in Chapters 2 and 6).

8.4 Reducing regulatory burdens and unnecessary prescription

This section:

- provides evidence of undue regulatory burdens and excessive prescription in the planning system;
- proposes the use of a national template to reduce unnecessary and unhelpful variation across plans; and
- points forward to other measures to reduce regulatory burdens and prescription.

Undue regulatory burdens

A number of reports have identified unnecessary, excessive and poorly targeted land use regulations in the planning system.

- In its *Using Land for Housing* report, the Commission pointed to the net economic costs of minimum apartment size, apartment balcony and minimum parking rules, including unnecessarily increasing the costs of new dwellings (NZPC, 2015a). The same report also highlighted rules that could have net benefits, but which had been poorly designed in many cities. These included building height limits, density controls and overly broad heritage or "special character" protections.
- The Principles Technical Advisory Group (2012) observed that their "own experience leads us to the view that there is certainly a degree of unnecessary over-regulation in RMA [Resource Management Act] plans", citing examples such as:

  - "[v]isual streetscape rules which apply to rear lots not visible from the street", "[r]equiring proponents of commercial/industrial development to assess the likely number of employees/hectare in the year 2031";
  - "[h]eritage zone provisions which apply to a 14 year old Lockwood"; and
  - "permitted activity standards that negate practical implementation – e.g. earthworks volume thresholds set so low that no development can proceed without a consent". (p. 52)
- The Urban Technical Advisory Group (2010) pointed to, among other things,
  - "the use by councils of full discretionary activity status when for a number of activities restricted discretionary status could be more widely applied… The added uncertainty of a full discretionary consent and possible appeal adds to risk and therefore costs";
  - "the use of unnecessarily restrictive district plan rules: it is common for local authorities to draft rules so widely that they catch many properties other than those to which the council intended them to apply"; and
  - "Minimum parking requirements in district plans, [which]… result in considerably increased costs especially for medium and high density developments". (pp. 23–24)
- The Registered Master Builders Association (2015) discussed overregulation of development "without regard for affordability implications" (p. 7).

Some land use regulations barely seem to have any connection to a negative externality at all, such as the requirements in a number of operative or proposed district plans for developments in commercial or business zones to have specified floor-to-ceiling heights.

- The Palmerston North District Plan (Palmerston North City Council, 2010) requires that the ground floors of buildings on "pedestrian streets" must be "not less than 1.3 times the floor to floor height of upper floors". This rule is justified on the grounds that "[g]reater first storey height helps accommodate a range of different future uses at ground floor level including food and beverage related retail. It also promotes active edges and facilitates change" (Chapter 11, p. 25).
- The proposed Christchurch Replacement District Plan, as notified, included a rule that required a 3.5-metre minimum floor-to-ceiling height to apply in the Commercial Core zone. In its closing submission to the Independent Hearings Panel (IHP), the Christchurch City Council argued that the rule aimed to ensure "flexibility and adaptability of the building to accommodate future uses" and that "buildings do not appear compressed or 'squat' which sends a message of low quality and lack of generosity" (2015a, p. 32). The Council also argued that the rule was "consistent with good practice and will promote certainty for users of the plan" (p. 33).
- The proposed Thames-Coromandel District Plan sets a 3.5-metre minimum floor-to-ceiling standard for the ground floor developments in its Pedestrian Core zones (2012, p. 405).
- The PAUP, as notified, included a number of floor-to-ceiling obligations, depending on the floor, zone and type of building. The stated purposes of these rules are that "buildings are adaptable to a wide variety of uses over time, [and] provide adequate sunlight and daylight access to buildings" (Auckland Council, 2013, Chapter 1, section 3, p. 27).

None of the underlying council analyses appear to have seriously considered the alternative arguments that owners of buildings will have incentives (ie, assurance of ongoing rental income) to design properties that will meet a range of needs, or assessed the relative costs and benefits of the regulation in any detail. The IHP for the Christchurch Replacement District Plan deleted their proposed height-to-ceiling rules because "developers generally build developments with an adequate floor to ceiling height" and there was "insufficient justification for imposing a minimum floor-to-ceiling height rule" (Christchurch City Council, 2015a, p. 60).[74]

[74] Decision 11.

F8.6 The planning system shows considerable evidence of unnecessary, excessive (and poorly targeted) land use regulations.

Too many plans and too much unnecessary variation across plans

In the current system, the relevant local authorities within a region prepare many plans independently of each other. Though guided by broad provisions in the RMA and related jurisprudence, local authorities have been left to develop their own methods in forming and laying out plans, and presenting them to the public and to subsequent users. Users find it difficult to identify and make sense of the parts of plans relevant to their property or proposed development. Finding a way through one plan does not necessarily help with finding a way through another plan.

Sir Geoffrey Palmer and Dr. Roger Blakely submitted:

> There are regional plans and there are territorial district plans. Making plans under the RMA was a challenge for many local authorities in the early years. Many local authorities re-invented the wheel at considerable expense, and with little attention to shared ways to deal with common problems… There are simply too many plans across a region. They are too diverse and they are too complicated. This has involved local authorities in considerable duplication of effort and there has been a proliferation of planning documents. The result has been ineffective and inefficient planning and poor resource management outcomes. (sub. DR122., pp. 3–4)

The submitters recommend the use of national templates, as proposed in the Resource Management Legislation Amendment Bill introduced into Parliament in 2015 (New Zealand Parliament, 2015).

> That is a change that we support, provided it does not undermine the devolved decision-making and community-enabling principles of the RMA (we have concerns about the Minister's regulation-making powers to override councils' decisions on residential land use rules). (sub. DR122, p. 4)

Associate Professor Ken Palmer also recommends the use of templates (K. Palmer, 2017). These templates could be used to reduce unnecessary variation across plans and in the way that they are presented. Standardised land use rules would create broader benefits (eg, around the installation and maintenance of utilities, such as gas, water, electricity and telecommunications infrastructure). Where the government wanted to promote common regulatory approaches, they would need to consult with local authorities about the form of any new rules and to undertake a regulatory impact analysis (similar to the current requirements for preparing an NPS or NES).

F8.7 The planning system has too many plans within regions, with too much unnecessary variation across plans in content, layout and presentation.

R8.5 In a future planning system, the government should use a national planning template to reduce unnecessary variation across plans in content, layout and presentation.

Sir Geoffrey Palmer and Dr. Roger Blakeley also recommend each region should have only one district plan, and that it should be developed after a regional spatial plan is adopted (sub. DR122, p. 4). Consistent with this, the Commission proposes an integrated approach to developing RSSSs and the District Plans of constituent territorial authorities (Chapter 13). Use of a national template to reduce unnecessary variation across plans will make an integrated approach easier.

Too much prescription

Zones and other forms of land use regulation that prohibit or restrict certain types of activities on specific sites necessarily limit the ability of people and firms to make their own location choices. Such restrictions can be justified where they control significant externalities, such as noise and other forms of pollution. However, regulatory approaches that a number of New Zealand urban councils currently use appear deliberately designed to inhibit flexibility without such justifications. Two common examples are "centres policies" that

aim to direct activity to specific areas and zone restrictions that specify which types of businesses can locate in a zone.

Centres policies aim to direct activity to specific areas

Centres policies aim to direct retail and commercial activity towards specific areas, typically those where such activity currently takes place. Such policies often also seek to maintain a "hierarchy" of centres, with the Central Business District (CBD) at the top. Wellington City Council is one council that uses the centres hierarchy (Figure 8.4). Centres policies generally involve more restrictive activity classifications on commercial development outside designated centres, and controls on the type of activities that can occur within the centres.

Figure 8.4 Wellington City Council centres hierarchy

Source: Adapted from Wellington City Council (2015).

A range of goals or objectives are cited for centres policies, including:

- reducing traffic, congestion and associated environmental problems (especially by encouraging the use of public transport);
- concentrating employment;
- maximising the use of existing public infrastructure and easing pressure on council infrastructure budgets;
- ensuring accessibility to services;
- supporting compact urban forms and easing pressure on peri-urban agricultural land; and
- contributing to a sense of community identity.

A number of submitters cited these objectives in favouring centres policies (Allison Tindale, sub. 8; Brenna Waghorn, sub. 9; David Hattam, sub. 41).

The Commission has also heard of New Zealand cases where council planners have aimed to restrict commercial development to designated centres on the grounds that this would reap productivity benefits for the local economy through agglomeration benefits (Chapter 2 discusses evidence for agglomeration economies). It appears however that such a justification for centres policies:

- fails to understand that agglomeration economies result from the choices of residents and businesses about which locations are likely to best suit their particular skills and enterprise; and
- fails to take into account the very real costs of forcing businesses to locate in more expensive areas than they might prefer; and/or in areas that have less favourable transport links with their employees, customers and suppliers.

In particular, it is only businesses that are likely to benefit from locating near other businesses in the centre or from concentrations of customers that will be willing to bear the higher costs of locating in the central city. Forcing all businesses to do so is likely to render some unviable at the margins.

Centres policies are common in Australian, British and New Zealand planning systems. Two-thirds of the respondents to the Commission's survey of local authorities said they had policies in place that restrict the development of large-format retail or other commercial activity outside centres. Local and international experience with centres policies suggests that they often fail to achieve their objectives and can have negative economic impacts (Box 8.1).

Box 8.1 **International and local experiences with centres policies**

Impacts on employment patterns

Day et al. (2015) analysed employment growth in Melbourne between 2001 and 2011 and found "with remarkable consistency, across a range of approaches, that AC [activity centres] policies are not significantly associated with higher jobs densities in the AC influence areas", with the exception of one group of centres (p. 11). Pfister et al. (2000) assessed employment patterns in Sydney between 1981 and 1996 and concluded:

> There may be an entrenched employment pattern that is more emphatically dispersed than polycentric, despite all the rhetoric of edge cities and public policies designed to encourage more nodal order and less dispersion in metropolitan employment patterns. On the one hand, the findings may well point to the hegemony of the market in directing metropolitan employment patterns to 'optimal' spatial solutions. On the other, and in the Australian context, they do lend weight to concerns about…the resistance of the market to planning interventions. (p. 440)

Co-location of business and residential uses

Goodman et al.'s (2010) analysis of housing supply in Melbourne between 1990 and 2008 found that "planning policies which sought to increase the proportion of new housing built close to designated activity centres and public transport nodes, specifically train stations, appear to have had very little influence" (p. 74). They attributed this lack of influence to vague language in policy and regulatory instruments, which was "not specific enough to require compliance" (p. 75), but also to underlying economic and market forces:

> Change is occurring in that, for example, the size of inner urban apartments is falling and the size of predominantly detached urban corridor dwellings is increasing. However, much change seems not to be strongly driven by government planning policy…Developers minimised the impact of government policy on development decisions. One stated that [planning policy] *Melbourne 2030* had no impact on development decisions. Some developers stated that they based their planning on strategic market research into demographic trends, consumer preferences, and market opportunities, and that they understood and catered to market preferences. (p. 74)

In Auckland, a 2007 evaluation of the Regional Growth Strategy noted that capacity for residential and business development was available within designated centres, but was not being taken up. The evaluation also noted that intensive housing was emerging outside intended centres, in business zones (which had larger sites, fewer rules and less community resistance) or in areas of high amenity (Regional Growth Forum, 2007, p. 53).

Protection of existing retail centres

A review of the English Planning Policy Guidance 6 (PPG6), which required local authorities to "sustain and enhance the viability of town centres" found that, although the supply of new regional shopping centres and out-of-centre stores had been restricted, traditional town centres "continued to lose market share" and there had been little success in "redirecting activity back into town centres, especially smaller centres" (C B Hillier Parker / Cardiff University, 2004, p. 91). The Australian Productivity Commission cited UK evidence that, in some cases, policies to protect town centres had the perverse effect of harming the smaller, independent stores they were aiming to protect (APC, 2011a, p. 248).

Reduced productivity and competition

Cheshire, Hilber and Kaplanis (2011) compared English, Welsh, Scottish and Northern Irish planning policies, and estimated "an aggregate loss of TFP [total factor productivity] of more than 20 percent on average since the late 1980s as a result of planning policies and their applications by LPAs [local planning authorities]" (2011, p. 28). Noting widespread evidence that TFP rises with store sizes, Cheshire et al. concluded that there were good reasons to think that "planning policies – in particular town centre first policies – directly cause a significant reduction in total factor productivity in retailing – at least in the case of the large supermarket sector" (p. 27).

Haskel and Sadun (2012) used micro-data to explore UK retailing productivity growth between 1997 and 2003. This period immediately followed the regulatory changes that made it harder to build large out-of-town stores. They observed a shift in British retailing (especially supermarkets) towards smaller stores, which was "remarkably different from what happened in countries with different planning policies, where retail chains have chosen large store formats to drive their expansion" (p. 426). Haskel and Sadun concluded that the fall in shop sizes was

> associated with lowered TFP growth by about 0.4% pa, about 40% of the post-1995 slowdown in UK retail TFP growth. Given that the slowdown in retailing alone is about one-third of the entire slowdown in UK market sector TFP growth, this is about 13% of that entire market sector slowdown. It is also around £88,000 per small chain store created. (p. 445)

Inquiries into groceries sectors have identified centres policies as constraints on competition. The Australian Competition and Consumer Commission concluded that access to suitable and large sites was a major barrier to entry by independent supermarkets and that

> zoning and planning regimes, including centres policies, act as an artificial barrier to new supermarkets establishing in areas, thereby potentially impacting on competition between supermarkets to supply consumers. In particular, such policies, by limiting opportunities for new developments, contribute to increasing the level of concentration in the retail grocery sector. (2008, p. 195)

The United Kingdom Competition Commission concluded that the planning system constrained the entry of new larger grocery stores and contributed to a shortage of land for such stores. They highlighted in particular the planning rules that restricted out-of-centre developments across the United Kingdom as acting "as a barrier to entry or expansion in a significant number of local markets" (2008, p. 175).

F8.8 Many local authorities in New Zealand discourage or prevent the development of commercial activity outside designated centres. Local and international experience with such policies suggests that they often fail to achieve their objectives and can act as barriers to competition and productivity growth.

A common theme in current and proposed district plans with centres policies is reducing competitive pressure on existing commercial areas, particularly from malls and larger format retail ("box stores"):

> The Central City forms the Regional Centre of Hamilton and is the dominant commercial, civic and social centre for the City and region and the focal point for the majority of the City's workforce. However the previous planning framework has enabled an unplanned dispersal of retail and office development which has contributed to the underperformance of some elements of the Central City with consequential effects on its function, amenity and vitality. It is important that future development in other parts of Hamilton does not adversely impact the important role of the Central City as the primary centre for the Waikato region. (Hamilton City Council, 2014, Volume 1, Chapter 2, p. 6)

> A potential threat to the viability and vitality of Centres is the increasing pressure for larger scale supermarkets, large scale retailing and other shopping destinations to locate in areas outside the City's traditional town centres. This is of particular concern given that Wellington's Centres represent a considerable investment, not only because of the infrastructure within them, but also because of the commercial and community services and facilities, and the street and landscape improvements they may contain. In the context of sustainable management these existing commercial centres are a valuable physical resource, and provide places that are highly accessible by multiple transport modes. For these reasons, Council seeks to ensure the viability and vitality of established Centres is not undermined by inappropriately located out-of-centre retail activities. (Wellington City Council, 2015, Volume 1, Chapter 6, p. 1)

> …the inappropriate development of additional Key Activity Centres may undermine the community's investment in existing centres and weaken the range and viability of the services they provide. (Environment Canterbury, 2013, Chapter 12A, p. 7)

Indeed, some district plans appear to see the reduction in competition as a beneficial outcome from the planning system. The Palmerston North District Plan, for example, attributes the "success of the inner business area" to, among other things,

> the absence of strong competition from competing suburban centres, this being a consequence of previous commercial containment policies which recognised the adverse impacts associated with permitting extensive peripheral retail development to occur. (2010, Chapter 11, p. 6)

The Palmerston North City Council reiterated its adherence to this approach in its submission (sub. DR62).

In one high-profile case,[75] Hamilton City Council tried to hinder the development of a mall by Waikato-Tainui to protect the city's CBD. It did so by varying its District Plan without first advising Tainui. The High Court overturned the Council's decision following a judicial review.

F8.9 In trying to protect existing city and town centres, some New Zealand urban local authorities have sought to shield retail and commercial enterprises in the centres from potential competitors in other locations.

Such restrictions could be justified if they delivered clear and significant benefits, but such benefits are not obvious. As outlined in Box 8.1, there are serious questions about the efficacy of centres policies. Also, many of the other arguments cited for such policies are largely about the amenity of "vital" or "vibrant" centres. Although efficiencies in the use of public infrastructure *may* result from centres policies, these are not guaranteed. As the Australian Productivity Commission noted,

> while restrictive centres policies may be used to encourage more focused infrastructure investment, this will not necessarily translate into infrastructure being fully utilised at a government's preferred development locations. (APC, 2011a, p. 285)

Phil McDermott observed (of the University of Waikato's defence (sub. DR079) of the Hamilton City Council centres policy):

[75] *Waikato Tainui Te Kauhanganui Inc. v Hamilton City Council* HC HAM CIV2009-419-1712, 3 June 2010.

> [A]n alternative interpretation [is]: that the District Plan has been shaped by the uncritical adoption of policies to sustain the existing retail hierarchy in part in the belief that this will bring about a return to the retail dominance of the high street in the face of decentralising tendencies: This: (a) does not recognise recent, current, and potential future changes in the distribution of goods and services and the nature of consumption; (b) fails to consider the changing nature of inner city activities and economies and the structural foundations of these changes; (c) reinforces the current distribution of wealth, effectively protecting established capital while suppressing new investment and innovation; and (d) promotes longer-distance trips for household spending and services than would be the case if a more decentralised pattern of commercial investment (to match residential development) were more freely allowed. (McDermott, 2017, p. 14)

Although some argue centres policies better serve people on low incomes (eg, David Hattam, sub. 41), contrary evidence shows that the growth of some large-format retail chains in the United States benefited poorer people, in particular through their lower prices (Basker, 2007).

The main argument advanced for centres policies that has some merit is that more dispersed commercial patterns may lead to greater car use, and associated pollution and congestion. However, it does not follow from this that tight regulatory restrictions on the location of retail and other commercial activity is the best solution. Other options, such as congestion pricing and emissions taxes or regulation, would more directly target the sources of concern (ie, congestion and pollution) (Chapter 9). Similarly, if the primary objective is maintaining and developing areas that are attractive to retailers and their customers, then other actions would be better. Such actions would include:

- targeted investments in the public realm and infrastructure;
- a sufficient supply of development capacity; and
- flexible land use controls within areas with a high degree of commercial activity (which permit a wide range of uses, and so allow the area to adjust to changing preferences).

Business-specific zone restrictions

A related regulatory practice that limits the ability of cities to evolve in response to changing preferences and individual choices is a business-specific zone restriction. Examples of such detailed restrictions are noted in Box 8.2.

Box 8.2 **Examples of restrictions on business operation in district plans**

The Hutt City District Plan limits retail outlets near the Seaview marina to "the sale of food and beverages for the consumption on site and to equipment directly associated with marina related activities". Shops in the area must also not exceed "100m² in gross floor area" or 8 metres in height (2011, Chapter 7B, pp. 6–7). Similar controls exist in the PAUP for the Marina zone and Minor Port zone.

The Wellington City District Plan limits the establishment of retail activities in its Business 2 zone to "trade supply retail, wholesalers, building improvement centres, service retail, ancillary retail, and yard-based retail activities", to "maintain industrial land availability and the viability and vitality of Centres" (2015, Chapter 33, p. 9).

Under the operative Christchurch City District Plan, any "retail activity undertaken from a site [in the Business 3 Zone] shall only consist of one or more of the following:

> (i) the display and sale of goods produced, processed or stored on the site, and ancillary products, up to 20% of the net floor area on the site used to produce, process or store those goods, or 350m² retail floorspace, whichever is the lesser;
>
> (ii) yard-based suppliers;
>
> (iii) trade suppliers;
>
> (iv) second hand goods outlets;

(v) food and beverage outlets; and

(vi) service stations. (2014, Volume 5, Part 3, 5.3.1)

The Proposed Hamilton City Plan (2014) controls the size of retail shops, banks, yard-based retail, restaurants, cafés and licensed premises and other forms of commercial activity in the city's business zones. Varying degrees of restrictiveness apply, depending on the business zone these activities are located in. For example, restaurants, cafés and licensed premises with a gross floor area of more than 200 square metres are a non-complying activity in the Large Format Retail Area business zone. Commercial places of assembly without cinemas or bowling areas are a permitted activity in the Major Event Facility business zone, but places of assembly *with* such additions are non-complying.

The Palmerston North City Council District Plan limits the number of "prepared food and beverage outlets" in the Fringe Business Zone (which is intended to accommodate demand for large-format retail) to one outlet on each site The Plan also requires that the outlet not take up more than 10% of the merchandising area of approved retail activity. Office activities in the zone are similarly limited to "10% of the Gross Floor Area of the building" and must be "ancillary to the principal activity on site" (2010b, Chapter 11, p. 120).

Under the Proposed Invercargill City District Plan, a range of activities (eg, light industry, healthcare, professional and personal services, essential services) are permitted in the Business 4 (neighbourhood shop) zone, but only if their floor area is less than 300 square metres and they are "open to the public only within the hours of 6.30 am to 10.00 pm" (2013, Section 3, p. 51).

Retail New Zealand also noted the presence of rules "[r]estricting floor space and the number of businesses in certain areas or zones" (sub. 29, p. 3). Some 47% of respondents to a survey of councils about their planning practice reported that they used controls on the total floorspace of businesses in their Plans, and 74% reported that they used controls on the types of businesses that could locate in commercial or industrial zones.

Detailed controls on the type and size of business may partly reflect the large number of differentiated business zones in some operative or proposed District Plans (Table 8.1).

Table 8.1 Commercial and industrial zones in selected operative and proposed District Plans

District Plan	Commercial and industrial zones	
Proposed Auckland Unitary Plan (as notified)	• Metro Centre Zone • Town Centre Zone • Local Centre Zone • Neighbourhood Centre Zone • Mixed Use Zone	• General Business Zone • Business Park Zone • Heavy Industry Zone • Light Industry Zone • Special Purpose – Airport Zone
Proposed Hamilton District Plan	• Commercial Fringe • Major Event Facilities • Sub-regional Centre • Large Format Retail • Suburban Centre • Neighbourhood Centre • Central City Zone	• Knowledge Zone • Industrial Zone • Ruakura Logistics Zone • Ruakura Industrial Park Zone • Te Rapa North Industrial Zone • Rototuna Town Centre Zone
Operative Tauranga City Plan	• City Centre Zone • Commercial Zone • Tauriko Commercial Zone	• Industry Zone • Port Industry Zone • Tauriko Industry Zone

District Plan	Commercial and industrial zones	
	• Wairakei Town Centre Zone • Wairakei Neighbourhood Centre Zone	• Papamoa East Employment Zone
Operative Palmerston North City District Plan	• Inner Business Zone • Outer Business Zone • Local Business Zone	• Fringe Business Zone • Industrial Zone • North East Industrial Zone
Operative Christchurch City District Plan	• Central City Business • Central City Mixed Use • Central City (South Frame) Mixed Use • Business 1 (Local Centre) • Business 2 (District Centre) • Business 2P (District Centre – Parking) • Business RP (Retail Park) • Business 3 (Inner City Industrial)	• Business 3B (Inner City Industrial Buffer) • Business 4 (Suburban Industrial) • Business 4P (Suburban Industrial – Produce Park) • Business 4T (Suburban Industrial – Technology Park) • Business 5 (General Industrial) • Business 6 (Rural Industrial) • Business 7 (Wilmers Road) • Business 8 (Islington Park)
Proposed Invercargill City District Plan	• Business 1 (Central Business District) • Business 2 (Suburban Shopping and Business) • Business 3 (Specialist Commercial) • Business 4 (Neighbourhood Shop) • Business 5 (Rural Service)	• Industrial 1 (Light) • Industrial 1A (Marine) • Industrial 2 (Urban) • Industrial 3 (Large) • Industrial 4 (Awarua)

Source: Auckland Council, 2013; Hamilton City Council, 2014; Tauranga City Council, 2013; Palmerston North City Council, 2010b; Christchurch City Council, 2014; Invercargill City Council, 2013.

Note: This table arguably underplays the complexity of zones, as individual zones in some cities may also be affected by overlays, which apply additional layers of rules on top of zones.

Narrowly defined zones reduce the responsiveness of the planning system, increase overall complexity, and increase the demand for plan changes and appeals (NZPC, 2015a). Detailed and localised controls on the types and sizes of businesses that operate within a particular zone are unlikely to be the best approach, not least because such rules can take a long time to change and inevitably lag developments on the ground.

F8.10 A number of councils apply very detailed controls on the types and sizes of businesses that can operate in particular zones. These controls are unlikely to be efficient, not least because such rules can take a long time to change and inevitably lag developments on the ground.

Reducing regulatory burdens and unnecessary prescription

The Commission proposes that an IHP review all Plans and significant Plan changes (section 8.6). Decision making would be guided by clear purposes for planning in the built environment (Chapter 13) and by statutory principles, similar to those provided for in Clause 8 of the Resource Legislation Amendment Bill currently before Parliament. These principles would create a presumption that development controls and design standards in rules will be used only to the extent necessary to achieve the purposes of legislation governing the planning system, and that planning processes are timely, efficient, consistent, cost-effective and proportionate to the functions and powers being exercised (Chapter 13). The combination of clear

statutory guidance and independent review should, over time, lead to a reduction in regulatory burden and unnecessary prescription.

8.5 Reducing uncertainty around the role of urban design in planning decisions

The Commission heard from both engagement meetings and submitters that some current regulatory practices lack certainty and predictability. The feedback was that this was due in large part to the discretion that councils exercise and the advice or requirements from councils or their delegates that fail to reflect the realities of development or the commercial world.

Urban design is one area where councils often reserve their discretion, and where complaints of uncertainty and excessive requirements frequently occur. Urban design has been defined in different ways, with varying degrees of specificity. Definitions typically emphasise the impact of the form and placement of buildings, spaces and structures on people, and the importance of considering "place" and context when making land-use decisions (Box 8.3). Thinking based on the "New Urbanism" planning paradigm has been influential in New Zealand (Chapter 13).

Box 8.3 **What is urban design?**

The Department for Environment, Transport and Regions and the Commission for Architecture and the Built Environment (2000) offered the following definition:

> Urban design is the art of making places for people. It includes the way places work and matters such as community safety, as well as how they look. It concerns the connections between people and places, movement and urban form, nature and the built fabric, and the processes for ensuring successful villages, towns and cities.
>
> Urban design is a key to creating sustainable developments and the conditions for a flourishing economic life, for the prudent use of natural resources and for social progress. Good design can help create lively places with distinctive character; streets and public spaces that are safe, accessible, pleasant to use and human in scale; and places that inspire because of the imagination and sensitivity of their designers. (p. 8)

In New Zealand, the Ministry for the Environment (MfE, 2005a) defined urban design as being

> concerned with the design of the buildings, places, spaces and networks that make up our towns and cities, and the ways people use them. It ranges in scale from a metropolitan region, city or town down to a street, public space or even a single building. Urban design is concerned not just with appearances and built form but with the environmental, economic, social and cultural consequences of design. It is an approach that draws together many different sectors and professions, and it includes both the process of decision-making as well as the outcomes of design. (p. 7)

Many District Plans make "urban design assessment" a condition of a resource consent, especially for larger developments, and a number of councils have established urban design panels to review proposals and provide advice.[76] This advice may cover the external appearance of the building, its bulk and location and other factors.

Determining "good design" is an inherently difficult process and open to interpretation. Yet some have argued that it is possible to conduct "objective design assessment" (Duncan Rothwell, sub. 38, p. 2). Likewise, the 2010 Urban Technical Advisory Group proposed that

> [d]esign quality can be objectively assessed. While opponents of design review often claim that the process is subjective, this claim is countered by the fact that professional educators in design are able to

[76] Some 23% of council respondents to a Commission survey reported they used urban design panels.

> teach, recognise and assess design skill, and competition and awards jurors are able to objectively assess professional design quality. (2010, p. 74)

Even so, some degree of discretion and variability is to be expected, and may be desirable. However, evidence presented to the Commission during this and earlier inquiries suggests that urban design requirements or assessments in some cities lack perspective, consistency, or a sense of their cost or economic implications. This is seen in examples of urban design advice – and in some cases, resource consent conditions – given to some South Island supermarkets (Box 8.4).

Box 8.4 **Urban design advice given to South Island supermarkets**

Queenstown PAK'n SAVE, Hawthorne Drive, Frankton Flats

In the resource consenting stage of the Queenstown PAK'n SAVE, Foodstuffs South Island Limited was encouraged by Queenstown Lakes District Council to seek comment and advice from the local urban design review panel which made various comments on the design and location of the building within the site.

The panel suggested various options including:

- lowering the entire PAK'n SAVE building below floor level;
- redesigning the exterior of the PAK'n SAVE to be viewed as a fruit processing shed; and
- placing a "dummy" retail shop on the corner of the PAK'n SAVE car park, to provide visual relief within the car park.

Ferry Road New World, Woolston, Christchurch

Urban Designers within Christchurch City Council provided specialist input in the processing of the resource consent. Recommendations included "sleeving" the New World supermarket with competing retailers, locating the New World to the street frontage to activate the store and provide a high street visual feel while locating all parking to the rear of the site. The location of car parking to the rear would have significant security, operational and CPTED [Crime Prevention Through Environmental Design] issues as well as being impractical.

Wainoni PAK'n SAVE, Aranui, Christchurch

Resource consent was necessary to rebuild a replacement [for the] significantly earthquake damaged PAK'n SAVE within the existing site while allowing the existing PAK'n SAVE to continue trading. The location of the replacement store was limited to the front of the site, and involved a complicated 3 year building process.

Urban designers and the processing consent planner within Christchurch City Council sought to have the application declined on the basis that a Council-owned open-space area adjacent to the PAK'n SAVE would have less visual exposure.

Kaikoura New World – Beach Road, Kaikoura

It was recommended by various council staff while processing the resource consent that the New World (which is only some 8.5 metres tall) be required to have a finished floor level lower than the State Highway and adjoining commercial properties.

The resource consent required the New World to be located at a lower ground level. A subsequent neighbouring shopping centre was not required to locate their buildings below road level and there is now a very noticeable physical difference in level between the two developments, and also between the New World and other adjoining land. Council officers further sought a mural be painted on the rear of the building so if anyone was fishing in the sea they would view an ocean themed mural rather than the recessive colour scheme of the New World.

Source: Retail New Zealand, pers. comm.

The somewhat arbitrary nature of the advice provided to supermarkets may reflect the imprecise, open-ended language used in assessment criteria or urban design guides. Rhys Phillips described urban design guides as "vaguely worded" and added:

> Through these Urban Design Guides, Councils are going beyond simply controlling the effects of the development upon the external environment and have started to control aspects of developments which have no impact beyond the site. (sub. 1, p. 1)

Retail New Zealand commented in their submission that very broad assessment criteria can make it hard for retailers and developers to consult meaningfully with affected communities. The criteria also introduce risks:

> Unclear and subjective planning criteria create serious issues for businesses wishing to work within the rules but with little guidance about how those rules might be interpreted. It creates issues for authorities that might find it difficult to maintain a level of consistency within its own decision-making. It also creates issues for public participation – it is very difficult to meaningfully consult on concepts that are so broad that they are meaningless. This is further complicated by the high level of discretion local authorities retain which means that planning decisions can become highly politicised, further adding to the uncertainty and unpredictability. (sub. 29, p. 3)

Property Council New Zealand submitted:

> Arguably, within an urban environment, the idea of amenity has hijacked the RMA. It is common for councils to place onerous and often complex financial and regulatory visual amenity conditions on development consents. Councils have no understanding of the true financial cost of these and the impact on development viability for a project. (sub. DR118, p. 9)

Supporters of urban design also seem to prefer the use of discretion and negotiation.

> So what might we look for in an ideal urban planning system? Some key phrases submitted by members are:
>
> > "Proposals need to demonstrate how the development is the right outcome for the site, rather than how it fits within rules."
> >
> > "Rule-based planning is inefficient and negative: it is based on what is to be avoided, as opposed to what is good in the context; effects (usually bad) rather than outcomes (may be positive)". (Urban Design Forum, sub. 37, p. 4)
>
> Generally, less rules and a more principles and policy based approach is advocated for, particularly when it comes to design matters. (Duncan Rothwell, sub. 38, p. 3)

Some central government guidance has compounded uncertainty about urban design by encouraging local authorities to take an expansive view of its scope. In its *Value of Urban Design* report, MfE (2005b) offers a definition of "public realm" that does not clearly distinguish between public and private property:

> The public realm comprises all parts of the physical environment that the public can experience or have access to. This is primarily the system of public space, but also includes the facades of private buildings that frame public space, and associated landscape and design treatments. (p. 48)

Under this definition, the public realm includes any part of a city that the public can see. One inference is that councils can and should regulate the appearance of private buildings as these are "in the public realm". Associate Professor Caroline Miller said in her submission:

> [P]lanning and planners are obliged to take account of the advice provided by the ministry in charge of that legislation. In the case of planning that ministry is the Ministry for the Environment (MFE). Thus, as this report identified, MFE produced the Urban Design Protocol and appointed champions to advocate its use in planning which helped to unleash the present day enthusiasm for urban design beyond the public realm. (sub. 50, p. 1)

F8.11 Council requirements on some developments to undergo urban design assessments sometimes lead to poor exercises of regulatory discretion. Urban design criteria can lack clarity and precision, and design advice to resource consent applicants can lack perspective, consistency, or a sense of their cost or economic implications. Judgements and practice on urban design vary considerably across councils.

Yet Ngā Aho and Papa Pounamu provide another important perspective on urban design:

> We disagree with the Commission's finding that implies a minimal value of urban design guidelines. A number of Māori communities are developing or have developed urban design guidelines by iwi/hapū independently or in collaboration with local or central government agencies. These initiatives reflect the developing capacity of Māori communities and practitioners to engage more effectively in urban planning and design, as well as the growing commitment from local and central government to work collaboratively with Māori. Kaupapa Māori urban design guidelines are intended to facilitate meaningful and authentic expressions of the relationship that Mana Whenua have with their ancestral lands, waters, wāhi tapu, wāhi taonga, mahinga kai, papa-kāinga and other taonga within urban environments. (2016b, pp. 39-40)

Kaupapa Māori urban design is a central part of Māori aspirations to "create great urban spaces and places for Māori to be Māori" (Chapter 7). The Te Aranga Cultural Landscape principles are one approach to promoting such design. The Auckland Design Office incorporates these principles into its online Design Manual (Auckland Design Manual, 2016).

The Canterbury District Health Board pointed to the health benefits of neighbourhood aesthetic quality (sub. DR59). These include "promoting healthy lifestyle behaviours, particularly physical activity" (p. 8).

Better use of regulatory discretion and urban design requirements

Urban design has significant "public good" elements (Chapter 3). It is legitimate for councils to provide for these in their plans and consenting decisions. The Christchurch IHP noted:

> [G]ood urban design is an essential ingredient not only in the recovery but also providing for the long-term future of Christchurch …[and this warrants] the capacity to decline consent where a development is so deficient that it would significantly derogate from the quality of its residential environment. (cited by Allison Tindale, sub. DR110, p. 3)

Other submitters likewise recognised the amenity value of urban design (Foodstuffs New Zealand, sub. DR108; The New Zealand Initiative, sub. DR75; Wellington City Council, sub. DR68; New Zealand Institute of Surveyors, sub. DR121).

The difficulty is finding the appropriate scope for regulatory discretion relating to urban design and balancing perceived benefits against any additional costs in meeting the urban design requirements of councils. Practice and judgement appear to vary considerably across different local authorities.

The Property Council New Zealand submitted:

> Councils should seek to work proactively with developers during the consenting process to achieve positive, functional and cost-neutral design outcomes for the developments … this is a more desired approach than through a regulatory framework. (sub. DR118, p. 10)

The Property Council commended the approach taken by the Auckland Council through its Urban Design Office. More broadly, it argued:

> Visual amenity is subjective, it means different things to individuals and communities, and therefore if councils are to invest in it, consultation is required. Using the long-term plan and annual plan development and consultation process [under the LGA] would provide an assessment as to how communities assess visual amenity alongside other more critical council investments and services. (p. 10)

F8.12 Urban design assessments can be a valuable tool for enhancing the amenity of public spaces if they:

- involve developers and designers in a collaborative process to find the best solution;
- are proportionate in scope to the public amenity being considered;
- take proper account of costs and benefits of alternative design proposals; and
- produce realistic and practical outcomes.

Promoting better use of discretion in taking into account the amenity of urban design could be approached by limiting provisions in plans for discretionary decision making in this respect.

Yet Sir Geoffrey Palmer and Dr. Roger Blakeley argued:

> [T]he benefits of urban design assessment are that they allow councils to reduce their use of blunt instrument controls such as height and density … There is still a requirement in urban design assessments to take account of cost and economic implications. (sub. DR122, p. 4)

To avoid possible adverse consequences, councils will need to manage carefully the trade-off in Plans between prescriptive controls and provision for discretionary decisions.

Together, the following features would provide better guidance to councils and encourage better practice in the use of discretion in plans:

- a clear statutory purpose for planning for the built environment (Chapter 13);
- statutory principles that require Plan provisions to be proportionate to the issues addressed and relevant to the purposes of the Act; and
- independent and systematic review of Plans and Plan changes (section 8.6).

Another approach would be to apply more discipline to the exercise of discretion in granting consents. In its draft report, the Commission asked whether allowing or requiring the Environment Court to award a higher proportion of costs for successful appeals against unreasonable resource consent conditions would be sufficient to encourage better use of discretion by councils. While some submitters (Foodstuffs New Zealand, sub. DR108; Property Council New Zealand, sub. DR118) thought this proposal had merit, many others saw difficulties in implementation and the incentives it would create to delay processes (Horticulture New Zealand, sub. DR73; Greater Christchurch Urban Development Strategy, sub. DR83; Greater Wellington Regional Council (GWRC), sub. DR80; LGNZ, sub. DR113; New Zealand Initiative, sub. DR75; Upper Hutt City Council, sub. DR120; Waipa District Council, sub. DR56; Water New Zealand, sub. DR67; Wellington City Council, sub. DR68; Whanganui District Council, sub. DR95).

The Commission has not pursued this idea further. It considers however that statutory principles favouring the proportionate and relevant use of discretionary powers in consents (Chapter 13), combined with the Environment Court jurisdiction over appeals on council consent decisions (section 8.6) would improve practice.

The Commission also asked in its draft report whether councils should be required to pay for some, or all, costs associated with their visual amenity objectives. While some submitters agreed with this proposition (Foodstuffs New Zealand, sub. DR108; Habitat for Humanity Christchurch, sub. DR114; Retail New Zealand, sub. DR74), many disagreed, mostly on the grounds that it would be impractical to evaluate costs and benefits, and would reduce incentives for developers to contribute with other developers and public agencies to good neighbourhood design from which they collectively benefit (Allison Tindale, sub. DR110; Canterbury District Health Board, sub. DR59; Greater Christchurch Urban Development Strategy, sub. DR83; Wellington City Council, sub. DR68; Whanganui District Council, sub. DR95; The Architecture Centre,

sub. DR123). The Commission agrees that such a policy would be difficult to implement and could create perverse incentives.

Removing the non-complying activity category for consents

The RMA (s 77A) sets out classes of activity which may be applied in plans to particular zones or performance standards:

- a permitted activity; or
- a controlled activity; or
- a restricted discretionary activity; or
- a discretionary activity; or
- a non-complying activity; or
- a prohibited activity.[77]

K. Palmer notes that an application for a "non-complying activity" may be viewed by council planners and the council as an attempt to undermine the plan, and so face greater hurdles than if the application was for a discretionary activity. As a result "[i]nnovative design and development, especially in the built environment, may be frustrated and deterred by the non-complying activity culture of a local authority" (2017, p. 57). Palmer proposes that the category should be abolished; and that instead council planners should have

> a discretion to disallow an application for a discretionary activity, where the consent authority determined on strong reasonable grounds that the development due to magnitude or precedent effect, should only proceed under a plan change…This would allow for greater flexibility and assessment on the merits, especially in the development of the built environment. (2017, p. 57)

New land use and resource management planning legislation should review and simplify as practicable the categories of consents.

8.6 Independent Hearings Panels to review Plans

This section discusses the current lack of systematic and timely checks on Plans and Plan changes, and recommends that IHPs, established locally as required, provide such checks.

Insufficiently strong checks on regulatory decision making

As discussed in Chapter 5, the quality of local authority regulatory analysis has been a source of controversy and complaint since the early years of the RMA. Commentators, including the Commission, have criticised the lack of proper cost–benefit analysis, inadequate consideration of options, poor implementation analysis, and the often concerning distributional impacts of regulatory decisions (Dormer, 1994; McShane, 1996; NZPC, 2013; NZPC, 2015a). Several submissions to this and earlier Commission inquiries have also raised concerns about the efficiency, fairness and proportionality of land use rules (section 8.4 and section 8.5). Continuing concerns, despite repeated amendments to legislation to improve performance, suggest that deeper, structural drivers of behaviour exist.

One cause of poor performance is gaps in workforce capability, as discussed in Chapter 14. Another substantial driver is the insufficiently strong quality checks on council regulations on land use. This is noticeable in a number of areas, including the lack (until recently) of NPSs or standards on urban matters, and the lack of any consequences for poor regulatory analysis. Although the Government has moved to fill the gap in NPSs, this is unlikely on its own to raise the quality of regulatory analysis or decision making.

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[77] A consent authority has the power to impose conditions on consents for *controlled activities* on matters over which control is reserved by a Plan, Proposed Plan or national instrument. It has the power to decline a consent or impose conditions on a consent for *restricted discretionary* activities only on matters over which discretion is reserved by a Plan, Proposed Plan or national instrument. It may decline a consent or grant a consent with or without conditions for a *discretionary activity*. And it may grant a consent with or without conditions for a *non-complying activity* only if the adverse effects on the environment will be minor, and it would not be contrary to the objectives and policies of a relevant Plan and/or proposed Plan (RMA ss. 87A, 104D).

New Zealand is unusual in providing appeals on the merits of Plans

The main check on the regulatory decisions of local authorities in the current system, apart from community scrutiny of draft plans, is the Environment Court which hears appeals on the merits of plans and of consent decisions. The Commission has previously noted the important role that the Court plays as a quality check and as a mechanism for resolving disputes (NZPC, 2013, 2015a). Some inquiry participants also made these points. For instance, the Palmerston North City Council commented that the Environment Court "holds people to account should they seek to abuse the urban planning system" (sub. 24, p. 3).

Appeal rights in New Zealand have expanded over successive iterations of the planning system (NZPC, 2015a) and are now broad compared with similar appeal rights in other comparable jurisdictions. The ability in New Zealand to appeal decisions on Plans in the courts is particularly unusual.

- No Australian state or territory provides for any right of appeal to a court or tribunal on the merits of a plan policy or rule.
- England and Wales have no provision for merit appeals on council plans.
- Neither Alberta nor British Columbia permits merit appeals on plans. Council decisions on submissions to plans in Ontario may be appealed to the Ontario Municipal Board. However, the Board is an expert review panel, not a court. Unlike in New Zealand, no relevant submitter can appeal the Board's decisions to higher courts (K Palmer, 2013).

F8.13 Appeal rights in New Zealand are broader than in other comparable jurisdictions. The ability to appeal provisions of Plans is particularly unusual.

Disadvantages and benefits of the Environment Court considering the merits of Plans

The role of the courts in considering the merits of plans is controversial. Local authorities have criticised the role of the courts in deciding on plans, arguing that this oversteps constitutional boundaries by allowing unelected judges to set policy (LGNZ, 2011).

Councils, and many others, have also argued that the *de novo* appeals standard discourages submitters from providing a "full brief of evidence" and leads some to "keep their powder dry" for the later appeals (NZPC, 2013; Peter Skelton, pers. comm. 19 September 2016). Shepherd commented that, like submitters, Councils themselves are more careful about the evidence when plans are appealed to the Environment Court.

> [T]he evidential base for Plan reviews and changes, and the reasons for the changes (including section 32 reports) are often compiled in a much more comprehensive manner in response to an appeal to the Environment Court than as part of the notified proposed Plan change. This results in the first merit assessment being less well informed than the second. (2016, p. 10)

Councils have highlighted the costs and delays caused by appeals, pointing to long timeframes involved in getting plans approved, which in their view "makes it harder to promote large-scale and ambitious projects, and makes our system slow to respond to emerging trends, new evidence, unintended consequences or new opportunities" (LGNZ, 2015a, p. 27). LGNZ (2015a) states that on average "it has taken 6.3 years after a district plan has been notified for it to become operative, 6.1 years for a regional plan, 4.4 years for a regional policy statement and 2 years for a plan change" (p. 27). Local government has sought to have appeal avenues in the planning system restricted, in part to speed up processes.

A further disadvantage of merit hearings in the Environment Court is "the acute drop-off in participant rates the further along the formal process a matter progresses" (D. Hill, pers. comm., 26 October 2016). Typically, only well-resourced participants proceed to Environment Court hearings on Plans.

Yet other commentators argue that the courts play an essential corrective role in the planning system. Nolan et al. (2012a) commented that the

> reality, which many participants in the RMA process would attest to, is that councils often make unsatisfactory decisions on many aspects of their policy statements and plans. This can be on major aspects, but in many occasions it is in areas of detail that can have significant impacts on business…the fact that councils know that their decisions can be appealed to the Environment Court means that they take a much more responsible approach to their decisions. (pp. 5–6)

Likewise Ngā Aho and Papa Pounamu commented:

> [A]ppeal rights have been extremely important to advancing Māori values, rights, and interests. Because of the issues of limited capacity and multiple processes experienced by Māori communities, coupled with the fact that councils do not engage sufficiently early with Mana Whenua, a number of iwi and hapū have had to use appeal rights to participate in planning processes. (2016b, p. 36)

Judicial oversight also promotes procedural fairness. Nolan et al. observed that local authorities "are more likely to accept submissions under the RMA process where there is a right of appeal than submissions where there is no right of appeal (for example, submissions on LTCCPs [Long-Term Council Community Plans (now called Long-Term Plans)] under the Local Government Act 2002)" (2012b, p. 7).

Members of the Environment Court have challenged claims that appeals still typically take many years to complete, noting the internal process improvements and a greater use of mediation and alternative dispute resolution have led to faster decisions:

> Gone are the days when a council would be granted a year or two by the Court to endeavour to negotiate solutions, often with no outcome to show for it, and only then find that much mediation and/or hearing work remained necessary to resolve cases. In recent sets of such appeals, mediation has been undertaken commencing as soon as all parties have been identified under s274, and brought to a conclusion about 10 or 11 months after the cases have been filed, with a high degree of success. Councils have been enabled to make large parts of the proposed instruments operative in short order if they wish, leaving the Court to move quickly to resolve remaining issues through hearings, facilitated conferences of experts, and pre-hearing and settlement conferences. (Environment Court, 2016, p. 19)

The Commission has previously found that participants in RMA processes were usually not incentivised to hold information back and that the Court-led mediation processes were working well (NZPC, 2013).

However, the Commission has also concluded that the current institutional arrangements do not provide the level of scrutiny over land use rules that they could. This is not a criticism of the Environment Court. The Environment Court only has the opportunity to review those rules that have been appealed. As a result, only a limited proportion of a District Plan's rules are subject to thorough review, and the feedback loops back to councils can be long. On the one hand this could be considered efficient: only those rules that are sufficiently costly are reviewed, saving time and resources. On the other hand, appeal avenues are generally more open to those with resources, and resulting selection of rules appealed may not be those where the public interest is highest. In addition, benefits are likely to come from considering the merits of a plan as a coherent whole, rather than simply the bits appealed. The effect of different rules is likely to interact; and remedying a particular provision appealed may not be the best solution to issues raised by appellants.

The IHPs established for the PAUP and Christchurch Replacement District Plan have provided an alternative, reviewing entire plans and drawing in expertise from across the community (Chapter 5). However, the IHPs are bespoke arrangements, with a limited lifespan. They also do not cover any subsequent private Plan changes, which will be considered through the usual RMA processes and so will not experience the same level of expert scrutiny.

F8.14 Current institutional arrangements do not provide enough scrutiny over land-use regulation. While the Environment Court plays an important role as a check on local authority regulation, it only has the opportunity to review appealed rules or appealed provisions. As a result, only a limited proportion of a District Plan's rules are subject to thorough scrutiny.

The Commission proposes clearer purposes, objectives and principles to guide regulation in the built environment (Chapter 13). Yet, on their own, these measures are unlikely to be enough. More thorough and upfront decision–review mechanisms will reinforce statutory guidance on the provision of development capacity, the reduction in unnecessary prescription that burdens development, and better use of discretion (section 8.4 and section 8.5). More immediate and more systematic review would also reduce or eliminate the need for later merit appeals and so provide greater certainty for both councils and residents about the stability of land use rules.

The Commission's draft report proposal for an Independent Hearings Panel

In its draft report the Commission recommended that any future planning system establish a permanent IHP to consider and review new Plans, Plan variations and private Plan changes across the country. The panel would be set up and operate in a similar way to the special purpose IHPs set up to review the PAUP and the Christchurch Replacement District Plan (Chapter 5).

The Commission considered that a central panel would be more likely to achieve the scale and expertise required to properly review new rules and controls than individual councils, and to apply a consistent approach to similar issues across the country. Yet, to assure confidence from councils and the public in its impartiality, the panel would have formal independence from central government and the person leading it would need to have extensive expertise and mana (such as a former or current judge, as was the case with the Auckland and Christchurch IHPs).

The Commission asked two questions.

- Should councils have the ability to decline a panel's recommendations (as was the case for the Auckland IHP, but not the Christchurch IHP)?
- Should councils be able to choose whether and which Plans would go to the panel for review?

Participants' responses to the Commission's proposals for an IHP

The Commission's IHP proposals attracted a large number of submissions. Many submitters supported an independent hearings process of some sort (eg, Federated Farmers, sub. DR96; Vector, sub. DR98; Trustpower, sub. DR61; Sir Geoffrey Palmer and Dr. Roger Blakeley, sub. DR122; Azeem Khan, sub. DR116; Environment Canterbury, sub. DR72; Foodstuffs New Zealand, sub. DR108; Horticulture New Zealand, sub. DR73; the Architecture Centre, sub. DR123).

A few submitters preferred their own independent hearings processes (Auckland Council, sub. DR86; GWRC, sub. DR80) or the current provisions that allowed appeals on merits (Ngāti Whātua Ōrākei, sub. DR76, Royal Forest and Bird Society of New Zealand, sub. DR91, the Environmental Defence Society, sub. DR57; the New Zealand Initiative, sub. DR.75; Water New Zealand, sub. DR67). Some participants were uncomfortable with an IHP appointed by central government (as in the case of the Auckland and Christchurch IHPs) and queried whether such a panel would be truly independent (Christchurch City Council, sub. DR90). Others thought that decisions on the place of IHPs in a future system should await further evaluation of the Auckland and Christchurch experience (Auckland Council, sub. DR86; Water New Zealand, sub. DR67; Whanganui District Council, sub. DR95).

Many participants argued that a single permanent national panel would be unworkable (given the large number of Plans and Plan changes being considered at any one time) or undesirable (given the need for local knowledge to ensure appropriate decisions); or unaffordable for smaller districts (GWRC, sub. DR80; Society of Local Government Managers (SOLGM), sub. DR107; Auckland Council, sub. DR86; Bay of Plenty Regional Council, sub. DR111; LGNZ, sub. DR113; West Coast Regional Council and Grey District Council, sub. DR78; Whanganui District Council, sub. DR95; Trustpower, sub. DR61; Water New Zealand, sub. DR67).

Rangitikei District Council argued that it would be desirable to match the type of IHP process to the scale of the Plan or Plan change (sub. DR71). Other submitters proposed thresholds (eg, in terms of the scale of the Plan, or the size and rate of growth of a district) above which an IHP process would be used (Greater Christchurch Urban Development Strategy, sub. DR83; Horticulture New Zealand, sub. DR73; Allison Tindale, sub. DR110; GWRC, sub. DR80; Property Council New Zealand, sub. DR118).

Many councils argued that they should be able to choose whether to use an IHP to review draft Plans and Plan changes (Bay of Plenty Regional Council, sub. DR111; Environment Canterbury, sub. DR72; LGNZ, sub. DR113; Upper Hutt City Council, sub. DR120; Waipa District Council, sub. DR56; West Coast Regional Council and Grey District Council, sub. DR78; Whanganui District Council, sub. DR95; Rangitikei District Council, sub. DR71; Wellington City Council, sub. DR68). Other submitters thought that all Plans should go through the IHP process (Retail New Zealand, sub. DR74; Water New Zealand, sub. DR67); while Trustpower recommended that the idea be explored further (sub. DR61).

Some submitters thought that councils should be able to reject IHP recommendations (subject to appeal on merits on those matters rejected) (Christchurch City Council, sub. DR90; Horticulture New Zealand, sub. DR73; Rangitikei District Council, sub. DR71). Yet others thought that appeals should be possible only on points of law (Retail New Zealand, sub. DR73; GWRC, sub. DR80; Environment Canterbury, sub. DR72; SOLGM, sub. DR107). GWRC advised that it uses independent hearings commissioners and accepts their decisions as a matter of course, on the basis that they have heard all the evidence (sub. DR80).

Other submitters stressed the importance of IHPs operating on reasonable timeframes that allowed adequate consideration of the issues (Allison Tindale, sub. DR110; Resource Management Law Association, sub. DR115; Berry Simons Environmental Law, sub. DR119); and to use processes accessible to ordinary people and not overly formal (Canterbury District Health Board, sub. DR59; Christchurch City Council, sub. DR90).

Environment Canterbury proposed an alternative IHP model (sub. DR72). It would be available to a local authority where a proposed plan or plan change was particularly contentious or complex or where substantial appeals to the Environment Court would be likely if the standard process was adopted. Briefly, the process would involve a hearings panel made up of a majority of independent hearing commissioners, with the Environment Court appointing a majority of them. The Environment Court appointees would be an Environment Court Judge and Environment Court Commissioners. Local authorities would appoint the balance of the panel, whether elected councillors or independent commissioners. The decisions of the panel would be subject to appeals to the High Court only on questions of law. The proposal would result in faster plan making and avoid the possibility of two merits hearings on proposed plans or plan changes (under the standard process).

> By limiting appeal rights to those related to points of law, the policy directions developed by the council and wider community are less likely to be diffused and compromised through an ad hoc appeal process driven by well funded interest groups. (pp. 17–18)

To assist it in thinking through the issues raised in submissions and by other participants, the Commission sought further advice on effective and workable IHP arrangements (Shepherd, 2016) and met with Professor Peter Skelton to discuss the Environment Canterbury proposal.

A revised proposal for Independent Hearings Panels

The Commission considers that a single-stage merits review of all Plans and of significant Plan changes carried out by a competent and independent panel should be a central part of a future planning system. The advantages in terms of improving the quality and speed of plan making are clear. To fulfil its proposed role, an IHP undertaking a single-stage merit assessment of Plans and Policy Statements (or changes to them) should:

- be independent of the promoter (of the Plan or Plan change) and participants in hearings;
- be competent;
- have a range of powers to resolve disputes; and
- produce a version of the notified Plan or Plan change that could be appealed only on points of law, and which the relevant local authorities would be required to make operative.

The design of IHPs and their processes should aim to minimise the sum of decision and error costs and be sustainable over time (Chapter 1). This means that the costs of alternative ways of making decisions

(eg, running a hearings process, the cost of delays and the time and other costs of the parties involved) should be weighed against the risks and costs of making mistakes in decisions (eg, regulating land-use activities that do not create significant externalities; and failing to regulate activities that create major spillovers). Being able to adapt to changing goals and values over time and securing the confidence and trust of participants contributes to sustainability. So a future planning system, by putting sufficient resources and institutional protections to undertake a credible single-stage merits review of Plans, should aim to both improve the quality of Plans (measured against statutory objectives) and be durable over time.

The independence of IHPs is a key aspect of their role

Many submitters argued that councils should be able to choose whether to submit plans to an IHP process; and/or be able to reject changes recommended by an IHP. Environment Canterbury proposed that councils have a role in appointing panels (see above).

The Commission carefully considered these views, but, in the end, concluded that IHPs should be fully independent of the Council or private individual promoting a Plan or Plan change. A durable and effective approach to plan making needs to be capable of taking into account (in an impartial manner) the various interests and competing viewpoints inherent in plan making. These competing interests include (but are not limited to):

- the national public interest (eg, as expressed by central government);
- local public interest (eg, as expressed by local government);
- environmental, heritage, cultural and recreational interests (as expressed by a range of groups or individuals);
- interests shared by groups in a particular locality (eg, as expressed by a local business association or a consortium of landowners); and
- private interests (eg, as expressed by a landowner or tenant).

A single-stage merit assessment of Plans needs to be designed in such a way as to be capable of resolving these tensions in a manner that is, and is seen to be, fair and reasonable in the circumstances, and lawful. To be durable, the process needs to be credible over extended periods of time to all interested parties, including those whose voices are not usually heard. It is important to note, in this respect, that local government represents only one interest (albeit a very wide and important one) that plan making affects .

Councils therefore should not be directly involved in appointing IHP members. After all, an IHP will replace the Environment Court in considering the merits of Plans. So it needs to enjoy similar independence. On a related point, K. Palmer argued that that a lack of independence is a problem with current council practices which use council planning committees as

> hearing bodies and decision-makers in respect of submissions made by property owners and other members of the public in respect of proposed policy, plans, changes and reviews … A central principle of fairness and natural justice is that the local authority or body who prepares and proposes a plan should not also be the hearing panel in respect of submissions which may challenge those policies and rules. (2017, p. 153)

It follows also that central government should not be directly involved in appointing IHP members.

Formal independence of IHPs would also align with the Commission's earlier advice on regulatory institutions. That advice found that independence from political control is appropriate where:

- a substantial degree of technical expertise, or expert judgement of complex analysis is required;
- public confidence in impartiality is important;
- a consistent approach is desired; and
- the oversight of government power is involved (NZPC, 2014b).

Nor should councils be able to choose whether or not to use an IHP process. This would give councils some control over what goes to independent review. Their choices are likely to reflect their own interests rather than the value to all interested parties of having an impartial and independent review.

For similar reasons, the Commission considers that an IHP should be able to determine on the merits any changes to Plans required by the evidence they have heard, and by reference to statutory objectives and principles. This would be equivalent to the current powers of the Environment Court to determine appeals on the merits.

Giving councils a further opportunity to accept or reject IHP proposals would place them in a privileged position over the other interests participating in a hearing. It would also be inappropriate for councils to override the IHP proposals, given that they will not have heard all the evidence (Environment Canterbury, sub. DR72; GWRC, sub. DR80; Shepherd, 2016). Further, if councils were able to reject an IHP recommendation, the consequential need for appeals on merits to the Environment Court would undermine some of the benefits of a single-stage merit assessment.

Without the opportunity to determine the final form of Plans, Councils instead will be encouraged to provide a sound evidential base for their proposed plan (reflecting the perspectives of a democratically elected body), and to participate constructively in the hearings process. Similarly, others with an interest in the Plan will have incentives to marshal evidence, anticipating a lower overall cost of participation (compared to current arrangements), on the understanding that there will be only one merit assessment.

Even if they do not have the final say, Councils will exercise strong influence over the outcome of the IHP process by:

- setting the nature and scope of changes in the notified Plan, obtaining input from stakeholders before notification, and ensuring the evidential base and reasons supporting the notified Plan (or Plan change) are sound:
- participating in the hearings process, including responding to issues and new information as they arise; and
- having the ability to launch a Plan change if they are dissatisfied with the outcome.

An independent statutory agency should appoint IHP members

IHP panel members should not be appointed by councils, or directly by central government. Instead, an independent statutory agency (ISA) should appoint IHPs from a pool of qualified people (Chapter 13). The ISA should appoint panel members with the range of knowledge and expertise required in each case.

IHP members need to have a mix of expertise or access to expertise, including:

- legal, planning, and economic expertise;
- technical scientific and engineering expertise as required by the circumstances; and
- understanding of local circumstances.

The panel should have knowledge of local tikanga Māori and mana whenua views, interests and worldviews, given that mana whenua interests are intimately connected to land use and resource management planning (Chapter 7).

The need for legal knowledge would not necessarily mean a sitting Judge, retired Judge or senior legal counsel would chair a panel. A panel would, for instance, have the power to engage legal counsel as required. The availability of appeals on points of law would discipline an IHP to follow fair and appropriate procedures. The ISA should pay particular attention to recruiting, training and developing a pool of strong and competent people able to chair a panel.

Members of the IHP would need to be suitably qualified. The ISA would be responsible for developing and certifying IHP members and building a pool of suitable candidates for IHPs. It would also be responsible for developing and promoting good practice and processes across IHPs (Chapter 13).

The ISA should match each IHP review process to the scope and significance of the Plan or Plan change. In some uncontested cases of Plan changes, for instance, this might mean no more than a review of the proposals on paper, without formal hearings; in other cases it might mean a relatively speedy review by a small panel. Central government should set a threshold for deciding whether proposed changes to a Plan are significant. Significant changes would require formal review by an IHP. The threshold could, for instance, be set in terms of some measure of the scale of the Plan change in terms of area covered, or its likely impacts on development opportunities or affected parties, or the resources required to prepare and advance the change.

The role of an IHP in plan making

An IHP would be appointed to review a notified Plan or Plan change and the evidence and reasons underlying it. An IHP would be guided by statutory objectives and principles for plan making (Chapter 13) and consider evidence on contested matters. In particular, an IHP would call for and consider submissions on the Plan or Plan change and be able to:

- employ alternative dispute resolution techniques such as mediation;
- call for further submissions on particular issues (but, weighing costs against benefits, the call for cross submissions on the original submissions would not be automatic);
- obtain their own reports, research and expert advice;
- request for evidence from the council proposing the Plan or Plan change;
- conduct "expert caucusing" to resolve differences in expert evidence; and
- issue procedural minutes and guidance to submitters on the Panel's initial view on matters to inform further proceedings.

IHPs, guided by the ISA, would determine their own hearings processes. Processes would need to be fair and lawful, while also being accessible to submitters with no legal representation.

IHPs would have a particular advantage in being able to obtain and hear evidence from their own selected independent experts. This would be analogous to the Environment Court sometimes using an *amicus curiae* or "friend of the court" in helping it come to decisions (Kós, 2016; Gardner-Hopkins, Scragg & Cameron, 2016). Such evidence would be heard by relevant participants in the IHP process and would likely contribute to resolving at least some contested issues. Both the Auckland and Christchurch IHPs used experts in this way.

The Commission heard from groups such as Ngāi Tahu in Christchurch who considered that the IHP process offered them a better and fairer opportunity to be heard than the usual RMA Schedule 1 processes. Likewise, the IHP (reviewing the PAUP) heard extensively from a range of groups who are usually underrepresented in making submissions on Plans (as described in Chapter 5). IHPs, guided by the ISA, will need to consider the best means to hear from a full range of interested parties in reviewing Plans.

Out-of-scope proposals

Another issue relates to so-called "out-of-scope" proposals. Broadly speaking, these are proposals for Plan provisions that emerge in the course of hearings and which were not provided for in the original Plan or Plan change, and so were not the subject of submissions. Under the provisions for the Auckland PAUP, the IHP was required to identify such proposals. Any recommendations it made on those proposals that were accepted by the Auckland Council could be appealed on the merits. Under the Christchurch Replacement District Plan provisions, the IHP was required to identify such proposals and, if considered desirable, direct the Christchurch City Council to prepare a Plan change and invite submissions on the change. The IHPs decisions on such proposals were not subject to further merits appeal (K. Palmer, 2017). The Commission

considers that the Christchurch provisions will better secure the advantages of a single-stage merits review of Plans (Figure 8.5).

The role of the Environment Court and appeals on points of law

IHP determinations should be subject to appeals only on points of law or to judicial review (as was the case for the IHP reviewing the Replacement Christchurch District Plan).

Although some functions currently carried out by the Environment Court would be taken over by the IHP, the Court would continue to play an important role. It would continue to hear appeals where affected parties or applicants wished to challenge resource consent decisions or conditions, hear applications for declarations and enforcement orders, and decide matters of national importance when they are "called in". The Environment Court would also continue to have roles and functions under other statutes.[78]

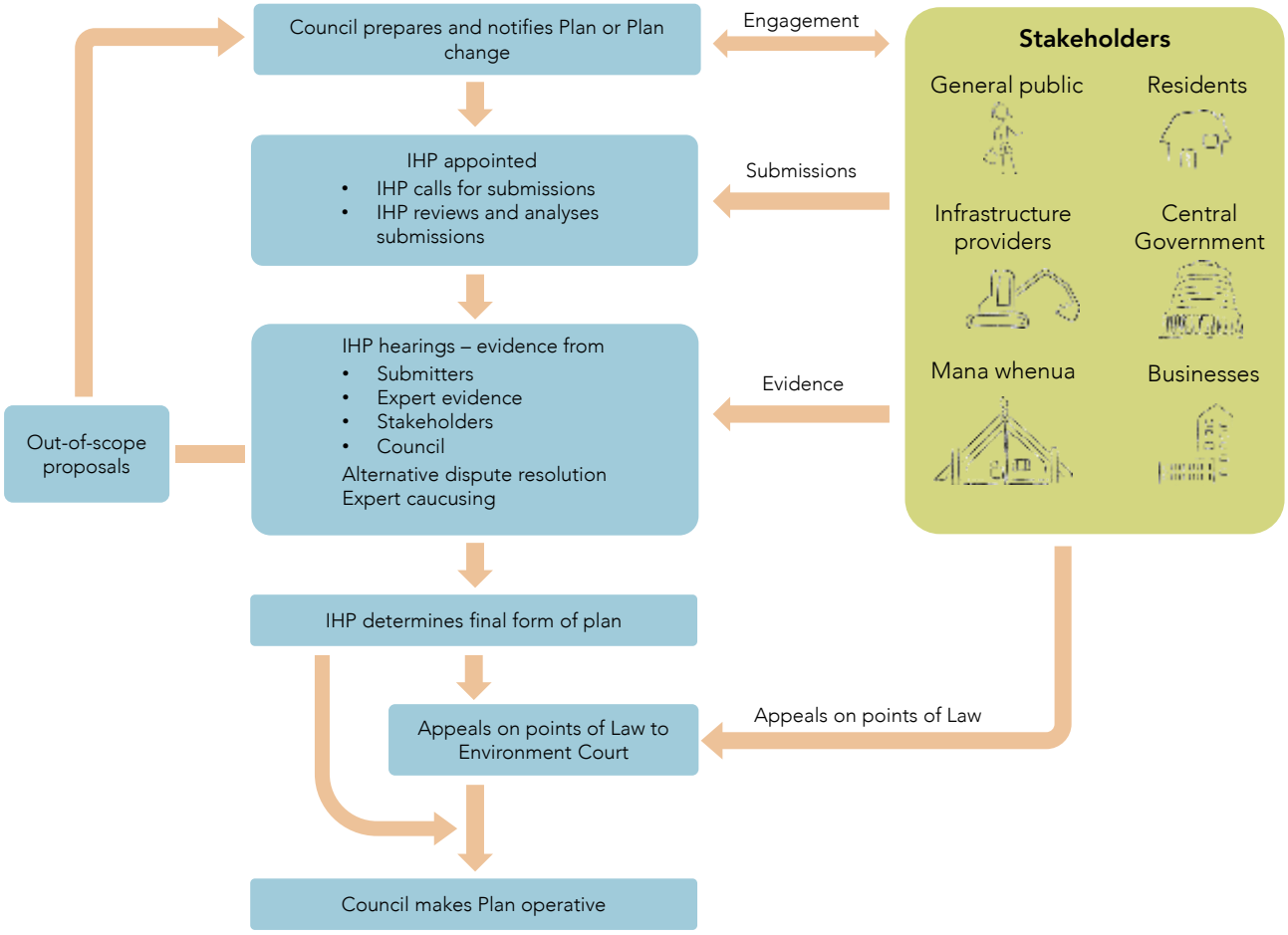
The Resource Management Law Association proposed that appeals on points of law from IHP determinations should be to the Environment Court (allowing for the fact that applications for judicial review of proceedings will always be available to the High Court) (sub. DR115). The Environment Court already exercises a declaratory jurisdiction that typically involves points of law. Associate Professor Kenneth Palmer advised the Commission that appeals on points of law could confidently be given to the Environment Court:

> The Environment Court Judges have the ability to assess whether an appeal is within the scope and bounds of a question of law, and could be expected and relied on to distinguish between appeals which are endeavouring to raise matters that have no basis as a question of law. (2017, p. 149)

The Commission proposes that appeals on points of law from IHP determinations be to the Environment Court. Figure 8.5 sets out the full process for an IHP review of a Plan.

[78] The Court has jurisdiction to determine matters under other statutes, including objections to the compulsory taking of land under the Public Works Act 1981, appeals about archaeological sites under the Historic Places Act 1993, appeals about felling native beech forests under the Forests Act 1949, objections to "road stopping" proposals under the Local Government Act 1974, and objections about access to limited access roads under the Transit New Zealand Act 1989. Road stopping is the term given to removing the legal road status to that of a freehold title.

Figure 8.5 Process for an IHP review of a Plan or Plan change



IHPs should review a coherent package of Plans and Policy Statements in a region

The Commission recommends that the RSS, the proposed Regional Policy Statement on the Natural Environment (Chapter 9), and district Plans, be reviewed together as a package (Chapter 13). This will reduce the number of review processes and justify the substantial resources required by a full IHP review of the scale of those used in the Auckland and Christchurch IHP processes.

Funding Independent Hearings Panels

Some submitters raised the issue of allocating the costs of IHPs in a future planning system (GWRC, sub. DR80; Rangitikei District Council, sub. DR71; LGNZ, sub. DR113; Shepherd, 2016). IHP operations are designed to secure a mix of local and national benefits, so it is reasonable that local and national government should share the cost (Shepherd, 2016). The central government is likely to take responsibility for the costs of establishing the ISA, and for the direct operating costs associated with ISA personnel and processes. A saving from the Environment Court no longer dealing with appeals on merits from Plan and Plan change provisions will offset these costs. Submitters and councils appearing before IHPs will continue to pay their own costs. As councils will no longer pay the costs of their own hearings on Plans, they could reasonably contribute to the operation of IHPs.

R8.6

In a future planning system, local Independent Hearings Panels (IHPs) should be established (when required) to consider and review new Plans, significant Plan variations and private Plan changes across the country, with the features listed below.

- An independent statutory agency should be responsible for appointing IHP members, developing a pool of qualified members across the country, and supporting the operation of local IHPs through guidance on processes and through administrative services.
- IHP members should reflect a range of skills and knowledge (including technical and legal expertise, familiarity with local circumstances, and with tikanga Māori).
- The number and composition of panel members and the hearings processes should reflect the scale and significance of the Plan, Plan variations and Plan changes being reviewed in each case.
- An IHP should be empowered to review together one or more Plans and other statutory land-use planning instruments applying to a region.
- An IHP should make final decisions on merits for Plans, Plan variations and private Plan changes, with appeal rights limited to points of law.
- Appeals on points of law should be to the Environment Court.
- Councils and central government should share the costs of operating the IHP.

Consent hearings and appeals

IHPs could potentially consider significant resource consent applications, on the initiative of the applicant (Shepherd, 2016). Yet the Commission considers that appeals on merits to the Environment Court should continue to be available to applicants for consents, because their property rights are directly affected. Applicants already have the option of having the Environment Court hear their applications heard directly (RMA s. 87D), so providing an IHP option would offer little advantage. However, some consent applications also involve concurrent plan changes (Shepherd, 2016). It could be procedurally efficient to have both heard before an IHP.

Currently, consent applications involving matters of national significance can be "called in" by the Minister and heard by a Board of Inquiry specially convened by the Environmental Protection Authority (Box 5.3). The functions of a Board of Inquiry are very similar to those of an IHP, so it may be efficient to replace Boards of Inquiry with an IHP in a future planning system.

Notification when Plan changes are limited to a particular site

In its draft report, the Commission recommended that councils should be allowed to notify only affected parties of Plan changes to a particular site, and that appeal rights on plans should be limited to people or organisations directly affected by proposed plan provisions or rules. Submissions widely opposed these proposals on a variety of grounds (Allison Tindale, sub. DR110; Environment Canterbury, sub. DR72; GWRC, sub. DR80; Horticulture New Zealand, sub. DR73; Palmerston North City Council; sub. DR93; Planz Consultants Ltd., sub. DR60; Royal Forest and Bird Society of New Zealand, sub. DR91; the Architectural Centre, sub. DR112; Whanganui District Council, sub. DR95; New Zealand Airports Association, sub. DR83; Trustpower, sub. DR61).

Submitters pointed in particular to:

- the difficulty of determining who was affected by a Plan provision or Plan change (for instance, in cases where reverse sensitivity might operate); and
- the likely shift from a contest about Plan provisions to a contest about who has standing to be heard.

The Commission proposes that IHP determinations are subject to appeal only on points of law, in return for an independent, expert and fair review of Plans and Plan changes. It considers that, with this provision in place, further limiting Plan notification and appeal rights (as proposed in its draft report) is not needed.

F8.15

Limiting notification of plan changes affecting a particular site to those directly affected, and limiting appeal rights to people directly affected by proposed plan provisions or rules, is likely to be difficult to implement in practice because:

- councils will find it hard to determine with any certainty all those who are "directly affected"; and
- litigation will shift from substantive issues to questions of whether appellants have standing.

A timely and systematic single-stage merit review of plans and plan changes by an Independent Hearings Panel is a better way to avoid the costs and delays involved in hearing appeals to the Environment Court on plans and plan changes.

8.7 More flexible and more effective consultation and engagement

This section discusses:

- the current limitations of consultation processes under the RMA in engaging a full range of interests in planning processes; and
- proposes that a future planning system provides for a more flexible and less prescriptive approach to engagement, with a focus on ensuring that the interests of all potentially affected parties are considered.

Participation in plan making

The introduction of "open public participation with no limits on standing" in 1991 was "new to town and country planning and was strongly demanded by community and public groups" (Gow, 2014, p. 10). The move to open up standing was driven partly by the need to standardise participation rights between the different conservation statutes being replaced by the RMA, and partly by a view that broader participation in plan making – which can involve trading off competing goals and values – would lead to better decisions.

Provision for broader participation was accompanied by obligations on councils to follow specific consultation processes when making or reviewing RMA Plans. Although the presumption was that these provisions would lead to better decisions, this is questionable.

Respondents to the Commission's survey of local authorities had mixed views on whether public participation and consultation were barriers to the successful implementation of urban planning:

- 81% of respondents considered that "lack of public understanding of planning processes" was somewhat of a barrier or a significant barrier;
- 73% of respondents identified "resource intensive and time consuming statutory consultation requirements" as barriers; and
- 60% of respondents believed that "too many opportunities to appeal decisions" were barriers; but
- only 47% considered that wide standing ("too many people have the opportunity to participate in decisions") was a barrier (Colmar Brunton, 2016).

There is a need to rethink the consultation obligations on councils. Current requirements (as laid out in Schedule 1 of the RMA) are both too prescriptive and too narrow. In particular:

- regardless of the size or complexity of the issue under consideration, councils are required to seek and respond to two sets of submissions;
- the regulations require submissions to be made in a prescribed, written form; and
- the requirements place no onus on councils to ensure that the interests of all potentially affected parties are considered.

One result of these requirements is that participation on proposed Plans is often skewed in favour of individuals and groups with more resources (see Chapter 5; NZPC, 2015a). Those who do not have the time, inclination or capability to make written submissions are underrepresented. In particular, women, young people, and Māori, Pacific and Asian people are significantly underrepresented as submitters on Plans.

F8.16 Consultation requirements under the Resource Management Act are both too prescriptive and too narrow. They require councils to seek two sets of submissions no matter the size and complexity of the issue under consideration, and require submissions to be made in a prescribed, written form. Yet the requirements place no onus on councils to ensure that the interests of all potentially affected parties are considered. Typically, significant population groups, such as women; young people; and Māori, Pacific and Asian peoples are underrepresented in planning processes.

The public has a necessary role in contributing to plan making. Plans involve trade-offs between competing values and goals, and such political decisions are appropriately subject to public scrutiny. Yet a future urban planning system would operate more effectively and efficiently if consultation and engagement requirements:

- focused more on gauging a full range of views and interests than on process, to produce a well-informed proposed Plan; and
- used a variety of methods, in addition to inviting submissions, to engage parts of the community, such as mātāwaka, whose views are not being heard well in current arrangements.

Recognition and active protection of Māori Treaty rights in land-use planning and resource management requires local authorities' special attention to engagement and consultation with mana whenua (Chapter 7). At the same time, mātāwaka are, relative to mana whenua, a numerically large group in Auckland, and New Zealand's other major cities have sizeable numbers of mātāwaka as residents (Chapter 7). Councils need to give special attention to how they engage with and gauge the interests of this group, who typically do not participate to any great extent in the standard RMA consultation processes.

Effective consultation and engagement

In its *Regulatory institutions and practices* inquiry the Commission identified good practice in consultation and engagement (NZPC, 2014b). It noted that engagement can help to reassure the community that good regulatory process is being followed and that the decisions of regulators are robust, well-informed and well-reasoned.

The choice of engagement mechanism should be influenced by the goal of the interaction, and by the relative efficiency of alternative engagement mechanisms. Goals can range from *informing* stakeholders of their regulatory obligations, to *involving* them in regulatory decisions, to *empowering* them to make decisions. An arrangement between mana whenua and local authorities for the co-governance of environmental sites and features is an example of empowerment. More generally, plan making processes typically aim to involve participants in decision making.

In general, the greater the level of public participation the more critical it becomes to ensure a common understanding of the goals of the engagement process (eg, to reach a fair decision on Plan proposals that balances a range of competing interests based on evidence, and guided by statutory objectives and

principles). Failure to establish a common understanding can result in unrealistic expectations around the extent to which participants can affect regulatory decisions.

When developing engagement strategies, regulators need to examine the fairness and proficiency of alternative mechanisms. In practice, the way a mechanism is implemented and the capability of the regulator influence both fairness and proficiency. Fairness requires, for instance, that parties should be given adequate notice and opportunity to be heard; and that the decision makers should be disinterested and unbiased.

The proficiency of a mechanism is situation specific. A mechanism needs to match the characteristics of the group being consulted. Inviting submissions on a Plan, for instance, works for some groups, but does not work for others. A key element of proficiency is whether the mechanism will collect and transfer the required information with minimum distortion or reduction in accuracy.

As noted above, it is appropriate for regulators to have more discretion around how they consult and engage if they are guided by clear principles and are accountable for their decisions to an independent body.

Collaborative decision-making processes

A collaborative decision-making process involves a regulator and regulated parties and relevant stakeholders negotiating aspects of regulatory compliance. If an agreement is reached, the regulator approves the outcomes of the process, avoiding the need to go through the full regulatory procedure. The outcome may better reflect stakeholder preferences while achieving the desired regulator outcome in an efficient, flexible, mutually beneficial and durable manner.

The Commission, in its *Regulatory institutions and practices inquiry*, identified five factors central to the success of any collaborative process. These factors are:

- a shared understanding of the boundaries of influence of the collaborating group;
- commitment to implementing the outcomes of the collaborative process;
- understanding the information needs of all parties and reducing information imbalance;
- selecting participants that represent the wider interests of the community; and
- establishing clear and transparent processes (NZPC, 2014b).

The Land and Water Forum (LWF) used a collaborative process in its work beginning in 2009 on freshwater and land management and recommended its use in regional environmental planning. Both the GWRC and Environment Canterbury employ collaborative processes in their regulatory roles (Box 8.5).

Box 8.5 **Collaborative decision-making processes in resource management**

Land and Water Forum. The LWF used stakeholder-led collaborative processes to consider reform of New Zealand's freshwater management system. It comprised representatives from a range of industry groups, electricity generators, environmental and recreational non-governmental organisations, iwi, scientists, and other organisation with a stake in freshwater management and land management. Central and local government attended as observers. LWF recommended implementing collaborative processes for setting freshwater objectives and limits at a regional level through RPSs and related plans made under the RMA. It also recommended changes to how national instruments are developed (NZPC, 2014b).

Greater Wellington Regional Council GWRC has adopted collaborative processes for implementing the NPS on freshwater management. In particular, it has worked with local communities to establish Whaitua Committees. The Committees "will develop Whaitua Implementation Plans [for management of natural resources in their catchment areas] in an open, communicative and collaborative manner – inclusive of community, partners and stakeholders" (GWRC, 2016, p. 3). GWRC has established Te Upoko Taiao (Natural Resource Management Committee) to oversee the development of the Proposed

Natural Resources Plan. The Committee is comprised of equal numbers of elected councillors and members appointed by mana whenua in the region (Chapter 7).

Environment Canterbury has adopted a collaborative process with local communities to develop regional water plans, as part of the Canterbury Water Strategy.

> Zone committees lead the collaborative process by identifying and explaining local issues and aspirations for water management. …Early engagement with the community is vital for successful collaboration. Our scientists and planners work together with local people from the beginning of the process to understand communities' concerns…Time invested in engagement pays off with fewer contentious issues arising later in the process…Teams of planners, scientists, community facilitators and rūnanga work together with zone committees on the collaborative planning process. Staff work together in cross-disciplinary teams to convert the outputs of this collaboration into plans. These teams guide communities through the development of regional Resource Management Act water plans and formulate solutions together. (Environment Canterbury, 2017)

Arising out of the work of the LWF, the government (through the Resource Legislation Amendment Bill 2015) has proposed that Schedule 1 of the RMA is amended to provide for collaborative processes. Yet prescribing the details of a collaborative approach may not be the best way forward. The GWRC submitted:

> Faced with the costs and uncertainty of existing processes, but the desire to involve our communities in resource management planning, local government is turning to the use of collaborative tools for engagement with the community. One anticipated outcome of these types of processes is that there would be a reduction in the grounds for appeal which GWRC would support. However, a proposed collaborative process in the recent Resource Legislation Amendment Bill created such an onerous process that we would be unlikely to use it even to gain the reduced appeal rights. Therefore, it is unlikely to produce any meaningful improvements to the process. (sub. DR80. pp. 4–5)

The Commission favours greater flexibility in consultation and engagement processes rather than more, yet prescriptive, statutory options.

Innovative engagement processes

Planners have a range of engagement tools at their disposal, but statutory constraints and conservatism in practice typically limit them to a few. Wellington City Council submitted:

> The current engagement requirements under Schedule 1 of the RMA are out of step with emerging consultation trends and the ways that people want to engage in government processes. As a result councils are failing to maximise the opportunity to engage with the very communities affected by urban change. Whilst councils can and still do undertake non-statutory consultation exercises outside of the existing legislative requirements, they may choose not to given the prohibitive costs and time involved and the fact that a formalised process is still required once a plan change is notified for example. (sub. DR68, p. 10)

A stocktake by Rowe and Frewer (2005) found more than 100 different public engagement mechanisms used in the United Kingdom and the United States alone. Examples that seem feasible for councils to add to standard submissions processes include (among many):

- surveys (whether telephone or online);
- citizen juries;
- focus groups;
- citizens;
- neighbourhood forums;
- workshops; and

- canvassing social media.

The aim should be to draw in a wider range of views that are normally heard in plan making, while running a fair and proficient process that gives adequate opportunity for those with particular interests impacted by plan proposals to be heard. Review of Plans by IHPs will provide an invaluable check and a guide on the fairness and proficiency of engagement.

Consultation and engagement requirements in a future planning system

Submitters generally favoured greater flexibility in the consultation and engagement methods and process required by statute (Allison Tindale, sub. 110; Auckland Council, sub. DR86; Environment Canterbury, sub. DR82; Foodstuffs New Zealand, sub. DR108; GWRC, sub. DR80; Horticulture New Zealand, sub. DR73; Planz Consultants Ltd., sub. DR60; Rangitikei District Council, sub. DR71; Whanganui District Council, sub. DR95; Canterbury District Health Board, sub. DR59). Many councils favoured the processes available under the LGA, while recognising the need for particular attention to the interests of residents directly impacted by provisions in proposed Plans or Plan changes. Horticulture New Zealand and Water New Zealand thought that guidance should be provided on what consultation tools to use in which circumstances (subs. DR73 and DR67). Wellington City Council argued that it was important that clear statutory principles guide good engagement and that these principles should be consistent across different planning statutes (sub. DR68).

The Commission considers that greater flexibility is possible when clear statutory principles guide processes (Chapter 13), and proposed Plans are subject to timely and systematic review by an IHP that can call its own evidence (section 8.6). Clear principles and timely review provide more room for councils to use a variety of processes that offer parties a fair opportunity to be heard, without the council having to conform to a highly prescribed statutory process. As noted in Chapter 13, greater flexibility will also have the advantage of making it easier to have common consultation and engagement processes across land use and resource management planning, land transport management planning, and local government infrastructure planning.

Consultation requirements under a future planning system should:

- give councils flexibility to select the most appropriate consultation tool for the issue at hand;
- encourage and enable participation by people affected, or likely to be affected by a decision; and
- encourage the use of tools that ensure the full spectrum of interests is understood in council decision-making processes (eg, statistically robust and representative surveys, to complement submissions), and that allow the public to understand the trade-offs involved in decisions.

R8.7

Consultation and engagement requirements in a future planning system should:

- give councils flexibility to select the most appropriate tool for the issue at hand;
- encourage and enable participation by people affected, or likely to be affected, by a decision; and
- encourage the use of tools that ensure the full spectrum of interests is understood in council decision-making processes, and that allow the public to understand the trade-offs involved in decisions.

Consultation strategies for communities facing change

A planning system that is going to genuinely enable growth and responsiveness must offer some benefits or rewards to those affected. Although more liberal planning rules (such as those that permit more intensive or higher development) tend to raise the value of underlying land, this sometimes seems not to be enough to offset the concerns of existing residents and property owners about disruption, the potential loss of amenity

and uncertainty about the future. Particularly at the neighbourhood level, councils should be able to work collaboratively with residents to improve understanding of proposed changes and reach agreement on ways to mitigate loss of amenity with tailored infrastructure and services investments.

While other features of the future planning system will help weight the system in favour of more enabling rules and policies, local authorities may still need to offer additional services or infrastructure to give existing residents, in areas facing considerable change, confidence about ongoing amenity. More intensive development can also put pressure on existing community facilities. Investing early could help ensure that community services and facilities are fit for the future.

Such approaches are possible under the current New Zealand planning system, but require careful coordination of different planning tools (ie, RMA regulatory plans with infrastructure spending in LGA Long-Term Plans and Annual Plans) and sometimes duplicative consultative processes. The Commission's proposals for a future planning system should make this easier by:

- providing for more flexible consultation requirements in land use and resource management legislation;
- providing better cross-referencing across different planning statutes (Chapter 13); and
- establishing the RSS as the platform for aligning infrastructure provision with land-use planning.

Yet in many situations it will be important to carry discussions about provision of offsetting infrastructure to facilitate development down to neighbourhoods. Such an approach is used in Brisbane, where the City Council works with communities significantly affected by zoning changes to explain the implications of the changes and identify improvements or additions to local public assets or services that would ameliorate problems (eg, road improvements to reduce congestion, and expanded green space). In Brisbane, once the City Council approves them, the improvements are formally incorporated into the City Plan.

District Councils could facilitate this type of process by putting aside funding each year to support increased infrastructure and service needs associated with plan changes. In some areas, resources for extra infrastructure to offset amenity losses from development could be realised by auctioning rights to develop beyond the standard thresholds for a zone (Chapter 12).

Submitters generally supported the concept of councils providing targeted infrastructure to offset the loss of amenity in communities facing significant changes as a result of development (Greater Christchurch Urban Development Strategy, sub. DR83; Horticulture New Zealand, sub. DR73; Retail New Zealand, sub. DR74; Sir Geoffrey Palmer and Dr. Roger Blakeley, sub. DR122; Wellington City Council, sub. DR68; Whanganui District Council, sub. DR95).

R8.8 In a future planning system, councils should engage with communities in areas facing significant land-use changes, to agree ways to offset any amenity losses. This could include providing targeted infrastructure or services investment (eg, the expansion of green spaces or upgrades to existing community facilities) for areas facing significant change.

Notification of resource consent applications

In its draft report the Commission recommended that a future planning system should focus the notification requirements for applications for resource consents (and any associated appeal rights) on those directly affected, or highly likely to be directly affected by, a proposed development. This would place the focus on managing negative externalities rather than extraneous issues, provide more certainty for developers and give them more confidence to proceed with developments. Even so, only a small proportion of resource consent applications for land use are publicly notified (1% in 2014/15, according to the MfE's National Monitoring System).

Participation rights in consent decisions have narrowed over time, but remain wide. Despite the introduction of "limited notification" in 2009, councils must still publicly notify a resource consent application where "the

activity will have or is likely to have adverse effects on the environment that are more than minor" (s 95A, RMA). As already discussed, the definition of "environment" in the RMA is open-ended (Chapter 5). And as the Quality Planning website observes, what counts as "more than minor" requires "exercising discretion as to the degree of seriousness involved" and can involve a large number of factors.

Many submitters opposed the proposal to further limit consent application notification requirements, for similar reasons to opposing limited notification of some plan changes discussed in section 8.6 (Trustpower, sub. DR61; New Zealand Airports Association, sub. DR83; Fulton Hogan, sub. DR100; Progressive Enterprises Ltd., sub. DR55; Goodman New Zealand Ltd., sub. DR103; the Architecture Centre, sub. DR112; Whanganui District Council, sub. DR95; Environment Canterbury, sub. DR72; Sir Geoffrey Palmer and Dr. Roger Blakeley, sub. DR122; the Resource Management Law Association, sub. DR115; Royal Forest and Bird Society of New Zealand, sub. DR91; Water New Zealand, sub. DR67; Allison Tindale, sub. DR110; Otago Regional Council, sub. DR93). Submitters argued that it is difficult in practice to determine who is directly affected (for instance in situations involving reverse sensitivity), and this leads to proceedings focused on questions of standing.

A few submitters supported further limits on consent notifications (sometimes subject to particular provisos) (Azeem Khan, sub. DR116; Foodstuffs New Zealand, sub. DR108; Property Council New Zealand, sub. DR118; Greater Christchurch Urban Development Strategy, sub. DR83; Auckland Council, sub. DR86).

On balance, the Commission considers that any benefits from further limiting consent application notifications could be outweighed by the disadvantages identified by submitters.

F8.17 Compared to current statutory provisions, further restricting notification of consent applications is likely to

- increase the difficulty for councils of identifying who is directly affected; and
- increase the focus on whether or not a potential appellant has standing and therefore should have been notified.

8.8 Conclusion

Providing proportionate, well-targeted and efficient land use regulation for the built environment has been a longstanding challenge. Complaints emerged about the poor quality of regulatory analysis shortly after the RMA was introduced, and has been highlighted in successive reviews. The poor quality stems from a number of factors, including:

- planning legislation (that provides insufficient focus on urban issues, but leaves wide scope for local authorities to pursue other objectives),
- risk aversion and a bias towards the status quo;
- unduly slow processes for changing land use rules;
- too few alternative tools;
- a blindness to prices; and
- insufficient checks.

The changes proposed in this chapter will help resolve these problems. However, changing the performance of the planning system is not simply a matter of introducing new laws. Indeed, perhaps the key lesson learned since the RMA was introduced is that successful planning reform also requires changes to underlying incentives, institutions and cultures. Chapter 13 and Chapter 14, in particular, further consider these aspects of a future planning system.

9 Urban planning and the natural environment

Key points

- The management of the natural environment requires an appreciation of the interactions between two complex adaptive systems – the built environment and the natural environment.
- Law and regulation to manage the natural environment is itself determined within a complex social environment, reflecting views, beliefs and values about the natural environment.
- Standard theories of regulatory control assume that the regulator is able to assess the risk to the natural environment and then decide on the action it will take. Yet in reality the regulator may lack an understanding about the dynamic processes that control natural systems and have only partial control over or awareness of, human actions with respect to the natural environment.
- Future planning regulation should set clear limits and standards within which development can occur, to ensure the integrity of natural systems (ecosystem sustainability), maintain standards of environmental quality (ecosystem services) for the liveability of the built environment, and recognise community preferences (including Māori interests).
- Above these limits and standards, and within the rules for the built environment, developments should be able to proceed with minimal oversight. If developments breach community standards for the natural environment, then decision makers should balance the benefits of development against the impacts on the natural environment. Clear legislative objectives and principles will help to guide decision making.
- The current system is not generating the level of information and analysis required for adaptive decision making. Yet such data is critical for detecting longer-term changes in the natural environment and for understanding whether current approaches are achieving their stated objectives.
- System architecture should make clear the roles of all component parts of the system. Key players in the system (central government, local government and Independent Hearings Panels (IHPs)) should each play a part in establishing and enforcing environmental limits, and providing guidance for decision making.
- Traditionally, the planning system has managed the impact of the built environment on the natural environment by command and control regulation. A more judicious mix of policy tools would achieve environmental goals more efficiently and effectively. In a future urban planning system government bodies responsible for environmental management should use a full range of policy tools, including market-based tools.
- Developing approaches to managing the cumulative effects of the built environment on the natural environment is a desirable feature of a future planning system. Such an approach will require institutions to be able to use adaptive management practices and strategies.
- Achieving reductions in greenhouse gases (GHG) through policies that change urban form takes a long time. Other policy measures are likely to be more effective and less costly in reducing emissions to meet New Zealand's emissions reduction targets. It will be important for government to consider the relative effectiveness (which can change with changes in technology) and the distributional impacts of policies to reduce GHG emissions in New Zealand.

This chapter is about urban planning and the natural environment.

Section 9.1 discusses different ways of conceptualising the relationship between the natural environment and the built environment and what that might mean for regulating the impact of the built environment on the natural environment.

Section 9.2 looks at some key issues with the Resource Management Act 1991 (RMA) in managing the effects of the built environment on the natural environment.

Section 9.3 outlines the desirable features of a regulatory regime for managing the impact of the built environment on the natural environment.

Section 9.4 looks at climate change and what that means for urban planning.

9.1 The relationship between and regulation of the natural and built environments

In developing a new planning system for New Zealand, how should the Commission think about the relationship between the built environment and the natural environment? This section presents two conceptions of the relationship between the natural and built environments. The two views have different implications for environmental law and regulation.

Regulation is about spillovers and sustainability and mitigation of effects

One conception of the relationship between the natural environment and the built environment focuses on the negative impacts of the built environment on the natural environment. These negative impacts on the natural environment are termed spillovers or negative externalities. For instance, run-off from roads and other impervious surfaces can impact the quality of water bodies. Emissions from cars, trucks and fireplaces can reduce air quality, and clearing land for development can place pressure on indigenous biodiversity.

Notions of sustainability

In this framing, the question of what is "sustainable" becomes very important.

Some aspects of nature are indispensable and the loss of these would lead to irreversible damage (Uno & Bartelmus, 2013). Ecological sustainability recognises that natural systems have ecological limits and does not pass the point where the environment is irreversibly damaged.

Another view of sustainability is about the need to maintain the natural environment so that it continues to contribute to the quality of the built environment. On this view the natural environment is conceived as providing *ecosystem services* to the built environment (Roberts et al., 2015). In this way:

- urban air quality is important for human health and the enjoyment of urban experiences;
- rivers and water bodies provide drinking water, act as natural pollution filters and provide recreational opportunities;
- forests and greenbelts serve as watersheds, habitats, carbon sinks, leisure amenities and tourist destinations;
- wetlands filter and process waste as well as providing breeding areas for fisheries and birds; and
- sand dunes and mangroves protect cities from storm surges and prevent erosion and siltation.

Sustaining ecosystem services requires maintaining the quality of the environment so that it can continue to provide services to the built environment.

Other notions of sustainability focus on intergenerational considerations. For example, Tietenberg and Lewis (2009) define a sustainability criterion where, at a minimum, future generations should be left no worse off than current generations. There is some debate about whether this criterion would allow gains in the built environment at the expense of the loss of some aspects of the natural environment, provided *the sum of*

physical and natural capital is maintained for future generations. Yet, some people believe that natural and physical capital is not substitutable. They think that the only sustainable built environment is one that does not reduce the existing stock of natural capital.

Conceptions of value

People value the natural environment in different ways. People can value the environment in an *instrumental* way, that is, for the value they get out of the ecosystems and species (eg, recreational value, medicinal value, cultural value or economic value).

But some people believe that ecosystems and species have value in and of themselves, no matter how people might value their use. On this view, the natural environment is something to be protected because it has *intrinsic* value.

As discussed in Chapter 7, Māori express their relationship with the environment in terms of the intergenerational obligation that arises by virtue of kinship (Box 7.1).

The RMA embodies many concepts

The current RMA is an environmental statute that embodies the concepts of ecosystem services, community wellbeing and negative externalities. The RMA accommodates different views about what "sustainable management" means, including maintaining resources for future generations, and there are different conceptions of value.

Box 9.1 **Resource Management Act (1991) Purpose Statement**

5 Purpose

(1) The purpose of this Act is to promote the sustainable management of natural and physical resources.

(2) In this Act, sustainable management means 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 well-being 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.

Thinking about the relationship between the natural and built environment in terms of spillovers and sustainability means that the regulator needs clarity about its role and the outcomes it is seeking. But it also places heavy reliance on the knowledge and information available to the regulator about the impacts of changes or growth in the built environment on the natural environment. This is to enable the regulator to "predict and control"– that is, accurately assess the impacts of the built environment and then apply policies and rules to mitigate the effects on the natural environment.

Regulation is at the intersection of two interlinked complex adaptive systems – the natural and built environments

Another way to view the relationship between the built environment and natural environment is as a relationship between two interlinked and interacting complex adaptive systems. This perspective leads to a different way of thinking about what is needed to effectively manage the impact of the built environment on the natural environment.

The origin of the idea that the natural environment is a complex adaptive system is often attributed to Charles Darwin (1861) who wrote in *The Origin of Species* that a "web of complex relations" binds living

things (p. 71). A hundred years later, Jane Jacobs (1961) had characterised cities as complex adaptive systems, describing them as "organized complexity" (Chapter 2).

Box 9.2 summarises the characteristics of complex adaptive systems.

Box 9.2 **The characteristics of complex adaptive systems**

1. Complex, large-scale behaviours emerge from the aggregate interactions of less complex agents. For example, macroeconomic trends emerge from the behaviour of many individual firms or investors.
2. The interactions of the system exhibit unpredictable, non-linear relationships where small-scale events can have large systemic effects ("butterfly effects") or where a minor shift in parameters can produce a sudden change of state ("tipping points"). Examples are the change in temperature that changes water into ice, or species extinction as a result of a small change in environmental conditions.
3. A complex, adaptive system can be described through the varied flows of its mediums – fluids, money, energy, information – for example, how clouds describe weather patterns.
4. Complex adaptive systems have diverse ingredients, such as the diverse range of species that make up an ecosystem.
5. All four of these properties combine into self-organising critical state behaviour through which change becomes a stabilising force rather than a disrupting force.

Sources: Holland, 1995; Ruhl, 1997; Colander & Kupers, 2014; Crawford, 2016.

Environmental law and regulation is determined within a complex adaptive system

At the same time that Jane Jacobs was writing about cities, Rachel Carson (1962) was writing about the impact of human actions on environmental dynamics. Her writings inspired a conservation movement and the development of a body of environmental law in the United States. But it was only in the late 1990s that writers like Levin (1998) described the complex adaptive properties of natural ecosystems and the impact of the loss of biodiversity on the ecosystem services on which people depend.

> Perhaps the fundamental theoretical and applied issues confronting ecologists today concern the stunning loss of biodiversity, and the implications for the loss of services on which humans depend…The biota not only provides direct benefits to humans, for example, as a source of food, fiber, and fuel; it also helps process nutrients essential to life, sequesters potentially harmful chemicals, and mediates regional and global climatic and atmospheric processes…. Ecosystems, and indeed the global biosphere, are prototypical examples of complex adaptive systems. (p. 431)

While Ruhl (1997) pointed out that

> [b]oth the target of environmental regulation, humans, and the purported beneficiary of regulation, the environment, display the discontinuities and synergies characteristic of complex adaptive systems (p. 968).

And Emison (1996) posited that environmental law itself is part of a complex system of human interaction with the natural environment (Box 9.3).

Box 9.3 **The changing nature of human agency and the impact on the natural environment**

- What comes under the purview of environmental law is subject to change as pollutants and the remedies available to mitigate them change. These changes are largely due to changing economic activity and technological change. Technological change, in particular, can be unpredictable and non-linear.

- People's behaviour and attitudes to the environment change over time. As scientific knowledge about the environment improves, the more people understand and the more they become concerned about the impact of human activity on the natural environment. As people became wealthier their expectations for environmental quality also increase, and they can influence business and government attitudes and behaviour toward environmental protection. These are the large-scale behaviours that can emerge from the behaviour of many individual agents.
- Values about the environment can change or become more prominent or recognised – for example the view that the environment should be protected because it has an intrinsic value rather than valued for the ecosystem services it provides. A shift in values can reach a tipping point, changing the purpose of regulation.
- The funding and the tools available to different levels of government responsible for environmental protection can change, along with the governance arrangements and the allocation of responsibilities. How money and information flow through the system is important for understanding how the system works, how it is constrained, or how it acts.

Source: Adapted from Emison, 1996.

While Emison argues that law and regulation are determined within a complex social environment, regulatory academics Robert Baldwin and Julia Black argue that so too are the activities of the regulator (Baldwin & Black, 2008; Black & Baldwin, 2010). Their theory of regulatory control departs from standard theories where the regulator is assumed to be able to assess the risk the regulated party poses to the objectives of the regulatory regime and then decide on the action it will take. In reality, the regulator may have very little influence over regulated parties who may be subject to other more powerful influences. For example, the regulated party is inevitably influenced by the culture of the industry it operates in (or for individuals, the social group they associate with), and may be subject to financial or other pressures that lead to risky behaviour or lack of compliance. The behaviour of the regulated party – both in respect of the risks it creates and its attitude to compliance – is also not blind to the behaviour and actions of the regulator. It is also recognised that regulators live with considerable uncertainty (NZPC, 2014). Williams and Brown (2012) outline four types of uncertainty that can impact on the regulator's management of the natural environment.

Box 9.4 **Types of uncertainty that can impact how the natural environment is managed**

- *Environmental variation* refers to fluctuations in the physical environment (such as precipitation patterns and temperature regimes) that directly and indirectly influence the ecological processes and the state of the natural environment.
- *Partial controllability* refers to the difference between the results intended by a given management decision and the results that actually occur. Unintended outcomes often result from management decisions.
- *Partial observability* refers to a regulator's inability to observe completely the resource system being managed; a nearly universal condition with renewable natural resources.
- *Structural uncertainty* is the lack of understanding (or lack of agreement) about the dynamic processes that control natural systems.

Source: Williams & Brown, 2012.

F9.1 An important purpose of environmental regulation is to manage the impact of the built environment on the natural environment. The challenge for environmental regulation is that the built environment and the natural environment display the characteristics of complex, adaptive systems.

F9.2 The characteristics of complex, adaptive systems mean that regulators can find it hard to accurately predict the impact of the built environment on the natural environment and take action to mitigate the impact.

F9.3 Environmental law is part of the complex system of human behaviour with respect to the natural environment. Regulators are only one influence and may have only partial oversight or control over regulated parties.

Understanding the RMA as the product of a complex social system

Seeing environmental law as the product of a complex, adaptive social system helps shed light on how law is developed, interpreted, implemented, challenged and changed, through the interaction of many agents.

Of the United States, Emison wrote,

> [t]he interactions of scientific knowledge, political interests, managerial competence, legal constraints, multiple levels of government, public interest groups, and private corporations combine to affect environmental quality…. Financial incentives, court orders, legal rights, and public opinion interact not only to produce today's environmental quality, but also to yield the unique approach that characterizes institutional responsibilities for environmental management in the United States today. (p. 182)

In New Zealand, the RMA had two main groups of supporters with contradictory agendas – economic reformers, who wanted less planning and regulation and greater freedom over land use, and environmentalists, who wanted stronger protection of the natural environment (Memon and Gleeson, 1995).

As Chapter 5 discusses, Parliament did not resolve these tensions when debating the Resource Management Bill. Major parties appear to have adopted a strategy of "constructive ambiguity".[79] That is, a strategy of maintaining vagueness around contested issues in the interest of progressing discussions, and in the hope that implementation would bring clarity. This approach is common in (international) environmental negotiations, and was understandable given that the dogged pursuit of clarity may have jeopardised progression of the Bill.

Further, the Act simply lists a range of "other matters" that persons exercising powers and functions in the Act should have particular regard to (section 7). These include Māori values with respect to the environment. Those values jostle in the list with the intrinsic value of the environment and instrumental matters such as the benefits to be derived from developing and using renewable energy.

Chapter 5's high-level assessment of New Zealand's planning system stressed that implementation of the Act has not brought clarity and the concept of sustainable management has failed to provide a philosophical foundation for planning under the RMA (Miller, 2016). The continuing debate around whether section 5 sets "bottom lines" or allows for an "overall broad judgement" provides evidence to support this point. While some commentators believe the "King Salmon case" settled this debate (sub. 60 and sub. DR122), many others (including the legal advice commissioned for this inquiry) have cast doubt over the wider application of the judgement (K. Palmer, 2016).

Recent governments have been loath to initiate a national conversation around what "sustainable development" means in the New Zealand context. One outcome is that while "sustainability" is a popular mantra in New Zealand policy, how the term is used or the philosophical lens through which is it applied, is unclear and inconsistent. This is not simply semantics. How sustainability is conceptualised has a significant impact on what the system is trying to "sustain" and, and consequently, on the design of institutions aimed at achieving "sustainable outcomes". Instead, "financial incentives, court orders, legal rights, and public

[79] The term "constructive ambiguity" is often credited to Henry Kissinger, who reportedly used ambiguity as a negotiating technique in international agreements (Shur-Ofry & Tur-Sinai, 2015).

opinion" interact and characterise New Zealand's approach to managing the impact of the built environment on the natural environment today.

F9.4 "Sustainability" and "sustainable development" are core concepts in the Resource Management Act. Yet ambiguity over the meaning of these concepts has led to difficulties in managing the impact of the built environment on the natural environment.

9.2 The built environment's effects on the natural environment: some specific issues

As described in section 9.1, environmental law and regulation must manage the impact of one complex adaptive system on another complex adaptive system. This section explores some issues about how, under the current RMA, cumulative effects are being managed, information for adaptive decision making is being generated and whether there is oversight of environmental outcomes.

The RMA has struggled to manage cumulative effects

Cumulative effects are a well-recognised characteristic of complex adaptive systems. As Crawford (2016) explains, complex systems display non-linearities, including "butterfly effects" where small-scale events can have large systemic effects, and tipping points where a minor shift in parameters can produce sudden changes of state.

In the natural environment, cumulative effects arise where individually innocuous impacts on the natural environment add up to cause significant damage. Assessed in isolation, these impacts are not large enough to trigger regulatory action. However, when many individually "minor" impacts accumulate independently, they can lead to substantial environmental degradation. Further, these individual impacts can interact in unpredictable ways – leading to unforeseen impacts on the natural environment (Becher, 2014).

The RMA specifically recognises the need to manage cumulative effects. Section 3(d) notes that "effects" include "[a]ny cumulative effect which arises over time or in combination with other effects – regardless of the scale, intensity, duration, or frequency of the effect". This includes any "potential effect of high probability" (section 3 (e)) and any "potential effect of low probability which has a high potential impact".

Yet, as in many other countries, New Zealand's planning system has struggled to adequately manage cumulative effects on the natural environment. The New Zealand Planning Institute describes the handling of cumulative effects as "[o]ne of the major failures with the RMA" (sub. 27, p. 11). Similarly, consulting firm Hill Young Cooper notes that "the basic problem planning has is dealing with cumulative effects – small effects one way or another that add up" (sub. 6, p. 9).

The management of cumulative effects is difficult because:

- time lags often occur between the spillover and the impact of the spillover becoming apparent (eg, nitrogen can take decades to leach into waterways);
- multiple, isolated incidents of spillovers can occur, making monitoring of individual impacts impractical; and
- the capacity of the natural environment to absorb a spillover – or society's ability to tolerate it – is often unknown or difficult to predict.

These difficulties reflect the complex nature of interactions between the built and natural environments, and the dispersed and incomplete nature of information about the effects of human actions on the natural environment. As Becher (2014) explains:

> Natural resources, like water and air, represent complex systems that form part of a larger and more complex bio-physical system. A characteristic of complex systems is that they have multiple stable states, and have the potential to change from one state to another ... However, many redundancies

> resulting from this complexity convey a certain degree of inertia to each system. This means there is a degree of resilience associated with each stable state, but a downside is that this resilience obscures a myriad of seemingly inconsequential changes that can result in a sudden change to a new state with unexpected properties. (p. 6)

Other issues identified as contributing to the difficulties include:

- a failure when designing the system to consider the cost, complexity and capability needed to manage cumulative effects;
- the limited availability of good science, data and biophysical modelling to support decision making and learning through time; and
- rigid institutional design that does not adequately deal with uncertain environmental impacts or the need to change management practices as more information becomes available.

The system does not generate information for adaptive decision making

Inquiry participants have suggested that the current system is not generating the level of information and analysis required for adaptive decision making. The Ministry for the Environment (MfE, 2014d) makes this point in its 2014 Briefing to the Incoming Minister:

> Our knowledge of the environment and how effectively we are managing it is insufficient in many areas. There has been a history of limited investment in environmental monitoring relative to growing pressures on the environment. Our evidence base is patchy at best. For too long, this has led to debate about data – whether it's robust, and whether it measures the right thing – overshadowing debate about environmental issues. (p. 13)

Similar comments were reflected in the submission from the Regional Public Health and New Zealand Centre for Sustainable Cities:

> A case can be made, however, that councils often work on the basis of limited information and understanding of the consequences of their actions, and/or they do not adapt their decisions in the light of changing circumstances, so that rules become maladaptive. Health and environmental consequences of council decisions are often not well understood, and shorter-term political considerations rather than longer-term consequences may be privileged. … This of course is not a criticism limited to local government – it applies at central government level also. (sub. 35, p. 4)

Until recently, developing nationally consistent environmental data has received little emphasis. Such data is critical for detecting longer-term changes in the natural environment and for understanding whether existing legislative frameworks are achieving their stated objectives.

Oversight of environmental outcomes is insufficient

Central government has too little understanding of whether the RMA is achieving good environmental outcomes or how efficient the current system is in achieving these outcomes.

For example, referring to its national surveys of local government, MfE notes:

> The survey did not measure the performance of the RMA in delivering better environmental outcomes. Nor did it measure how well individual local authorities delivered these outcomes: this occurs through state of the environment monitoring and reporting at both the national and local level. (MfE, 2016h)

The "state of the environment" reports of 1997 and 2007 were criticised for being inaccurate and having limited geographic coverage (PCE, 2010). It appears that for the first 20 years of the RMA, central government had little oversight of the health of New Zealand natural environment, let alone the impact the RMA was having on environmental outcomes.

The Environmental Defence Society (EDS, 2016) attributes this to the absence of an evaluative culture within government agencies:

> In the absence of a culture of evaluation and accountability, running blind is the only alternative. The underwhelming environmental outcomes of the RMA demonstrate the consequence of this absence. The poor attention paid to monitoring and enforcement, the poor evidentiary base for many of the past

> reforms,…the lack of data on policy effectiveness and the overall limited agency accountability all point to the same problem: the failure to rigorously evaluate outcomes and consequences and to respond accordingly. (p. 59)

Poor oversight has been found to be an issue across New Zealand's regulatory system. In its inquiry into *Regulatory Institutions and Practices* (2014b) the Commission found that oversight of regulators commonly involves extensive reporting against measures that give little indication of whether regulators are making good decisions or achieving the desired regulatory outcomes. Recent reviews of the RMA are a case in point.

> Previous reviews of the RMA have largely focused on processing issues such as time and cost of resource consents, rather than quality of decision making. There is very little monitoring at a local, regional or national level as to the quality of decisions made and whether the intentions of the RMA are being met. Available information suggests that many items identified as a matter of national importance under s6 of the Act are inadequately identified and protected through District Plan provisions. (Allison Tindale, sub. 8, p. 1)

Auckland Council makes a similar point:

> Ongoing changes to the planning framework have tended to focus on improving processes and reducing costs and delays in the consenting process. While this is important and helps to provide greater process certainty for those involved, it can result in undue focus on process and compliance, potentially losing sight of the overall outcomes sought. A good planning system must provide sufficient flexibility to keep the big picture in sight when making day to day decisions. (Auckland Council, sub. 47, p. 4)

In recent years, the government has taken steps to improve the monitoring of environmental health. The Environmental Reporting Act 2015 requires regular reporting on New Zealand's environment. Under the Act the Government Statistician and the Secretary for the Environment are jointly responsible for producing and publishing environmental reports independent of the government of the day. The Parliamentary Commissioner for the Environment may comment on environmental reports produced.

The Environmental Reporting Act 2015 is a step forward from the inconsistent reporting of the past two decades. Yet questions remain around how to link environmental data to the effectiveness of the planning system – at both the local and central government level. Data are valuable to the extent that they inform adaptive decision making and provide timely feedback on the effectiveness of previous decisions. As such, a clear "collection logic" is crucial when determining the type and form of environmental data collected.

In the context of monitoring the urban planning system, this means identifying environmental indicators directly impacted by the human behaviour regulated under the system. These indicators then become an indicator of environmental health, and the basis for reviewing current policies and regulations.

F9.5 The planning system has struggled to adequately manage cumulative effects on the natural environment. The system does not generate the level of information and analysis required for adaptive decision making, and oversight of environmental outcomes is insufficient.

9.3 A planning system to manage the impact of the built environment on the natural environment

Essential features

The interaction of two complex adaptive systems is inevitably uncertain. This makes it difficult to predict future outcomes. Yet, regulators and policymakers still play a role. Well-designed settings that encourage learning and adapting to new information, allow for flexibility and innovation, and the use of incentives, can lead to desirable outcomes for the natural environment. Box 9.5 outlines a list of design elements recommended by Emison (1996) to improve the management of the environment and improve environmental quality.

Box 9.5 **Applying complexity theory to environmental policy**

1. Collecting accurate detailed environmental data and making it widely available

   If we are in a continuous state of change and emergence, having some picture of that state is essential for us to respond and adapt…. Information, therefore, is key not only to get an accurate fix on the state of environmental affairs, but also to enlist all the players needed to improve the system. (p. 187)

2. Setting specific and measurable goals

   When goals are either vague or responsibility is not clearly assigned, the goal's chances of success are diminished… Because complex adaptive systems adjust, why not take advantage of this property when setting goals?... goals can be adjusted to provide for an ever-improving environment, based on our knowledge of where improvement is most beneficial. (p. 188)

3. Using all parts of the environmental management system

   Environmental quality management is more than writing regulations and enforcing them…. Tax policy, capital and operational spending, and information dissemination should accompany traditional regulation as candidates for action. (p. 188)

4. Using incentives to promote responsible behaviour

   The use of positive incentives can be a major strength of using complex adaptive systems to advance environmental quality. (p. 189)

5. Paying close attention to implementation

   Complex adaptive systems theory tells us that the best control of large systems comes from controlling the component systems. Therefore we can strengthen the effectiveness of environmental policy by focusing on state and local governments. Complex adaptive systems theory tells us that no design, no matter how well conceived, can possibly anticipate all the opportunities and problems likely to be encountered in implementing the policy. (p. 190)

6. Making innovation a priority

   …unmoderated control can be the enemy of innovation, and we desperately need innovation if we are to adapt to the emerging challenges of the future of environmental management. (p. 190)

7. Emphasising flexibility

   Complex adaptive systems theory indicates that we are unlikely to ever anticipate completely the consequences of the national environmental quality system. We will have unforeseen problems and unforeseen opportunities. Our policies should be built with adaptability and agility as two of their undergirding principles. (p. 192)

Source: Emison, 1996.

Drawing on these elements and the Commission's previous work on regulatory design, implementation and review (NZPC, 2013; 2014), this chapter proposes desirable features of a planning and regulatory regime to manage the impact of the built environment on the natural environment.

- A clear legislative purpose, alongside principles and objectives for managing the impact of the built environment on the natural environment, would inform decisions and help with priorities and trade-offs. Māori values about the environment would be recognised, respected and accommodated.
- The regulatory system would be outcomes-focused and have information flows so as to measure outcomes and make decisions.
- Insights about complex adaptive systems would inform the design of the system architecture for managing the impact of the built environment on the natural environment at all levels.

- The regulatory regime would make use of the full range of instruments that can influence human activity with respect to the natural environment, including providing information, command and control regulation, and market instruments.
- The planning and regulatory system would promote adaptive management (AM) so that the regulatory regime can respond flexibly to information flows about the state of the natural environment.

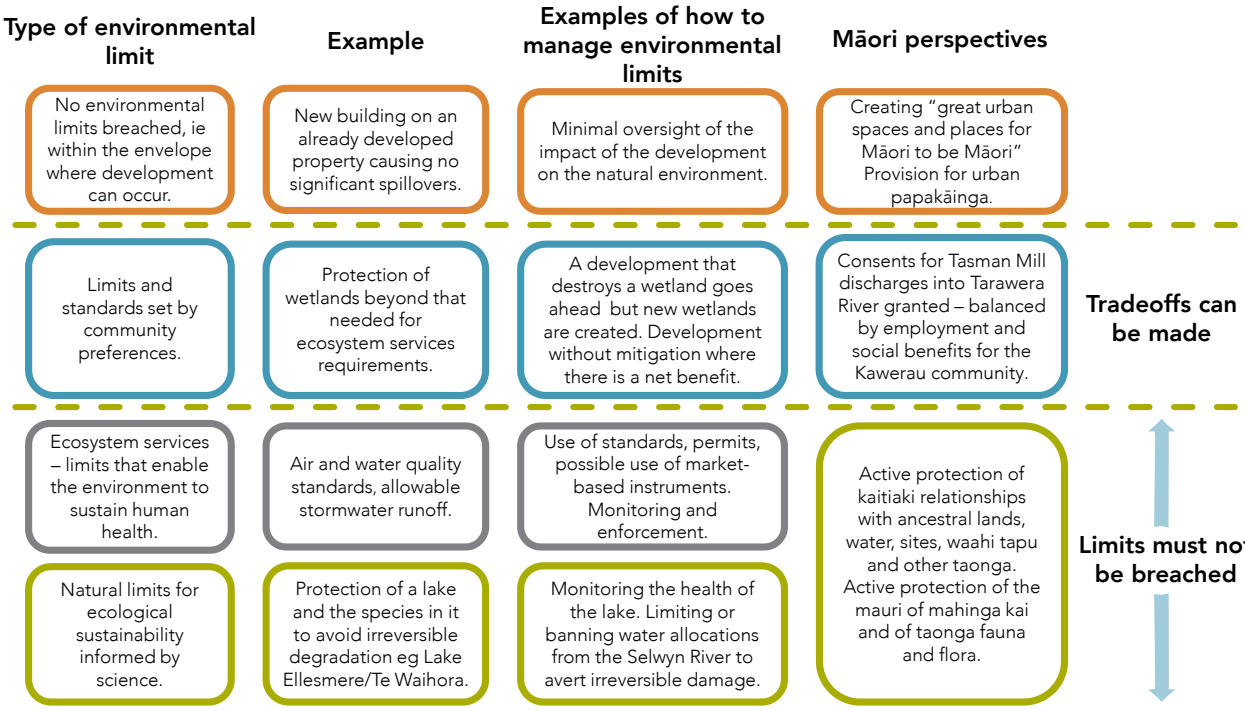
These desirable features are discussed in detail below.

Clear legislative purpose, objectives and principles

Future planning legislation should provide greater clarity and certainty for decision making than at present.

The Commission considers that the overarching purpose of planning legislation should reflect the positive benefits from the built environment that meet the social, cultural and economic needs of New Zealanders, while safeguarding the natural environment (Chapter 13). The concepts of sustainability, limits and standards can be invoked to help operationalise this purpose (Figure 9.1).

Figure 9.1 Limits and standards for regulation of the natural environment



In a complex and adaptive regulatory system, community preferences may change. People may increase their scientific understanding of the natural limits of ecosystems, and they may find new ways to mitigate the effects of the built environment on the natural environment.

This chapter distinguishes between the natural limits of ecological sustainability beyond which the environment would be irreversibly damaged, and the sustainability of ecosystem services necessary to maintain the liveability of the built environment.

These limits should not be breached. They also lie at the heart of the obligation that Māori have to protect the mauri of mahinga kai and the taonga fauna and flora. These two limits are shown in the last two rows of Figure 9.1, with examples and the regulatory control mechanisms that might be used to maintain levels of ecosystem services and protect ecological sustainability. The limits and the standards necessary for protecting these ecosystems, and the services they provide, rely on good science and good information about the state of the environment.

Above these limits are those limits and standards determined by community preferences[80] (shown in the second row in Figure 9.1). In many cases these will be well above the limits required to maintain ecosystem

[80] That is, they are determined in a complex social environment rather than being a product of a complex natural environment.

services for the built environment. For example, the community may have preferences for how to preserve wetlands or the quality of water in a river that exceeds what is needed to sustain the ecosystem. Where a proposed development will have a significant impact on the natural environment, a decision must be made about the social and economic value of the development compared to the loss to the natural environment.

Two examples illustrate the types of trade-offs.

- **Mitigation and enhancement:** NZTA mitigated the loss of wetland in the Kāpiti district as a result of the Mackays to Peka Peka expressway by creating new wetland areas – "with every hectare of wetland that is lost or moved due to construction, the MacKays to Peka Peka Alliance will regenerate it five times over" (NZTA, 2017).
- **Net benefit consideration:** The Environment Court renewed (time limited) consents for Tasman Mill discharges into the Tarawera River without remedy or mitigation of the adverse effects, because, on balance, the social and employment benefits to the community outweighed the loss to the environment (K Palmer, 2016).

A future planning system would be supported by objectives and principles aimed at setting and operationalising limits and standards for protecting the natural environment.[81]

And, where the natural environment is not significantly impacted, developments should be able to proceed with minimal oversight (top row of Figure 9.1). For example, kaupapa Māori urban developments and new building on an already developed property would have rights to proceed without undue restriction.

R9.1 The overarching purpose of planning legislation should reflect the positive benefits from the built environment that meet the social, cultural and economic needs of New Zealanders, while safeguarding the natural environment.

R9.2 Future planning regulation should set clear limits and standards within which development can occur, to ensure the integrity of natural systems (ecosystem sustainability), maintain standards of environmental quality (ecosystem services), and recognise community preferences (including Māori interests).

If developments breach community standards for the natural environment, then decision makers should balance the benefits of development against the impacts on the natural environment.

Where these limits and standards are not breached, and within the rules for the built environment, developments should be able to proceed with minimal oversight.

Legislation should provide clear objectives and principles to guide how limits and standards are determined.

A focus on environmental outcomes and information to support decision making

When dealing with a complex adaptive system, regulation (or other instruments that seek to maintain environmental standards) needs to be based on up-to-date information about outcomes. Monitored outcomes should correspond to specific and measurable goals that are linked to the overall performance of the system. Central government should work with local government to determine what environmental outcomes to measure.

[81]. Legislation should also provide corresponding objectives and principles for the built environment (Chapters 8 and 13).

This means identifying environmental outcomes that are impacted on by the built environment. These outcomes then become indicators of environmental health and the basis for reviewing current policies and regulations. Consistent and accurate information flows about the quality of the natural environment, especially at a regional level, are needed to measure these outcomes and make decisions. Also, information needs to be widely available, since the planning system is comprised of many dispersed regulators and regulated parties. Due to likely economies of scale and scope, central government is best placed to help regional regulators set up information systems that provide timely information about environmental outcomes.

Chapter 13 goes into further detail about central government's stewardship role in monitoring the outcomes of the planning system.

R9.3 Central government should work with local government to determine what key environmental outcomes are measured and work with regional regulators to set up information systems that provide timely information about outcomes.

The design of system architecture

The system architecture should allow for good information and societal preferences to inform the management of the impacts of the built environment on the natural environment. And the component parts should fit together, each with their own roles. Key players in the system (central government, local government, Independent Hearings Panels (IHPs) and the Environment Court) will each play a part in establishing and enforcing the ecological limits and standards designed to safeguard the natural environment. With reference to Figure 9.1, different players will set standards and limits, monitor outcomes, and make trade-offs and decisions. The will do so depending on the circumstances; so, these roles need to be clear.

Central government

Negative spillovers can extend beyond regional boundaries. Where the costs of spillovers are felt nationally, it is appropriate for central government to play a role in setting regulatory standards and policies and in providing guidance on how to apply those polices and standards. National standards, policies and guidance may also be needed where national consistency is important or where economies of scale and scope offer efficiency gains (Chapter 3).

A lack of central government guidance and the delay in establishing National Policy Statements (NPSs) and National Environmental Standards (NESs) has hindered the implementation of the current planning system (Chapters 4 and 8). Yet the Commission has received mixed views on the role central government should play in a future planning system.

Many inquiry participants believe more guidance and clearer standards from the central government would help councils make decisions (subs. 1, 2, 27, DR60, DR68, DR77, DR83, DR89). The Commission agrees with this view. However, submitters also warned that national requirements can limit the scope councils have to tailor land use regulations to local circumstances (subs. DR68, DR86, DR124).

Chapter 3 introduces a framework for allocating regulatory roles between central and local government (see Figure 3.1). See also the regulatory allocation framework set out in NZPC (2013) *Towards Better Local Regulation*.

R9.4 A future planning system would include a well-articulated and stable approach for deciding when to set environmental standards and policies nationally and when to leave standard setting to local decision makers.

In its draft report, the Commission raised the idea of a Government Policy Statement (GPS) on environmental sustainability. It was suggested that such a GPS could replace the existing NPSs and NESs with a view to creating a more congruent, transparent and clearer national direction.

While some submitters expressed general support for the intent of the GPS (subs. DR50, DR59, DR68, Dr108), many submitters expressed concerns (subs DR72, DR86, DR90, DR92, DR103, DR118). In particular, these concerns focused on:

- the practicality of balancing a wide range of competing interests within a single document;
- the risk that the GPS would become overly political and lose its required scientific focus;
- the risk that the GPS would be subject to ad hoc changes that would undermine certainty for both the environment and investors; and
- the belief that a GPS would need to be so high-level that it would not provide councils with the specificity needed for practical plan-making.

The Commission finds these arguments compelling. While there is value in central government clearly signaling its environmental priorities, a single document that attempts to do so could become unwieldy and would not be an appropriate model for setting environmental standards (K. Palmer, 2016). In addition, clearly defined objectives and principles in legislation should help to provide guidance around how best to resolve conflicting environmental objectives (Chapter 13).

In light of the arguments above, the Commission recommends the continued use of NPSs and NESs. Yet currently only one mandatory national statement sits under the RMA: the National Coastal Policy Statement. To ensure sufficient guidance is provided on a wider range of matters with respect to the natural environment, the Commission recommends that central government deliver a core suite of national instruments (Chapter 13).

Additionally, the Commission's recommendations around spatial planning provide an opportunity for central government to signal its priorities via a more practical and location-specific process. Chapters 10 and 13 discuss the Commission's suggested process for developing regional spatial strategies.

R9.5 A future planning system should retain the use of national instruments such as National Policy Statements and National Environmental Standards.

Importantly, national direction and guidance should not be restricted to formal legislative tools. A future planning system would see central government making more effective use of *informal* (ie, non-binding) guidance (Chapter 13).

Local government

Under the RMA, guidance at a regional level for managing the natural environment is currently provided through Regional Policy Statements (RPSs). Prepared by regional councils, RPSs outline strategies to address regional resource management issues such as maintaining air quality and managing natural hazards.

However, RPSs are also used to regulate the built environment. Regional councils include policies related to urban development that are often vague, too restrictive and aspirational, and based on insufficient evidence. Examples include:

- maintaining and enhancing the sense of identity and character of a region;
- setting explicit targets for intensification, and encouraging high-density and mixed development around designated centres to ensure a more compact urban form; and
- imposing urban limits.

McDermott (2016) argues for a shift in the focus of RPSs:

> While the setting of regional standards and provisions for protecting or restoring the quality of air and water, the integrity of soils, and biodiversity should be clearly set out and adhered to throughout region

> as far as practical, the tendency for Regional Policy Statements to promulgate land use prescriptions to control matters outside the immediate requirements of the natural environment intrudes on urban development options. (p. 23)

The Commission agrees. The purpose of RPSs should shift towards setting standards and limits to safeguard the natural environment. So, in a future planning system, regional councils should prepare a Regional Policy Statement for the Natural Environment (RPS-NE) to replace existing RPSs and regional plans (to the extent that they deal with standards and limits for the natural environment). The RPS-NE would stipulate the ecologically sustainable limits within which development in the region must occur. It would give effect to national policy instruments and would allow regional councils to set ecological limits and standards above national levels. For instance, a regional council may decide to set the minimum standard of water quality for local rivers at a higher level than specified in national instruments. The RPS-NE would give appropriate recognition to, and provide for, mana whenua kaitiaki relationships with the natural environment.

The role of regional councils in land-use planning is discussed in Chapter 10. Chapter 13 sets out the Commission's proposals for the hierarchy of Plans.

R9.6

In a future planning system, regional councils should prepare a Regional Policy Statement for the Natural Environment. That policy statement would:

- describe the ecologically sustainable limits that must not be breached;
- replace existing regional policy statements and regional plans to the extent that they deal with standards and limits for the natural environment;
- give appropriate recognition to, and provide for, mana whenua kaitiaki relationships with the natural environment; and
- give effect to national policy instruments and allow regional councils to set limits and standards above national levels in line with regional preferences.

Independent HearingS Panels and the Environment Court

Chapter 8 recommends establishing IHPs that would consider and review the suite of Plans within a region. Plans include an RSS (Chapters 10 and 13), RPS-NE and District Plans. Strengthening and streamlining the plan review process in this way ensures that plan rules adequately protect the natural environment, local environmental issues are addressed, and development is not unnecessarily constrained.

Even once IHPs are established, the Environment Court should continue to play an important, residual role in managing the effects of the built environment on the natural environment. The Environment Court should continue to be responsible for hearing appeals, on the merits of council consent decisions, and appeals, on points of law, from IHP decisions. As the decision maker on consent appeals, the Court will help to ensure that consent decisions comprehensively weigh up the social benefits of a development against its costs on the natural environment (Chapter 8).

Use of the full range of instruments

Traditionally, planning systems manage spillovers through regulation, monitoring and enforcement – so-called "command and control" measures. However, instances may likely arise when other policy approaches – or a more judicious mix of approaches – can achieve environmental goals more efficiently and effectively.

Firms and individuals make decisions that damage the environment partly because they do not bear the full cost of their actions – that is, costs spill over into the wider community (Chapter 3). "Market-based instruments" manage spillovers by internalising costs into the decisions of firms and individuals. When people face the full costs of their decision, they have an incentive to reduce environmental damage and use resources more efficiently. In this way, markets can act as the coordinating mechanism for multiple, independent players in a system. Box 9.6 outlines different types of market-based instruments.

Box 9.6 **Market-based instruments**

- *Price-based instruments* – instruments that attempt to influence environmental performance by pricing negative externalities or subsidising mitigation actions. Two examples are noted below.
  - Environmental charges – charges that link the amount paid to the level of spillover (eg, discharge fees for effluent). Alternative charges can be placed on inputs related to a spillover (eg, vehicle registration fees based on engine size as a proxy for GHG emissions).
  - Incentive payments – payments that subsidise the cost of mitigating actions. Competitive processes can be used to distribute incentive payments.
- *Quantity-based instruments* – instruments that involve setting quantity limits (eg, emissions) and that allow trade among those adding to the quantity and those mitigating the quantity (permitting individual underperformance if compensated by over-performance elsewhere). Tradeable permits and environmental offsets are two major variants.
  - Tradeable permits – permits that create and allocate a limited number of permits that produce an undesirable effect on the environment; then allow parties to trade the permits with each other. A person is then only allowed to exceed a given quantity if they buy permits from someone who has excess permits because they are under their permitted emissions level.
  - Environmental offsets - actions taken to meet a standard (reducing pollution or environmental impacts) at a site away from where the action causing an environmental externality occurs. The party causing the externality can either act, or pay for others to act on their behalf. For instance, to offset the loss of native vegetation from a development, a developer could improve the quality or quantity of native vegetation in a nearby area.

Source: Adapted from MacDonald, Conner & Morrison, 2004.

When market-based instruments are well-designed and implemented, they can lower the cost of achieving environmental objectives and create incentives to seek out innovative solutions to environmental problems. Yet relative to other countries within the Organisation for Economic Co-operation and Development (OECD), New Zealand does not use these instruments enough (OECD, 2007). The OECD has noted that, to meet its environmental challenges, New Zealand will need to "further integrate environmental concerns into economic and sectoral decisions, particularly by using economic instruments to internalise [the] environmental costs of economic activities" (p 1).

While New Zealand has other examples of market-based instruments (such as the Lake Taupō nitrogen cap and trade programme and the Quota Management System (QMS) for fish stocks), policy innovation in the use of market-based instruments has been minimal. [82] Command and control measures remain the policy instrument of choice in managing the impact of the built environment on the natural environment.

Councils have opportunities to make more use of the full range of environmental management tools. For example, Chapter 11 explores the use of congestion charges and water charges. That chapter highlights how technology now makes it possible to introduce sophisticated pricing structures that reflect the full costs of infrastructure use. It is possible that these pricing structures could internalise a broader set of external costs. However, taxes on fuel consumption are still likely to be a more efficient way to internalise the cost of some transport-related externalities such as air pollution from vehicle exhausts and GHG emissions.

Box 9.7 highlights examples of market-based approaches in France and Germany to manage stormwater run-off from the built environment on the natural environment, and raise revenue to pay for stormwater infrastructure.

[82] The Lake Taupō nitrogen cap and trade programme is one of the world's first non-point-source water quality cap and trade schemes (see Duhon, McDonald & Kerr, 2015).

Box 9.7 **Use of market-based instruments for stormwater run-off**

Many local authorities in France and Germany impose a stormwater tax on landowners to control stormwater run-off in urban areas. Unlike in rural areas where rainfall is absorbed into the ground, urban areas consist of expanses of impervious surfaces such as roads and car parks where water is unable to pass through. This causes stormwater to pick up pollutants such as chemicals and oils as it flows across these surfaces into the stormwater system, leading to in polluted rivers and streams. Taxes aim to incentivise improved management of urban stormwater and are based on the impervious land surface of a property.

The City of Dresden charges, on average, €1.04 per m^2 of impervious surface each year. Many French municipalities offer tax reductions between 20% and 100% if landowners create or improve their stormwater system to limit run-off. Additionally, the revenue collected in Germany helps to finance projects aimed at promoting re-use of stormwater for municipal use.

Source: OECD, 2010.

It is important that environmental regulators have access to a full range of policy tools. Yet ensuring that legislation provides access to tools is not enough. Central and local government need to work together to remove or mitigate obstacles to implementing market-based instruments. This includes removing or mitigating any misunderstanding and cultural resistance to the use of these instruments that stems from two common misconceptions (Review Group on the Resource Management Bill, 1991).

- The first misconception is that market-based instruments are simply a way for individuals to "buy their way out of" protecting the environment. The aim of market-based instruments is better environmental outcomes – the same as regulation. What differs is that market-based instruments use price mechanisms to create incentives for individuals to seek out efficient ways to achieve the desired outcome.
- The second misconception is that market-based instruments will not work because the government cannot precisely measure the level of spillovers generated. While it is true that a spillover is often difficult to measure, this is because of the nature of the spillover rather than the instrument selected to manage it. Nor does it follow that developing efficient market-based instruments requires more information than alternative policies (such as direct regulation). Indeed, market-based instruments can strengthen incentives to better understand the spillover in question.

Other obstacles that would need to be addressed include:

- the cost of collecting data on which to base taxes and charges;
- limited experience and capability in developing economic instruments;
- that market-based measures can be politically unpopular, given they can entail people paying to do things they previously enjoyed for free (or at a subsidised price); and
- potential distributional effects.

As steward of the planning system, central government has scope to do more to promote capability in the use of market mechanisms within the system. Chapter 13 looks at central government's stewardship role in more detail, while Chapter 14 addresses culture and capability within the planning system.

R9.7 When regulating urban spillovers affecting the natural environment, a future planning system should ensure regulators have access to the full range of instruments (including market-based tools).

Adaptive management practices

AM recognises that scientific understanding of complex natural systems is incomplete and that this uncertainty should not necessarily prevent projects from occurring (MfE, 2016l).

Under AM it is expected that management decisions will need adjusting as more information about the environmental impacts of a decision becomes available (ie, as the response becomes known).

AM can be contrasted to the "predict and control" approach typically used under the RMA. Under that Act, all applications for resource consent must include an assessment of the likely environmental effects of the proposal. Applicants must also include a description of how they will mitigate negative effects. Councils (or the Environment Court) then decide whether to grant the consent.

Difficulties applying a "predict and control" approach to complex environmental problems suggests that a future planning system should place greater emphasis on AM. This would require a recognition that planning decisions occur under uncertainty and that, in some instances, research, information gathering, and environmental management cannot be decoupled.

Cumulative effects are inherently unpredictable. Therefore, using AM can be a useful approach to managing these sorts of impacts on the natural environment. As Canter and Atkinson (2010) describe in their evaluation of AM for managing cumulative effects, a greater focus on learning by doing would see regulators regularly monitoring outcomes to determine if management actions are meeting outcomes. If outcomes are not met, regulators should facilitate management changes that will best ensure that outcomes are met or re-set the objectives.

AM is used for some other aspects of environmental regulation in New Zealand, including the regulation of the marine environment in New Zealand's exclusive economic zone (EEZ) and continental shelf (CS). Developers who seek a consent for an activity affecting the EER or CS can propose an AM approach to dealing with any uncertain impacts on the marine environment (Box 9.8).

Box 9.8 **Experience of adaptive management in regulating the marine environment**

The Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012 (EEZA) places an obligation on regulators to consider AM when assessing marine consent applications for activities in New Zealand's EEZ and CS. Under section 34(3) of the EEZA, where an activity is likely to be prohibited, "the Minister must first consider whether providing for an adaptive management approach would allow the activity to be classified as discretionary".

Yet the EEZA requires that the decision maker favours caution and environmental protection where the information available to the decision maker is uncertain or inadequate. In their consent application, an applicant can outline measures they will take to manage the uncertainty of the project. Such measures include monitoring, reviewing and varying the activity once the consent is granted. Decision makers then consider whether the measures are sufficient, whether further action is needed or the project should be refused consent.

Experience with the EEZA suggests there tension can emerge between the environmental benefits of AM and the investment uncertainty that may arise when AM is used. A common criticism from developers is that, in practice, AM has meant projects have been permitted to proceed in stages, and that this "staged approach" overlooks the fact that some projects require a minimum scale to be economically viable (MfE, 2016l).

For example, in 2014, proposals from Trans-Tasman Resources Ltd and Chatham Rock Phosphate Ltd to undertake seabed mining projects were declined. In both cases, the consent proposals included what the applicant considered to be AM provisions. However, the consents were refused on the basis that AM provisions did not adequately address the uncertainty surrounding the adverse effects of each project. Further, in both cases, the applicant rejected suggestions by the regulator to stage their projects, judging that a staged approach would make the project commercially unviable.

Source: MfE, 2016l.

The experience with the EEZA shows that staged approaches, with uncertainty about whether all stages can happen, may make a development unviable from the start. Additionally, the cost of analysing the potential

impact of proposed activities, and continually monitoring their effects along with the risk of having to adapt the project later, could mean that some acceptable projects become commercially unviable.

Wellington City Council raised this point in its submission:

> The Council sees the main obstacle to [an adaptive management] approach being the ongoing monitoring framework that will need to be implemented and the associated costs it brings. There is also the risk that, based on the level of sunk investment, changes to approved development to address issues of cumulative effects may simply be impractical or uneconomic. (sub. DR68, p. 15)

Even given the above, submissions to the inquiry indicate wide support for increasing the emphasis on AM (subs. DR68, DR73, DR86, DR111). For example, Water New Zealand submitted:

> Water NZ agrees that a greater emphasis on adaptive management may assist in managing cumulative effects. This is particularly the case, where as in Auckland, there have been numerous proposals for land use changes (including special housing areas) in a relatively short time frame, meaning there has not been enough time to develop accurate models to predict the effect of the changes.(sub. DR67, p. 8)

Similarly, the submission from Auckland Council notes:

> The council supports further investigation into the potential for using adaptive environmental management tools. Widening the environmental management toolkit and providing the discretion to use the best tool for each given situation or enabling a combination of approaches to be used would allow a more flexible and responsive approach, and enable the approach to be tailored to address complex local environmental issues (sub. DR86, p. 9)

When adaptive management is a possible mechanism

AM may be a better fit with market-based instruments for environmental management. For example, fishing quotas to regulate commercial fishing activities in New Zealand, use a QMS that sets catch limits for different fish stock to prevent overfishing. Allocations of fish stock are split into quota shares that commercial fisheries can freely buy and sell. The Ministry of Primary Industries (MPI) regularly monitors and reviews the quota allocations – in other words, makes adaptive changes based on information about outcomes – to ensure the long-term sustainability of fish stocks. MPI (2016) reports that most of the stocks that were overfished before the introduction of the QMS now have sustainable catch limits in place.

AM can also help to manage discharges into rivers, with permits or licenses allocated, adjusted or revoked according to updated information about water quality.

Where information can be collected, outcomes monitored, and limits or standards adjusted, AM is a useful way to deal with cumulative or uncertain effects.

R9.8 A future planning system should encourage the use of adaptive management for dealing with cumulative or uncertain effects, where information can be collected and outcomes monitored, and where limits or standards can be adjusted.

Support for the use of adaptive management

To support the wider use of AM, Water New Zealand noted in its submission that "there should be clear guidance about what AM is, and what it is not, as well as when it is appropriate for it to be used" (sub. DR67, p. 9). The Commission agrees with this suggestion and considers that central government is well suited to provide this kind of guidance. As well as comprehensive guidance, central government should also help councils to build the scientific base and analytic capability necessary to support AM.

In addition, institutional resistance to acknowledging the presence of uncertainty will need to be overcome to implement AM effectively, as will the risk-averse cultures of government bodies. Williams and Brown (2012) note:

> Learning organizations are critical in implementing adaptive management. For adaptive decision making, many organizations must make a transition from a more traditional "top down" organization structure to one that is more inclusive, collaborative, risk tolerant, and flexible ... However, an adaptive management approach must comply with statutory and regulatory requirements. (p. v)

Chapter 14 explores the issues of culture and capability within the planning system.

R9.9 To support the use of adaptive management, central government should produce comprehensive guidance on when and how the approach should be used, and provide councils with technical support to help build capacity within the planning system.

The implications of an adaptive management approach for the use of natural resources

Figure 9.1 describes limits for protecting and preserving ecosystems (last row of the figure). When new information reveals these limits are close to being breached, then action is needed to avert irreversible damage. The example given in Figure 9.1 is of the health of a lake depending on the flows of water into the lake from a river.

Where market-based instruments are in place – such as tradeable permits for water allocations – then these can be "bought back" by the regulator and taken out of circulation. In this way, owners of tradeable permits are compensated for the loss of the property right to take water from the river. Where allocations of water have been made without a tradeable property right, and these are enduring, then these permits may need to be revoked, with a resulting loss (if uncompensated) to the holder of the permit. Of course, if permits are time-limited, then there should be no expectation of a roll-over of arrangements under AM as new information would be expected to inform and potentially revise regulatory settings.

Holders of property rights carry the risks associated with AM approaches. Losses incurred by holders of property rights are balanced against the losses that current and future generations would suffer as a result of the irreversible degradation of ecosystems.

9.4 Climate change and urban planning

Climate change is arguably the greatest challenge to the livability of New Zealand's urban environment. In its Fifth Assessment Report, the International Panel on Climate Change (2014) noted:

> Anthropogenic greenhouse gas emissions have increased since the pre-industrial era, driven largely by economic and population growth, and are now higher than ever … Their effects, together with those of other anthropogenic drivers, have been detected throughout the climate system and are extremely likely to have been the dominant cause of the observed warming since the mid-20th century. (p. 4)

Policy responses to climate change are commonly grouped into two broad areas – adaptation and mitigation. Adaptation policies aim to help communities and ecosystems cope with actual or expected changes in climate conditions. Mitigation polices aim to reduce GHG emissions and enhance carbon sinks.

Several inquiry participants raised questions around the role that a future urban planning system should play in adapting to and mitigating climate change (eg, sub. 3, sub. 7, sub. 9, sub. 20, sub. 21 and sub. 32).

A full discussion about adapting to and mitigating climate change is beyond the scope of this inquiry. The comments the Commission makes about the role that urban planning should play in addressing climate change in this section draws on the features of a desirable planning system discussed elsewhere in the chapter, and in other parts of the report. These include:

- the need for regular, accurate and detailed information flows;
- access to a full set of instruments, including market-based tools to manage spillovers;
- appropriate allocation of regulatory roles between central and local government (Chapter 3);
- use of adaptive approaches such as Real Options Analysis to deal with uncertainty (Chapter 10); and
- use of regulation where this is reasonably considered as the most efficient and effective way to achieve the purposes of the legislation (Chapter 13).

The challenge of adapting to and mitigating climate change provides an illustration of how the Commission's recommended planning system would manage the interrelationship between the built environment and the natural environment.

Adaptation – managing effects

In undertaking their responsibilities under the RMA, councils are required to have particular regard to the effects of climate change (s. 7). In addition, the New Zealand Coastal Policy Statement 2010 includes requirements for councils to manage the potential effects of climate change. For example:

- Policy 4 requires councils to provide for integrated management of natural and physical resources in the coastal environment, particularly where "development or land management practices may be affected by physical changes to the coastal environment…including as a result of climate change" (p. 13);
- when considering the form and design of reclamation, Policy 10 requires councils to have "particular regard" to "the potential effects on the site of climate change, including sea level rise, over no less than 100 years" (p. 15); and
- Policy 24 requires councils to "[i]dentify areas in the coastal environment that are potentially affected by coastal hazards..." having regard (among other issues) to the effects of climate change on coastal sediment dynamics and storm frequency, intensity and surges (Department of Conservation, 2010, p. 23).[83]

Generally speaking, communities are able to cope with climate variability within a given range. Outside this range they are vulnerable to loss and damage. For example, insufficient rain may cause water shortages; too much rain may cause harm from flooding.

The necessity to adapt to climate change arises after assessing what extreme (rather than average) events are likely in a region. In some respects, the strategies to adapt to climate change are well-known to councils. As Füssel (2007) notes:

> [M]ost activities considered in adaptation to climate change are not new... Adaptation includes well established practices from disaster risk management (e.g. early-warning systems), coastal management (e.g. structural protection), resource management (e.g. water rights allocation), spatial planning (e.g. flood zone protection), urban planning (e.g. building codes), public health (e.g. disease surveillance), and agricultural outreach (e.g. seasonal forecasts). (p. 268)

Yet several aspects of climate change adaptation are new. For example, climate change may result in new types of hazards that were previously absent or extremely rare (UNDP, 2010). Further, traditional assessment approaches for dealing with natural hazards and water-resource management are not well suited to a complex and dynamically evolving hazard such as climate change (Füssel, 2007).

The Parliamentary Commissioner for the Environment (PCE, 2015) has noted that, in coming years, rainfall, wind and storm patterns will alter in response to climate change. The PCE also noted that sea-level rise is projected to increase the frequency, duration and extent of coastal flooding (Box 9.9). Factors affecting the vulnerability of coastal areas to flooding include low land elevation, the presence or absence of natural and built defences (eg, sand dunes, built sea walls, and tidal barriers), and the design and capacity of stormwater pipes.

Box 9.9 **Projected impacts of climate change**

- **Rainfall:** The distribution and intensity of rainfall across New Zealand is predicted to change, with more rain expected in the west of both islands and in the south of the South Island. Northland and eastern regions are projected to get drier and downpours are projected to become more extreme – raising the risk of river flooding.

[83] See also Policy 3 (precautionary approach), Policy 3 (integration), Policy 18 (public open space) and Policy 27 (strategies for protecting significant existing development from coastal hazard risk).

- **Wind:** Changing circulation patterns in the atmosphere are projected to result in more intense and prolonged westerly winds – particularly in winter. This will increase the power of waves, leading to an increased risk of storm surges.[84]
- **Storms:** Warmer atmospheric temperatures are projected to alter storm patterns. Winter cyclones formed south of New Zealand will become more intense, resulting in stronger winds and larger waves hitting coastal areas exposed to the south. The intensity of cyclones elsewhere in New Zealand is projected to decrease.

Source: PCE, 2015.

In addition to flooding occurring more regularly, rising sea levels are projected to increase coastal erosion[85] and salt water intrusion into groundwater tables. The risk of these problems will depend on the characteristics of each local area and on the ability of that area to adapt to new climatic conditions (Scheraga & Grambsch,1998).

A future planning system will need to recognise the risk and impact of climate change. Yet, adapting to a changing climate will take more than simply strengthening planning legislation. Rather, action is required at different points in the planning system (Box 9.10).

Box 9.10 **Actions to adapt to climate change**

- **Disseminating the best-available science based on standardised data and assumptions.** Scientific analysis is crucial to understanding climate change risks, impacts and vulnerabilities. While local adaptation strategies will vary, the science underpinning the strategies should be developed from a common scientific base. This means, for example, developing nationally consistent approaches to collecting land elevation data and nationally consistent approaches to modelling sea-level projections.
- **Raising community awareness of the potential impacts of climate change and creating avenues through which the community can express their views on how risks are managed.** Climate change adaptation is a technical and complex subject. Central and local government need to focus on lifting community understanding of the science underpinning policy options, and the relative costs, benefits and risks of alternative courses of action.
- **Central and local government need to weigh up the cost and benefits of adaptation options alongside other social goals and priorities.** This includes assessing not only the fiscal cost of plans, but also the non-climate related side-effects of strategies (eg, the potential impact of sea walls on marine ecosystems).
- **Collaboration and coordination at the national, regional and local level.** While local areas will bear the brunt of some impacts of climate change (such as coastal erosion), other impacts may have national implications (such as changing rainfall patterns). Effective adaptation planning requires vertical collaboration between levels of government, and horizontal collaboration across government agencies and councils.
- **Monitoring the performance of adaptation actions and modifying them in response to new information or technology.** Climate change science and adaptation technologies are evolving rapidly. As a result, what constitutes best available science today is unlikely to be so in five years. Further, while much is known about how local ecological systems function, there is still much to learn; unexpected responses in the natural environment are likely. This points to the need for

[84] Storm surges occur when high winds and low air pressure combine to create a bulge in the sea that is driven onto the coast (PCE, 2015).

[85] Due to larger, more intense waves hitting the shoreline.

adaptation actions that respond responsive to new information and new technology as they become available.

- **Dealing with environmental uncertainty.** Uncertainty about the effects of climate change makes it very hard to decide how best to adapt now to future conditions. For instance, continuing rising sea levels may later mean investing in and building some form of sea wall. It is vital to consider this uncertainty and build flexibility into investment decision making when developing and analysing options for adaptation.

Sources: Scheraga & Grambsch, 1998; Füssel & Klein, 2004; UNDP, 2010; The United States Environmental Protection Agency, 2014; PCE, 2015.

All of these actions have been discussed as features of a desirable regulatory system for managing the impact of the built environment on the natural environment, in the course of this chapter.

It is also important to recognise that, in a complex social system, individuals will also adapt to climate change. People decide where they wish to buy property, and insurance companies decide what cover they will offer, and what premiums they will charge, for climate-related damage. Central and local government actions and policies to adapt to climate change will influence these decisions. For example, a council's decision to build a sea wall will influence the value of coastal properties, and individuals' decisions about whether to buy coastal property.

Mitigation – reducing greenhouse gas emissions

As part of the international response to climate change, central government has set an unconditional target of reducing New Zealand's emissions by 5% below 1990 levels by 2020.

The 2004 Amendments to the RMA introduced provisions prohibiting consent authorities from considering GHG emissions when making rules to control discharges in air, and when considering an application for discharge permits (sub. 7). Accordingly, responsibility for mitigation policies effectively rests with central government (Chapter 6).

Some submitters argue this decision should be reversed and councils given the mandate to control GHG emissions. For example, Sir Geoffrey Palmer and Dr Roger Blakeley submit:

> The Commission should be recommending amendment to the Resource Management Act 1991 to allow local government to properly deal with climate change factors when making environmental decisions. Cities and urban areas are estimated to account for 80% of New Zealand's greenhouse gases (sub. 122, p. 16).

However, there are strong arguments for formulating regulatory policy and standards for transboundary pollutants (such as GHG emissions) at the national level.

- The impacts of GHG emissions are felt on a global scale and over a long period of time. Because the beneficiaries of emissions reductions lie outside local boundaries, local authorities would face few incentives to set standards that reflected the national (or global) interest – particularly when doing so conflicted with the interests of their constituents.
- Local variability in emissions standards is unlikely to be efficient and may simply result in emissions-creating entities moving from local areas with strict emissions standards to areas with more lenient standards.
- As a general principle, policymaking responsibility should be allocated to the level of government where the electorate has the most interest (and ability) to hold politicians accountable for regulatory outcomes (Chapter 3). In the case of GHG emissions, effective accountability is more likely when policies and

> standards are set at the national level. This is because central government is accountable for New Zealand's compliance with its international climate-change obligations.[86]

The submission from the Property Council notes:

> [C]ontrolling GHG emission in one part of New Zealand will have no effect on climate change, if another part of New Zealand raises its GHG emissions by the same amount. The only fair and practical way to ensure national emissions go down is to manage it at a national level. (sub. DR118, p. 11)

Horticulture New Zealand submitted:

> There is clearly a link between urban planning and GHG emissions. However Horticulture New Zealand would not want to see GHG emissions targets be addressed through regional and district planning regimes. This is a national issue and therefore should be addressed at a national level as there is potential for inconsistencies in addressing the issue at a regional or district level. (sub. DR73, p. 11)

The Commission can see no strong rationale for giving local government primary responsibility for setting climate-change mitigation policies and standards. That said, local government may be an important conduit for mitigation action at a national level. This being the case, an NPS or NES would be the appropriate mechanism for promoting a nationally consistent approach to mitigation.

F9.6 The rationale for giving local government primary responsibility for setting climate change mitigation policies and standards is limited. Should central government decide a role for planning in climate change mitigation is needed, this role is best articulated through the use of a National Policy Statement and/or a National Environmental Standard.

Clearly, New Zealand needs to reduce its transport-related GHG emissions to meet its international commitments. The crucial question is: what is the most cost-effective combination of policies to achieve this objective? And, where does urban planning sit in this combination of policies?

Relevant considerations are:

- the potential magnitude of GHG reductions through urban planning policies;
- the cost of reducing emissions through urban planning policies relative to other policy measures; and
- how the costs of reducing emissions through planning policies are distributed throughout society.

The likelihood of urban planning being used to reduce emissions

The Commission's survey of councils suggests that most councils (60%) feel the planning system can have only a minor influence on reducing GHG emissions. A further 19% thought the planning system can have no influence on reducing emissions. Conversely, 19% also said that the planning system could be used to have a moderate (17%) or major (2%) impact on reducing emissions.

The main problem appears to be the degree of stasis in urban planning. Changes in urban form take decades to change the urban landscape (Chapter 2). Even so, the Sustainable Cities submission (sub. DR-82) believes that, based on available international and domestic evidence, urban form is "a useful planning domain through which urban emission reductions can be achieved over time" (p. 7).

However, as outlined in Chapter 4, policies that attempt to achieve a more compact urban form can also have unintended social costs. For instance, urban limits put in place to contain development within city limits create an artificial constraint on land supply, leading to less affordable house prices.

[86] A summary of the principles for allocating regulatory roles is provided in Figure 3.1.

The cost-effectiveness of different approaches for reducing emissions, and the role of technology

Studies on urban GHG emissions typically centre on the link between urban form and transportation – or more specifically, the relationship between urban density, vehicle miles (kilometres) travelled and GHG emissions per capita. Ewing et al. (2010) note:

> For decades, it has been known that compact areas have lower automobile use per capita and greater use of alternative modes of transport than do sprawling areas. They also tend to generate shorter trips. The combined effect is significantly less VMT [vehicle miles travelled]. (p. 20)

Numerous studies support this view. Ewing et al. (2015) assert close to 150 empirical studies ("conducted with rigour", p. 21) have investigated the relationship between urban development patterns and individual and household travel.

As for New Zealand research, Sir Geoffrey Palmer and Dr Roger Blakeley submit:

> The evidence from transport modelling for the Auckland Plan showed unequivocally that private vehicle use was significantly greater in more dispersed urban form options. Similarly, Australian studies have shown significantly greater transport costs and greenhouse gas emissions of dispersed urban form. (sub. DR122, p. 15)

Yet few of these studies indicate the relative cost-effectiveness of reducing emissions through promoting urban density as opposed to other policies that alter transport use. For example, market mechanisms – including taxes on petrol and subsidies for public transport – can be effective in reducing emissions from the use of private vehicles. It will be important for government to consider the relative effectiveness of policies to reduce GHG emissions in New Zealand.

Transport technology also influences the relationship between vehicle travel and GHG emissions. Infrastructure New Zealand submitted:

> The Commission identifies a list of "other factors" (including local demographics, income levels, land use mix and layout of streets) which impact carbon emissions, but the most significant – and not one which land use planners are necessarily in a strong position to understand – is transport technology.
>
> All available evidence today strongly indicates that electric vehicle prices are reducing, and will continue to reduce, as technology becomes cheaper. …With the decline of conventional engines, the basis for urban planning to manage down private vehicle use is greatly reduced, yet we have seen very little evidence that shifting energy trends are reflected in planning provisions. (sub. DR103, pp. 9–10)

Similarly, the Institute of Professional Engineers New Zealand submitted:

> Technology is constantly developing and changing the way we live. We believe technology may in some cases change the way in which we live, work and do business. For example, the uptake of autonomous or semi-autonomous vehicles could result in reduced congestion, reduced demand for parking spaces and lower noise and emissions levels, all of which will need to be considered in urban design. The rapid pace of change in ICT means that we are now more connected and working remotely, such as from homes, is a viable option for many industries. (sub. DR58, p. 3)

Distributional and equity considerations

Local demographics, the availability of public transport and income levels also have a significant impact on travel behaviour and GHG emissions. It will be important to also consider the distributional (equity) impacts of alternative ways to reduce GHG emissions in New Zealand.

F9.7 Achieving greenhouse-gas (GHG) reductions through policies that change urban form takes a long time. Other policy measures are likely to be more effective and less costly in reducing emissions to meet New Zealand's emissions reduction targets. It will be important for government to consider the relative effectiveness and the distributional (equity) impacts of alternative ways to reduce GHG emissions in New Zealand.

9.5 Conclusion

This chapter suggests the need for a new system for managing the impact of the built environment on the natural environment. Regulation that applies a traditional "predict and control" approach cannot deal with unpredictability and non-linearity of impacts and effects on the environment. Regulators are hampered – their view is partial and their influence over other agents may be weak. Other tools that provide incentives for polluters to change their behaviour, or to innovate to lessen effects on the environment, may be more effective in achieving environmental outcomes. Where regulation is warranted, AM practices (and structures that support AM) can allow regulators to make decisions in the face of incomplete information and they can make further decisions as more information comes to hand. In any event, much more can be done to gather information, and use it to monitor outcomes.

This chapter has also highlighted the need for a clear set of limits and standards within which development can occur, to ensure the integrity of natural systems, maintain standards of environmental quality for human health, and recognise community preferences (including Māori interests). Above these limits and standards, and within the rules for the built environment, developments should be able to proceed with minimal oversight. If developments breach community standards for the natural environment, then decision makers should balance the benefits of development against the impacts on the natural environment. Clear legislative objectives and principles for the natural and built environments will help to guide decision making. These objectives and principles form the basis for a new statutory framework outlined in Chapter 13.

10 Urban planning and infrastructure

Key points

- Planning, building and operating essential urban infrastructure is one of the three main rationales for governments to undertake urban planning. This task is challenging, particularly because of the contrast between the unpredictable and dynamic nature of city growth and the long-lived, lumpy, place-specific, inflexible, expensive- and irreversible nature of infrastructure assets.
- Urban planning systems that effectively support the growth and evolution of successful cities:
  - ensure a sufficient supply of development capacity to meet demand;
  - appropriately align land-use rules with the supply of infrastructure (and vice versa); and
  - ensure the mobility of people and freight to and through cities (through a full suite of "city-shaping", structural and follower infrastructure).
- New Zealand's current planning system has struggled with all three tasks. Reasons include:
  - legislative arrangements that do not encourage integrated decisions;
  - institutional and governance arrangements for water services that discourage responsiveness; and
  - the absence of formal mechanisms to resolve debates over large city-shaping infrastructure.
- Many of the features proposed for a future planning system elsewhere in this inquiry will help to resolve these problems – particularly greater use of price signals, and changes to the ways in which planning and land-use regulation is done.
- In addition to these changes, the supply of infrastructure in future could be improved by:
  - making spatial planning a formal part of the planning hierarchy, to help provide a high-level overview and direction, and greater collaboration, consistency and certainty over future development; and
  - making greater use of analytical planning tools which reflect uncertainty and retain flexibility, such as real-options analysis.
- Despite weaknesses in existing institutional and governance arrangements, the Commission sees no merit in proposing large-scale structural reforms for water services, because of the fragmented and small-scale nature of water networks in New Zealand, the uncertain net benefits of mergers, and the high costs of setting up alternative institutions.
- Water services could improve through more modest actions, such as clarifying statutory frameworks, performance benchmarking, allowing councils to undertake franchising and other innovative forms of delivery, and greater use of variable pricing for water.

The need to plan, fund, build and operate urban infrastructure is one of the three main rationales for governments to undertake urban planning (Chapter 3). Transport and water infrastructure, which are both largely provided by local governments in New Zealand, are important components of urban development and growth. Other types of infrastructure, including many forms of social infrastructure, matter for the wellbeing of city residents. Supply of infrastructure services is essential for an effective supply of land for housing, for a multitude of business and private services within cities, and for a well-functioning urban labour market. In addition, the better the transport and other links between urban centres within a region, the more these centres will be able to operate as a productivity-enhancing system.

This chapter:

- describes urban infrastructure and why it is important for cities;
- examines issues with the current planning and supply of infrastructure;
- argues that the problems facing the current planning system are the result of statutory and institutional barriers to greater integration and better coordination, political and cultural barriers, funding and financial barriers, and analytical barriers; and
- points to legislative, institutional and planning practice changes that would address these barriers to more responsive supply of infrastructure in urban development.

Chapter 11 discusses funding and financial barriers to the effective and efficient provision of infrastructure, and desirable solutions to these barriers in a future planning system.

10.1 What is infrastructure and why is it important for urban growth?

Urban infrastructure comprises essential facilities, services, and social structures for cities and communities. In Latin *infra* means *below*, and some forms of infrastructure are literally underground (such as water and natural gas supply systems). The 2011 National Infrastructure Plan defines infrastructure as "the fixed, long-lived structures that facilitate the production of goods and services and underpin many aspects of quality of life" (National Infrastructure Unit, 2011, p. 1).

Urban infrastructure includes:

- transport – rail, ports, airports, highways, roads, footpaths and cycleways, and public transport;
- water – water supply (also referred to as "potable water"), collection and treatment of wastewater, and the removal of stormwater (collectively the "three waters");
- energy – electricity and natural gas production, transmission and distribution;
- telecommunications – fixed line, mobile and internet; and
- social and community infrastructure – eg, public recreation spaces, reserves, libraries, schools and hospitals.

Typology of infrastructure assets

Infrastructure assets vary in their roles. At a high level, there are three main categories of infrastructure assets.

- Strategic or "city-shaping" infrastructure is a relatively limited set of mainly transport-related infrastructure (eg, highways or metro rail) that can fundamentally change the accessibility of urban areas. It achieves this by driving the location decisions of households and firms, facilitating agglomeration and improving productivity.

- Structural infrastructure is "trunk" infrastructure that provides the skeletal framework for urban development. These infrastructure assets include main roads, the "three waters" as well as social infrastructure. They underpin the economic adaptability and viability of urban areas.
- Follower infrastructure is infrastructure assets that provide services into a suburb or neighbourhood once investment in city-shaping and structural infrastructure assets has enabled the development of these areas. The purpose of this type of infrastructure is to service the evolving pattern of urban development. Examples include suburban streets, lighting, parks and community facilities (SGS Economics and Planning, 2014, p. 15).

Why is infrastructure important for well-functioning cities?

Infrastructure assets are not ends in themselves. Their usefulness comes from the services the assets provide. Improvements in infrastructure offer opportunities not only to improve productivity within the economy, but also to achieve social objectives such as public health. Donaghy (2011) highlights the importance of infrastructure to well-functioning cities. Wellman and Spiller (2012) make similar comments.

> [C]ities would be inconceivable without infrastructure systems. Streets, bridges, harbour facilities, transit systems, water and sewer systems … systems of electrical power generation and distribution, and communications systems are what make safe, sanitary, and productive urban living possible. (Donaghy, 2011, p. 81)

> Efficient, effective urban infrastructure does not lead in itself to competitive, innovative cities, but the lack of it would strongly impede their development and sustainability. Through infrastructure's enabling function, complex, dynamic cities come alive. (Wellman & Spiller, 2012, p. 1)

Effective transport infrastructure is an essential component in improving business efficiency, innovation, competition and trade, and facilitating a mobile, connected and flexible labour force.

Infrastructure can be a serious bottleneck in the supply of residential, commercial or industrial development capacity if its delivery is poorly timed or located. Infrastructure provision is therefore a key pathway through which councils are able either to facilitate or hamper development. Local Government New Zealand (LGNZ) emphasises that lack of infrastructure can limit urban growth:

> In essence, the availability/future provision of infrastructure is a de facto urban limit … ultimately, the land is not 'shovel ready' until main trunk infrastructure has been extended to a point at which it becomes economical for a developer to meet the cost of connecting. (LGNZ, *Using land for housing*, sub. DR 54, p. 9)

Yet providing infrastructure for new land development is an expensive undertaking for councils and can be risky. Councils that install new infrastructure ahead of demand may find themselves facing high borrowing and depreciation costs, particularly if growth is slower than anticipated.

Given that infrastructure plays such a critical part in land and housing supply chains, and in the effective functioning of urban labour markets, the arrangements through which planning and delivery of infrastructure take place are essential elements of an urban planning and development system.

Important characteristics of infrastructure assets

Urban infrastructure assets have certain economic characteristics that influence their planning and delivery. Seven of them are noted below.

- *Highly capital intensive and typically last for a long time (more than 50 years in some cases)*

  Infrastructure assets such as water and wastewater transmission pipelines, wastewater treatment plants and roads typically are expensive and have long lives. They tend to be built with spare capacity based on long-term forecasts, with significant risks if the demand for the infrastructure over that period is uncertain. For some infrastructure assets the "payback" period is long because the returns on investment are relatively low in the initial years and rise only in later years. This is common in telecommunications, for example, where returns to investment in new technology depend on the rate at which consumers adopt the new technology.

- *Valued for the services they deliver*

  Infrastructure assets are valuable to households, communities and businesses, not in themselves but for the stream of essential and other services they deliver. Some infrastructure assets are specific to a particular service (such as a gas network), while others provide a platform for multiple services (such as roads and, increasingly, the internet).

- *Subject to economies of scale and scope*

  Infrastructure assets often exhibit economies of scale. For example, in the case of pipelines, as diameters increase, construction and installation costs increase less than proportionately, while the carrying capacity increases exponentially. The marginal costs of additional use (eg, running more water through a pipe) are very low until capacity is reached. Then the costs rise sharply, because capacity can usually only be added in large increments. Strong complementarities exist across different infrastructure services for both consumers (eg, residences and businesses need a package of services) and infrastructure providers (eg, roads are natural corridors for pipes and wires). These generate economies of scope and the need for coordination.

- *Often part of a wider network*

  Many infrastructure assets have a network structure. In some cases, for example in communications networks, one person's decision to join a network can make the network more valuable to other current or future users. However, once congestion occurs adding an extra user can be to the detriment of existing users. For example, a motorist choosing to use a congested motorway can increase the travel times of other travellers. If individual users do not bear these incremental costs, the result is traffic congestion for all users.

- *Place specific and inflexible*

  The demand for most infrastructure assets and related services is located at a specific place, and the infrastructure must physically exist at that place to service the demand. In addition, as part of a network, infrastructure in a specific place cannot exist in isolated pockets – it must connect to the rest of the network. Roads that do not connect are of little value. This can have major implications for land requirements and use. Also, the level of demand for infrastructure can vary significantly at different places and times due to the preferences of local residents and the pattern of business activity. But once infrastructure supply is committed to, the capital is largely sunk and difficult to retrieve.

- *Highly dependent on past infrastructure investment*

  Urban infrastructure has a high degree of path-dependency in its development. Past infrastructure investment can either enhance or reduce the efficiency and effectiveness of future infrastructure development. For example, the costs of providing water to a new housing area will be much higher if the bulk-water transmission pipeline to existing areas is fully used. Wellman and Spiller (2012) note that the "longevity and essentially path-determining nature of urban infrastructure investment influences urban development patterns and cost structures for decades" (p. 2).

- *May require some public sector funding*

  Given the features of infrastructure assets outlined above, markets and private providers cannot always be relied on to deliver an adequate supply of infrastructure assets and services. For some infrastructure assets, such as local roads, it is technically difficult or costly to charge for use and to restrict access only to those who pay. Private businesses will not provide infrastructure without sufficient revenue to cover costs. Even if it is feasible to charge users, marginal costs can be lower than average costs, creating a conflict between efficient pricing and recovering total costs. Also, major infrastructure investments are likely to involve higher risks than the typical business investment project. All this means that public funding is common for some forms of infrastructure. It also means deciding who should bear the costs of infrastructure. Views about what is an equitable allocation of costs can vary.

F10.1

Infrastructure assets:

- are expensive and long-lived;
- are lumpy;
- are highly place specific and inflexible;
- are irreversible;
- are typically part of a network;
- often need to be coordinated; and
- may require public funding.

Providers of infrastructure are exposed to risks, including that demand may be less than expected leading to underuse and possible stranding of assets. This puts a premium on effective planning, procurement, funding, managing and monitoring of infrastructure assets.

10.2 Current issues with the provision and planning of infrastructure

Urban planning systems that effectively support the growth and evolution of successful cities:

- ensure a sufficient supply of development capacity to meet demand;
- appropriately align land use rules with the supply of infrastructure (and vice versa); and
- ensure the mobility of people and freight to and through cities (through a full suite of "city-shaping", structural and follower infrastructure).

The current planning system has struggled to deliver these.

Insufficiently responsive supply

Infrastructure supply and, by association, development capacity have struggled to keep pace with demand in New Zealand's faster-growing cities. The effects of this lack of responsiveness are seen in the rapidly rising urban land prices discussed in Chapters 6 and 8. During its *Using Land for Housing* inquiry, the Commission heard from a number of developers whose ability to deliver housing in a timely manner was constrained by the supply of infrastructure or uncertainty about the adequacy of existing networks:

> TGH's [Tainui Group Holdings] experience working with the infrastructure component of the land supply system has not been positive. Typically, the HCC [Hamilton City Council] will zone areas of land for development, but the planning and delivery of infrastructure does not follow in a timely and coordinated manner. For example, stage one of TGH's Rotokauri development needs Three Waters infrastructure. HCC has expanded the stage one land area without making any additional investment in the Three Waters infrastructure necessary to service that additional land area. (Tainui Group Holdings Ltd, *Using land for housing*, sub. 53, pp. 2–3)

> One of the major barriers to housing development in the sub-region is the ability to fund and deliver network infrastructure. Without infrastructure delivery, the residential development sector will be unable to service the anticipated population growth. (Property Council New Zealand, *Using land for housing*. sub. 33, Annex 7B, p. 1)

> It is the inability of Councils to fund infrastructure [that] is the most important aspect of increasing land supply. (Carrus Corporation, *Using land for housing*, sub. DR 78, p. 2)

Evidence presented to the Auckland Independent Hearings Panel (IHP) cited wastewater and transport systems that are at capacity and constraining development. For example, the need to wait for additional wastewater capacity is holding up development in the Dairy Flat, Orewa, Silverdale and Wainui areas. These areas have about 3 203 hectares of future-urban-zone land that could provide 36 095 dwellings and 128 hectares of business land (Auckland Council, 2015c, p. 11; various statements of evidence before the Auckland IHP).

Misaligned land use rules and infrastructure investments

Infrastructure supply is unresponsive commonly because land use rules and infrastructure planning are not well aligned. As noted, infrastructure is not always in place to support zoning provisions. Sometimes it can be the other way around: opportunities provided by the availability of infrastructure go unexploited.

- The New Zealand Council for Infrastructure Development (NZCID, 2016a) noted that the land use controls in the Proposed Auckland Unitary Plan (PAUP) failed to maximise the development potential in areas served by the inner-city rail network[87]:

  > [S]ignificant land use change around the majority of stations on the isthmus – the area where demand for land is highest and where most growth under a compact model should in theory be accommodated – is not permitted under the Unitary Plan. The type of development activities which would benefit from access to rail, such as residential apartments and town houses, are only substantively permitted around 11 of the 24 stations on the isthmus (indicated in green). Development change is generally prohibited around 6 of the stations (indicated in red) and a further 7 permit some degree of change (indicated by orange circles). (p. 45)

  Conversely, development would be permitted in other parts of the city not well-served by public transport:

  > Somewhat surprisingly, heavy growth is permitted along the Pakuranga Highway corridor which is unserviced by the busway. Highland Park town centre could see development of up to six storeys despite the fact that congestion into and out of the area is already an issue and no significant public transport improvements are planned. (NZCID, 2016a, p. 47)

- In Tauranga's east, land rezoned for housing has not been supported by access to nearby roads (Box 10.1).

Box 10.1 **Construction standards for the Papamoa East interchange**

Tauranga City Council (TCC) rezoned more than 300 hectares of land for residential, industrial and commercial development in Papamoa East. The land is bordered on the south by the Eastern Link motorway – a $455 million highway completed in August 2015.

To unlock large areas of land for housing in Papamoa East, a new interchange is needed to connect with the Eastern Link motorway. The construction standard for this proposed interchange epitomises the competing interests that can emerge between the New Zealand Transport Agency (NZTA) and local governments.

From the NZTA's perspective, the primary objectives for the Eastern Link motorway are:

- safer and easier travel;
- reduced travel times between Tauranga and Paengaroa;
- more efficient connections for business, industry and tourism; and

[87] The Auckland IHP recommended rectifying this deficiency in the PAUP of not allowing appropriately greater residential density around transport nodes. The revised plan should: "Enable the centres and corridors strategy in line with the development strategy envisaged in the Auckland Plan. This involves significant rezoning with increased residential intensification around centres and transport nodes, and along transport corridors ..." (Auckland Unitary Plan IHP, 2016c, p 47.)

- supporting regional employment and economic growth (NZTA, 2015a).

To protect the savings in travel time and the safety of the motorway, the NZTA requires that the Papamoa East interchange is built to a high standard (grade separated) at an estimated cost of between $20 million and $25 million.

In contrast, TCC suggested that a lower-specified interchange (ie, a roundabout) could be built at significantly lower cost and that the standards set by the NZTA are unnecessarily high:

> TCC faces … the financial consequences of what we believe are unnecessarily high levels of service sought by [the] NZTA for much of the State Highway network in and around Tauranga. We don't believe that these levels are sustainable or affordable… The outcome of these types of levels of service include things like having to build grade separated interchanges to connect local roads to the State Highway network at a cost of 2 to 3 times more than a roundabout would cost. (NZPC, 2015a, sub. 47, pp. 21–22)

In February 2017, TCC reported to the Commission that they are continuing to work through the issue with the NZTA, including potential cost-sharing arrangements and the intensity of nearby development.

Source: NZPC, 2015a; pers. comm., n.d.

Impaired mobility of residents and freight

Cities cannot function well without transport infrastructure that enables the mobility of residents and freight to and through them. Large effective labour markets lie at the heart of the economic success of cities. Yet local authorities have limited tools available to support city-shaping infrastructure. This type of infrastructure can play an essential role in enabling mobility in cities (eg, renewing and expanding rail in Auckland), opening up new development opportunities (eg, as the Auckland Harbour Bridge opened up the potential for the city to grow north) or reinvigorating development and economic activity within established areas (eg, Melbourne's underground rail loop, as discussed in Box 10.2).

Box 10.2 **Melbourne's underground rail loop**

Legislation to build an Underground Rail Loop (the Loop) was introduced into the Victorian Legislative Council in November 1970 and the Loop was progressively opened between 1981 and 1985. Melbourne had developed a radial train network, which radiated out from two stations in the Central Business District (CBD). Projections suggested that by 1985 these two stations would be unable to handle the expected number of passengers at morning peak time. The Loop expanded the capacity of the system by adding 12 kilometres of tunnels and 4 stations to the network. Among other things, this eliminated the need for train reversing and provided access to new and existing city stations from as many lines as possible.

One purpose of the Loop was to enhance accessibility within central Melbourne. Before the Loop, development had continued to occur beyond a convenient walking distance of the existing railway stations. Stimulating public transport use was expected to expand the city's capacity to absorb employment, residential and educational growth, so as to improve its global competitiveness.

Several key land-use developments contributed to the Loop's success and to the growth of central Melbourne:

- the relocation of rail stabling yards enabled land on the edge of the CBD precinct to be redeveloped;
- almost the entire city block above the Melbourne Central loop station was redeveloped (funded partly by the sale of development rights to the air space above the station: see Chapter 12); and

- the northern end of the CBD was transformed, with the growth of the City North education precinct.

The City of Melbourne changed its planning scheme in the mid-1980s, increasing plot ratios, parking provisions and sewerage works, to stimulate development specifically around the new Loop railway stations and the northern CBD. This encouraged development and use that supported the significant investment in the Loop.

Source: Fitzgerald, 2016; Metropolitan Transport Authority, n.d.; Rawnsley, Davies, Szafraniec, Ratnam, 2014.

City-shaping projects tend to be very expensive, and arguably beyond the reach of most urban local authorities. They may also have wider spillover benefits, such as the faster movement of people, goods and services through and to urban areas. For Auckland, the lack of clear mechanisms within the planning system to identify such projects and fund them has led to several years of jockeying between local and central government over the size, nature and funding responsibilities of large-scale land transport packages (section 10.6).

Mobility also depends on structural and follower infrastructure. Kelly and Donegan (2015) cite cases of residents in Melbourne's outer suburbs who face prohibitive travelling distances to employment in the inner city because of congested roads and lack of public transport infrastructure and services. Box 2.3 describes the woes of employees of an Auckland firm in travelling to and from work and to meetings. This problem not only damages the city's labour market; it also risks causing deeper social and economic disadvantage and exclusion for poorer and less-skilled households.

F10.2 The current infrastructure planning and provision systems are insufficiently responsive to demand pressures, do not always align infrastructure supply and land-use rules, and lack tools for the provision of city-shaping assets that underpin the mobility of people and freight.

10.3 What is causing these problems?

The problems of inadequate responsiveness and supply, misaligned regulation and infrastructure investment, and a lack of support for city-shaping projects can be attributed to four main causes.

- **Statutory and institutional barriers:** These barriers arise from differences in objectives, responsibilities and processes, and from different agencies being responsible for different aspects of land use and infrastructure planning. Legislation that is fragmented rather than integrated is often the underlying cause of these kinds of barriers.
- **Political and cultural barriers:** These barriers arise from opposition to certain policy approaches and to development more broadly. For example, as discussed in Chapter 11, existing residents of a city may feel threatened by newcomers, particularly if they are concerned that they will bear the cost of the infrastructure required to service those newcomers. These kinds of tensions can undermine attempts for citywide integration of infrastructure and land-use planning.
- **Funding and financial barriers:** These barriers arise from authorities with planning and infrastructure responsibilities facing budget constraints or limitations on the flexibility in how they can collect or use revenue needed for integrated development. These barriers are discussed in Chapter 11.
- **Analytical barriers:** These barriers are sometimes caused by fragmented organisational arrangements, and sometimes by weaknesses in analytical tools, or in the methods or skills needed to undertake cross-discipline analysis.

This chapter deals primarily with statutory/institutional barriers and analytical barriers, and policy responses. Chapter 11 discusses financial barriers, while Chapters 8 and 14 discuss political and cultural barriers.

Legislative arrangements do not encourage integrated decisions

In its *Using Land for Housing* inquiry, the Commission found that the three planning Acts – the Resource Management Act 1991 (RMA), Land Transport Management Act 2003 (LTMA) and Local Government Act 2002 (LGA) – create an overly complex web of regulatory, investment and funding processes. Interaction occurs at a number of points, but without an underlying, coherent legislative design that ensures these interactions are smooth, efficient and effective (NZPC, 2015a).

As outlined in Chapter 5, the current legislative framework assigns roles and responsibilities for land use and infrastructure planning across the RMA (for land use regulation), LGA (for infrastructure planning and provision) and LTMA (for land transport planning and provision). Essentially the Acts mandate three separate decision-making processes that operate on different timeframes and spatial scales for three separate but related purposes.

This legislative complexity makes it difficult for local authorities to develop and implement consistent plans around land use and infrastructure investments. For example, making a particular area of land ready for development – setting planning controls, installing trunk infrastructure, providing sufficient capacity on the road network – requires local authorities to take decisions through at least three distinct processes, each with different timeframes and implementation speeds. Decision-making processes under the LGA and LTMA are generally faster, reflecting the greater flexibility provided in the LGA and LTMA and the prescriptive nature of consultation requirements and access to merits appeals in the RMA. As a result, one process can lag behind another, and the requirements for decisions to support those taken in other processes are patchy.

The downsides are delay, the need in some cases for duplicate consultation processes, and uncertainty about the likelihood and timing of new development capacity (NZPC, 2015a). Councils have highlighted the long timeframes involved in getting plans approved and the costs and delays involved in appeals which, in their view, "[make] it harder to promote large-scale and ambitious projects, and [make] our system slow to respond to emerging trends, new evidence, unintended consequences or new opportunities" (LGNZ, 2015a, p. 27). LGNZ also notes:

> LGNZ's view is that the current planning system (comprising RMA, LGA and LTMA) is unwieldy and not well integrated. There is little alignment between strategies, funding, regulation and decision-making to integrate land use and infrastructure development, set spending priorities, and manage growth. The three planning statutes are not working together as a complete planning system, although there are some connections. (sub. 19, p. 2)

NZCID (2015a) also states:

> There is a lack of common purposes and goals across the planning framework and the hierarchy between the RMA, LTMA and LGA plans is unclear… A nationally significant project may be a priority in the Auckland Spatial Plan but have no recognition under the RMA or the GPS [Government Policy Statement] on land transport. Similarly, a regionally significant project may have priority in a RLTP [Regional Land Transport Plan] but not be funded in the local councils Long Term Plan. (NZCID, 2015a, p. 34)

Despite the separate legal instruments and the complexity outlined above, some links between the individual legal frameworks do exist. The following are some examples.

- The RMA contains provisions that help to clarify the relationship between land use and infrastructure. Section 30(1)(gb) of the RMA specifically states that regional councils are responsible for "the strategic integration of infrastructure with land use through objectives, policies and methods". This provision was introduced in 2005 as a response to a perceived lack of role clarity between regional and local councils in relation to their respective mandates (Ward et al., 2007). At the same time, amendments were made to require regional and district plans to "give effect to" Regional Policy Statements (RPSs) (sections 67 and 75 of the RMA), placing additional responsibilities on regional councils to ensure integration between land use and infrastructure.

- The LGA sets out an investment process intended to safeguard the interests of ratepayers, and establishes a framework (through long-term plans) for local decision making related to the funding and delivering infrastructure projects. The Act provides sufficient flexibility for local government planning and prioritisation, including for integrated land use and infrastructure planning under long-term community plans. For example, section 79 (3) of the LGA contains a requirement for the process of decision making under other statutes (such as the RMA) to be consistent with any requirements of the LGA, highlighting a need for councils to coordinate and align plans under both statutes.

- The LTMA provides for the allocation of funding for transport infrastructure, which is done in line with the National Land Transport Programme. This, in turn, gives effect to the funding priorities set out by central government in the Government Policy Statement (GPS) on Land Transport. To receive transport funding allocations, regional councils prepare Regional Land Transport Plans (RLTPs), which provide strategic links between transport priorities and activities nationally, regionally and locally. In developing a three-year National Land Transport Programme, the NZTA is required to take into account any relevant national or regional policy statements or plans that are in force under the RMA (s19A of the LTMA).

While the legal structures appear to be flexible enough to enable integrated planning to take place, the requirement to adopt an integrated system-wide approach is not mandated. In addition, existing links tend to rely on relatively weak legal wording such as "have regard to", "take account of" and "not be inconsistent with". Such legal terms are generally regarded as having limited statutory force. For example, in preparing policy statements and plans under the RMA, regional and district councils are required only to "have regard to" any strategies prepared under other planning Acts (sections 61(2), 66(2) and 74(2) of the RMA). While these provisions allow councils to consider other relevant planning documents, doing so is not explicitly required.

A further problem is the different priorities across different plans mandated under the Acts. For example, the priorities under the 2015 GPS on Land Transport (a central government document) are economic growth and productivity, road safety and value-for-money investments. But these priorities for land transport development can be at odds with the priority of boosting land supply for housing in terms of:

- funding from an overall fixed land-transport budget; and

- tension between investing in access to new housing developments and other GPS priorities.

The next section and Chapter 13 examine how a future planning system could achieve better integration across its different legislative components and their separate purposes and processes – by making greater use of spatial planning. The solution is not to combine the different Acts into one omnibus piece of legislation. It is necessary to recognise that there are limits to how far common decision-making processes can be used across pieces of legislation that have different roles and purposes. As LGNZ argues, it is definitely possible to improve on current arrangements:

> While there is benefit to be realised from removing unnecessary duplication between these statutory frameworks, such as through common principles, the challenge is to make them more flexibly empowering so that alignment can be better negotiated at the local or regional level. Attempting to 'unify' or standardise them arbitrarily may be undesirable given the spatial scales operating under the statues can be very different. (sub. DR112 p. 4)

F10.3 Current legislative provisions do not encourage integrated land-use and infrastructure planning. Barriers include different timescales, consultation requirements and decision-making processes. While some links and common processes exist across the Resource Management Act, the Local Government Act and the Land Transport Management Act, improving on these in a future planning system is possible.

Institutional and governance arrangements for water discourage responsive supply

Institutional and governance arrangements for some types of infrastructure – especially "three waters" assets – act against responsive supply.

Water services in New Zealand are almost all provided by territorial authorities and vary widely in scale – from Watercare in Auckland (serving a population of about 1.4 million) to small authorities (serving a few thousand customers). Most authorities operate at well below the size at which international evidence indicates that scale economies become exhausted. Apart from urban exceptions such as Watercare and Wellington Water, provision is fragmented. Yet water is expensive to transport, which discourages fragmented systems from being joined up. Water New Zealand (2011) estimated that in 2011 more than 2 250 separate water supplies existed and around 350 wastewater treatment facilities. The performance of water suppliers in New Zealand is variable. Some perform very effectively, with larger suppliers featuring well in international benchmarking exercises. However, some smaller suppliers struggle to provide adequate services and meet the drinking water standards set by the Ministry of Health (see Chapter 6).

Other factors that contribute to low responsiveness include:

- susceptibility of water pricing to political interference;
- monopoly provision;
- unhelpful legislative restrictions on the use of contracting and franchising arrangements for the delivery of water services, and
- unclear statutory and legal frameworks for water supply, stormwater and wastewater (NZPC, 2015a).

F10.4 Local government political pressures, legal restrictions on supply arrangements, and fragmented and monopoly provision of "three waters" infrastructure act against responsive supply.

No formal mechanisms to resolve debates over large-scale infrastructure

No established process exists for local authorities to test and work through with central government large city-shaping projects that fall outside the scope of existing policy and funding settings (eg, NZTA funding grants) and which could have wider spillover benefits. This lack of clear process stands in contrast to other similar jurisdictions, such as Australian states. Significant infrastructure projects in Australia are agreed with state governments which then partly or fully fund them, and organise their procurement.

10.4 Fixing the problems

Other Commission recommendations will lead to improvements

A number of Commission recommendations in this and earlier inquiries will help to resolve some of the problems discussed in section 10.3.

- The "price trigger" mechanism discussed in Chapter 8, and earlier in *Using land for housing*, will encourage local authorities to respond to demand for development capacity in a timely manner. This is also the intent of the new National Policy Statement (NPS) on Urban Development Capacity (New Zealand Government, 2016).
- Clearer legislative purposes, that recognise the benefits of sufficient development capacity and mobility, will help to give greater weight to the alignment of land use regulation and infrastructure investments. They will also give local authorities a greater ability to reject private Plan changes that would insufficiently value these benefits.

- Better links and more common processes across different pieces of legislation will improve integration and efficiency (Chapter 13).
- The process for making plans using Independent Hearing Panels (Chapters 8 & 13) will provide a quality check on plans (eg, do they provide for sufficient development capacity?) and reduce some of the delays currently incurred (eg, because of merit appeals to the Environment Court).
- Funding tools (described in Chapter 11) should help to make infrastructure investment more financially viable and less risky for local authorities.
- Reforms (described in Chapter 12) will allow private developers greater ability to initiate developments beyond current urban boundaries on condition that they provide for infrastructure needs normally the responsibility of councils (eg, connections for "three waters" and transport).

However, a future planning system will need some additional features and capabilities if it is to deliver a more responsive and better-integrated infrastructure supply. Two key additions are a formal place for spatial planning, and analytical planning tools that better take into account uncertainty and retain flexibility.

Spatial planning would help to provide greater security of supply

The Commission has previously noted that creating a formal place for spatial plans in the planning hierarchy would be beneficial (NZPC, 2015a). This judgement is based on two main grounds.

First, spatial plans are an established (if only semi-formal) practice within a number of New Zealand cities, and participants have argued strongly that they create a range of benefits, including:

- better cross-regional cooperation and understanding;
- more efficient use of existing infrastructure;
- enhanced responsiveness;
- greater certainty; and
- cost savings (NZPC, 2015a).

Second, when properly designed, spatial plans can help contribute to the greater certainty of future land and infrastructure supply, and to more successful cities.

Nearly 30 submitters on the draft report for this inquiry strongly supported spatial planning and the Commission's recommendation that it should have a formal part in the planning hierarchy. These submitters represented diverse participant types including regional and district councils, planning professionals, iwi, developers, infrastructure providers, industry groups and utility operators. Only a few submitters expressed scepticism (SOLGM, sub. DR107) or wished spatial planning to remain voluntary (LGNZ, sub. DR113; Whanganui District Council, sub. DR95).

What does the Commission mean by spatial planning?

In recommending greater use of spatial plans, it is important to clarify terminology. "Spatial planning" is defined in many different ways, with each implying different roles and scopes for plans. For example, the Royal Town Planning Institute (RTPI, 2007) defined spatial planning as "the practice of place shaping and delivery at the local and regional levels that aims to:

- Enable a vision for the future of regions and places that is based on evidence, local distinctiveness and community derived objectives.
- Translate this vision into a set of policies, priorities, programmes and land allocations together with the public sector resources to deliver them.
- Create a framework for private investment and regeneration that promotes economic, environmental and social well being for the area.

- Coordinate and deliver the public sector components of this vision with other agencies and processes." (p. 7)

The European regional / spatial planning charter (also known as the Torremolinos Charter) states:

> Regional/spatial planning gives geographical expression to the economic, social, cultural and ecological policies of society. It is at the same time a scientific discipline, an administrative technique and a policy developed as an interdisciplinary and comprehensive approach directed towards a balanced regional development and the physical organisation of space according to an overall strategy. (Council of Europe, 1983, p. 13).

In a future planning system, the Commission considers that spatial plans would have the most benefit where they:

- focus on the types and locations of the land-based public assets needed for effective urban development (eg, roads, the "three waters", public open spaces, rail corridors, ports, airports, reserves, and conservation areas) and natural hazard management (eg, identification of "no development" or high-risk areas, and development of flood barriers);
- lay out a vision for a city's development over time, so as to enable councils to act ahead of demand to secure essential corridors (see below);
- take into account significant spatial aspects of important social and cultural aspirations (eg provision for schools and health facilities);
- recognise and actively protect sites of significance to mana whenua;
- understand and reflect the topographical, geographic and engineering challenges, and the costs, of installing new infrastructure; and
- inform the strategies, plans and budgets of each local authority with respect to land use and infrastructure.

Because of the uncertainties in the development of cities, spatial plans should not seek to set or predict in detail where private sector activities or services would locate (eg, they should not attempt to set detailed land use rules). Rather, they should make some assumptions about likely future population and business growth, their needs for space and how this could best be met, and the sorts of infrastructure that would be needed to support households and business. In essence, spatial plans should lay out the bones of the city's future development. The more detailed district plans, council long-term plans, together with the choices and actions of individual developers, residents and entrepreneurs would then fill out the body of the city over time.

The spatial planning process would also provide a forum for discussions with central government about the need for education and health facilities (eg, hospitals), and for possible collaboration (including joint funding) of large, city-shaping infrastructure with national benefits.

Many submitters supported this or similar conceptions of spatial planning.

> There are a number of benefits in formalising spatial plans – providing direction and greater focus on key matters, reducing duplication, etc. However, perhaps the greatest benefit is to link land use development with infrastructure in one plan so that the infrastructure needed to support the land use development (and the likely timeframes in which it is required) can be identified and planned for in advance. (Water New Zealand, sub. DR67, p. 10)
>
> The Council agrees that there are benefits to be achieved through the formalisation of structure plans in the planning system and has supported the concept of spatial planning in previous submissions. Council also recognises the need for greater collaboration between central government and local authorities to deliver a much more integrated approach and spatial plan.
>
> Council agrees that spatial plans should be tightly defined and sees their primary purpose as outlining a high-level future urban form, key physical infrastructure and social infrastructure projects, and general development patterns that could be informed by structure plans where they are in place. (Wellington City Council, sub. DR68, p. 16)

Yet a few submitters argued for a broader conception of spatial planning more in line with that expressed in the Torremolinos Charter.

> Spatial plans must include a land use and infrastructure development plan and contain a community-wide vision across economic, social, cultural and environmental wellbeing for a range of agencies to implement. (Canterbury District Health Board, sub. DR59, p. 6)

In the Commission's view, allowing spatial plans to have a very broad scope risks making them unrealistically complex and ambitious, at the expense of achieving the main benefits of coordination and direction. Yet, as mentioned, the Commission accepts that the spatial aspects of matters of high cultural or social significance (eg, burial sites, schools, hospitals) are appropriate inclusions.

Good spatial planning well in advance helps to ensure adequate supply in the future

In his book, *Planet of Cities*, Angel (2012) expands on what constitutes the "bones" of the future growth of cities and stresses the importance of governments providing them. Angel urges national and city authorities and communities to take a realistic view of the additional land that will be needed for streets, other public infrastructure networks, and public open spaces as fast-growing cities expand. It is highly desirable that this land is planned and secured well in advance of development for financial reasons alone. Once the land is in use for urban activities its value soars, placing an extreme burden on public authorities if they decide to buy it. The advance action will also reduce uncertainty and is the only realistic way to enable the infrastructure and public amenities that residents of those future urban areas will need for their quality of life.

Authorities can secure the land for future city growth by purchasing property, or more commonly by placing "designations" on land titles to secure and reserve essential infrastructure corridors. To reduce the risk that authorities do not misuse the power to designate future corridors, they should be required to offer to buy the affected land, once identified, at its market value before it was identified.

These land and infrastructure spatial plans do not specify the detail of development – but they create valuable future options for that detail. Once established and signalled, they create a platform for the private and public planning of many other components of city development – residential, community, commercial and industrial – as well as decisions on investment in specific infrastructure. Market forces and decentralised individual decisions ought to be allowed to play a large role in this "follower" land-use planning.

R10.1 Fast-growing cities should plan realistically for the large land areas required to accommodate future growth. They should decide and signal its location two to four decades in advance, and secure infrastructure corridors, public open spaces and conservation areas.

Making spatial plans a formal part of the planning hierarchy

Although a number of local authorities have already prepared spatial plans using the LGA, problems with translating decisions across the other planning statutes and processes have hampered their effectiveness. Spatial plans currently lack strong legislative backing and must be translated into regulatory plans through additional consultation requirements and processes before being implemented.

This lack of legislative weight can cause frustrating duplication. For example, a council may have consulted widely on developing a spatial plan, but then has to run a further consultation process to incorporate the substance of the spatial plan into its RMA regulatory plans. Translating spatial plans into LGA and LTMA processes can also be challenging, particularly where the operational and budget plans of local authorities are not obliged to reflect the objectives of spatial plans.

Still more challenging is translating spatial plans into the RMA regulatory plans. While spatial plans can be effective in highlighting the need for the trade-offs necessary to give effect to an overall integrated vision, the actual making of the trade-offs, which takes place at the regulatory-planning and operational-planning stages, remains difficult and controversial. In addition, because only the RMA plans involve a right of appeal against council decisions, disconnects can arise between the vision articulated in spatial plans and the compromised reality outlined in district or unitary plans under the RMA. Disconnects have been evident in

Auckland, where commitments to a denser urban form in its spatial plan (the Auckland Plan) were put at risk of not being given effect in the Auckland Unitary Plan (Box 10.3).

Box 10.3 **The tensions between the vision and implementation – the Auckland experience**

As part of the amalgamation of local government in Auckland in 2010, the Local Government (Auckland Council) Act 2009 required the Auckland Council to prepare a spatial plan (the Auckland Plan) that set out the high-level, long-term strategy (20–30 years) for Auckland's growth and development. Auckland's Unitary Plan is then the key tool for implementing the targets and objectives of the Auckland Plan.

The Auckland Plan promoted an ambitious intensification target, noting that Auckland's population is expected to increase by one million people over the next 30 years. Some equate that to 3 or 4 people "arriving" in Auckland every hour. Under the Plan, the majority of the expected 400 000 new dwellings (about 60%–70%) were to be built within the existing urban footprint. The Plan set out a number of objectives and targets for these dwellings, such as:

- 100 000 new dwellings between 2012 and 2022; 170 000 new dwellings between 2022 and 2032; and 130 000 new dwellings between 2032 and 2042;
- deliver greenfield growth in a sequenced way over the next 30 years, with an average of 7 years unconstrained development capacity at any point in time;
- undertake development in accordance with the Urban Centres hierarchy, which classifies areas according to their existing and future role and function;
- focus growth on nine existing compact urban areas served by existing infrastructure;
- note the expected "design-led" approach to development, aimed at meeting the principles of good design (as detailed in the Auckland Design Manual);
- encourage increased density and commercial activities in and around urban centres, and limit out-of-centre retail and development; and
- encourage the supply of affordable housing as part of development proposals within urban centres.

While the Plan provided general direction as to where Auckland's new housing might be located, it was silent on how the Auckland Council would ensure sufficient development capacity, or "ready to go" land, for housing in the locations identified. The Plan left that level of detail to the Unitary Plan – the regulatory rule book for land use.

Auckland Council developed and publicly notified its PAUP. It naturally consulted with local communities on their aspirations for their areas and their views on the intensification proposals. A number of inner-city communities (in desirable areas to live and work) expressed strong opposition to any form of intensification. This led Auckland Council to retreat from some of its proposals to up-zone parts of eastern and central Auckland suburbs (as well as parts of South Auckland) to allow the building of more, mostly two-storey, townhouses and apartments.

The Auckland IHP (Box 5.2) recommended a number of changes to the PAUP aimed at doubling the feasible enabled residential capacity to exceed 400 000 dwellings and meet demand for the next 30 years. These changes included expanding the Rural Urban Boundary, removing density controls in residential zones, reducing or removing requirements for on-site parking and deleting demolition controls on buildings constructed before 1944. Auckland Council accepted most of the IHP's recommendations, but a number of appeals by resident groups are still in process and require resolution before the Auckland Unitary Plan comes fully into force.

Source: Auckland Council, 2012.

Many of the changes to the planning regulatory system described in Chapters 8, 9 and 13 will help to deal with the problems of translating longer-term spatial plans into land use regulations. These changes include, for example, simplifying the plan-making process by having only a single merits-assessment stage. Indeed, the Commission favours a comprehensive merits assessment of the whole suite of land-use plans in a region by an IHP. IHPs would assess the suite of district plans for consistency with the spatial plan and integration across them. Chapter 13 describes how this comprehensive plan-making process might work in practice.

Submitters pointed to other importantly desirable features of spatial plans in a future planning system.

- Scale and level of spatial plans: Most submitters agreed that spatial plans should be regional but with provision to incorporate cross-regional issues where appropriate. Regional Councils would be responsible for leading the development of spatial plans, but all councils in a region would "own" and sign the spatial plan. Most submitters also agreed that spatial plans should be high-level, strategic, direction-setting documents. For this reason, the Commission favours calling them *Regional Spatial Strategies*.
- Broad participation: All the important players should be around the spatial planning table at some point. They include all councils in the region, mana whenua, relevant central government agencies, the district health board, developers and infrastructure investors and operators.
- Status: Because of the strategic and vision-setting characteristics of spatial planning, most submitters favoured it coming under the LGA rather than a reformed RMA in a future planning system. The Commission is open minded on this question. Yet to remove any doubt about the status of spatial plans / strategies, they should be a formal part of the planning hierarchy and have clear and strong legislative weight in regulatory, budgeting and land transport processes.

In line with the Commission's recommendation for clear and separate purposes for the built and natural environments, regional spatial strategies (RSSs) would focus on development of the built environment (including setting aside, for example, public open spaces and reserves). Regional policy statements for the natural environment (RPS-NEs) would focus on managing and protecting the natural environment (Chapter 9). Above both the RSS and the RPS-NE at the national level would sit a new resource management Act, as well as NPSs and National Environmental Standards. The RSS and RPS-NE in each region would be required to give effect to these (Chapter 13).

In turn, the RSS and RPS-NE would set the parameters for land use rules and infrastructure provision in the district, unitary, long-term, and land transport plans at the territorial level. This would mean that planners and infrastructure providers would be obliged to take into account the provisions of the RSS and RPS-NE when later making their specific infrastructure investment plans.

R10.2

Spatial plans or strategies should be a standard and mandatory part of the planning hierarchy in a future system. They should:

- be region-wide, led by regional councils yet owned by all councils in a region;
- be high-level and directional, yet open and flexible about the details of future development;
- focus on issues closely related to land use, in particular the corridors for water and transport infrastructure, land for community facilities (eg, schools, hospitals, recreational spaces, and conservation areas), protection of high-value ecological and cultural sites, and natural hazard management;
- enable all key stakeholders to participate and share information, including iwi, central agencies, developers and infrastructure providers and operators; and
- be the platform for a suite of plans in a region covering both land use regulation (district and unitary plans) and operational and budgeting plans (eg, council long-term, annual and infrastructure plans).

It may be thought that making spatial planning a formal and mandatory part of a future planning system risks adding to the system's overall cost and complexity. Given the focus of RSSs on high-level infrastructure and transport planning, opportunities will be available to partially or fully replace the infrastructure-strategy requirements of the LGA and the RLTP requirements of the LTMA. The new system would also see the current Regional Policy Statements (RPSs) narrow their focus to managing and protecting the natural environment (in the form of RPS-NEs). Above all, the formal status of RSSs in the planning hierarchy, and the effect of the IHP process as a quality and consistency check across a whole suite of plans in a region, has the potential to reduce duplication, enhance certainty and cut costs across many dimensions and for many players.

Analytical tools that better take into account uncertainty and retain flexibility

A key benefit of spatial planning is to provide a high-level picture of how the expanding populations of cities and towns will be accommodated. A spatial strategy provides a single "song sheet" that all interested parties – public and private – can use as a guide when they make their individual investment decisions and choices. As noted, it is vital that major infrastructure investments are planned well in advance to secure the connected land corridors essential to their network function.

Decisions about land use and infrastructure require difficult choices among alternative options. Options include:

- Should a route be an arterial road or a motorway?
- Should city water supply be taken from a river or artesian wells?
- Is extending commuter rail or improving the bus network the better public-transport option?

Using the right analytical tools to help make these decisions can yield real cost savings and other benefits.

Cost-benefit analysis

The decision tool of choice among economists and policymakers is cost–benefit analysis (CBA) because it provides a rational means of weighing up the social costs and benefits of each option in a short list of options and choosing the option that offers the highest net benefit. Every business case for a major infrastructure investment should contain a CBA. In practice, CBA is complex and requires a lot of skill to do well. Even then, it is only a guide to assist decision makers. Many handbooks exist for how to carry out CBA, such as Treasury's *Guide to Social Cost Benefit Analysis* (New Zealand Treasury, 2015b) and the more specialised New Zealand Transport Agency's *Economic Evaluation Manual* (NZTA, 2016).

The Commission strongly supports the requirement for high-quality CBA to be used to help decide on major infrastructure and land-use projects. That said, CBA has limitations.

One is the risk of a fragmented analysis, which can happen if a CBA's scope mirrors the fragmented structure of the organisations concerned. For example, if a transport agency undertakes the analysis from its perspective only, it may ignore the broader costs and benefits of the policy or project being considered. Or the transport agency may take them into account but use different assumptions for key values (such as the value of life), which can alter the ranking of different projects. The Treasury publishes standard values on its CBA website to help users of CBA avoid this problem (New Zealand Treasury 2015b, p. 48).

A more serious limitation when using CBA in urban planning is that it has difficulty accounting for cities as complex, adaptive systems in which a single change can set off various feedback loops and system-wide effects. CBAs often adopt a partial approach that does not take into account the system-wide effects of a proposal. This will not matter in the case of small projects for "follower" infrastructure. It is more of an issue for larger projects, and particularly for city-shaping infrastructure. Using a general equilibrium model can sometimes address the CBA's partial approach. That type of model considers the changes that occur throughout the economy when a project is large enough to have economy-wide impacts. Yet general equilibrium models assume a given set of economic relationships. So they may not capture the effects of city-shaping infrastructure that has capabilities to restructure urban economies. Such capabilities include

enabling greater access by residents to existing centres, increasing the effective size of markets, and creating new opportunities for entrepreneurship and competition.

Finally, another important weakness in using CBA in urban planning is that it tends to be used deterministically. Users do not build in the flexibility to modify decisions as more information comes to hand. This happens largely because CBA is geared to taking a decision at a point in time and making the best use of information on costs and benefits available at that time. It ignores the value of options that enhance the ability to take later decisions with the benefit of information not currently available. It is also often used out of sequence, to test or justify a decision, rather than informing the development of, and decisions over, multiple options.

Real-options analysis

A complementary decision tool – *real-options analysis* – is a form of CBA suited to situations of high uncertainty, but where decision makers also have the flexibility to preserve or create options to make later decisions when better information becomes available. A current decision under this approach might be to invest in actively acquiring better information, and to delay the substantive decision until that information becomes available. The value of preserving or creating options in this way can be very high.

Real-options analysis is suited to the characteristics of growing cities (Chapters 2 and 3). As complex, adaptive systems, cities are best left to mostly evolve organically in line with individual households and businesses making and realising their own plans. Yet as noted, a need exists to make provision (decades earlier) for future infrastructure networks on which cities depend. Even so, decisions on specific layouts and assets should be delayed to retain flexibility to respond to the later information about the scale and nature of the organic growth. This is why the corridors secured well in advance of development in RSSs should be "real options" rather than particular infrastructure types.

The real-options approach, compared to deterministic versions of CBA, has the potential to redirect decision makers – from looking for answers to the wrong questions, to looking for answers to the right questions given the unavoidable uncertainty.

Box 10.4 is an example of the potential use of real-options analysis for planning urban infrastructure.

Box 10.4 **Applying real options analysis in practice – the prospect of driverless vehicles**

The potential for driverless vehicles to become widely used has significant implications for decisions about investing in transport infrastructure. The technology is expected to radically change the way that roads are used, and reduce some of the social costs that arise from vehicle use. For example, driverless vehicles could reduce the need for private vehicles, increase the efficiency of vehicle use, and reduce the amount of infrastructure required to meet a city's transport needs. Many commentators speculate that driverless technology will be available within the next 10–20 years.

Yet, the timing of driverless technology and its uptake, and its impact on the need for additional transport infrastructure are uncertain. Making decisions about investing in infrastructure is therefore difficult. On one hand, a council of a growing city could commit to a large-scale investment in public transport, and later regret having a "white elephant" if driverless technology greatly increases the efficiency of vehicle use in the near future. On the other hand, deciding not to invest risks congestion reaching serious levels and reducing the city's connectivity.

A real-options approach could help deal with this kind of uncertainty. The council could choose to impose congestion charging to encourage more efficient use of the existing transport capacity. This would delay the need to decide whether to invest in the expensive public transport system until new information is available about the uptake and impact of driverless technology. That way, the council would preserve its options to either invest in the public transport system if it turns out it is still needed, or not invest in the case that driverless technology removes the need for a traditional public transport

system. In the latter case, the council (and ratepayers and taxpayers) will have avoided the large costs of an investment that turns out not to be needed.

Source: David Campbell Workshop Notes, 2016.

F10.5 Real-options analysis is a useful tool for planners making decisions about infrastructure and land use because it builds in flexibility to cope with the uncertain evolution of urban spaces over time. It can help planners reduce the risk of worse-than-expected outcomes and take advantage of upside opportunities as they emerge.

Applying real-options analysis to spatial and other land-use planning will require local authorities to raise their capability. In Chapter 13, the Commission concludes that central government needs to take a more active and engaged role in operating the planning system in future. Such a role should include providing advice and support to councils carrying out their statutory roles. Rather than councils trying individually to build their own knowledge and capability, central government should establish a centre of excellence or resource that councils can draw on for advice and training to conduct both real-options analyses and CBA in infrastructure and land-use planning. The centre should build awareness of the value of these tools and encourage wider use.

R10.3 As part of the transition to a future planning system, central government should establish a centre of excellence or resource that councils could draw on for advice and training in using real-options analysis and CBA in infrastructure and land-use planning.

10.5 Can the institutional arrangements for water services be improved?

The problems with the institutional arrangements for water services outlined above raise whether alternative arrangements could make those services more responsive. Some stakeholders have argued that restructuring both water infrastructure and the delivery of water services is needed in a future system to improve performance (NZCID, sub. 20; Water New Zealand, 2011). It is also notable that other infrastructure services delivered through the private sector (eg, telecommunications and electricity) do not appear to suffer from the same problems of delay and inadequate provision. These private sector infrastructure services operate under a different set of institutional and governance arrangements.

Different institutional arrangements for providers of urban infrastructure

A significant proportion of infrastructure assets are owned and provided publicly because they are natural monopolies. Privately owned monopolies have well-known problems that are difficult to mitigate. Chapter 3 described the relevant considerations and concluded that the logic for public provision of some infrastructure is sound, and that providing such infrastructure constitutes one of three main rationales for urban planning.

However, some natural monopolies (electricity and telecommunications lines) are provided through commercial enterprises. The development of these enterprises is a result of a long period of economic reform, which separated the earlier council- or state-owned power and telephone departments into competitive and monopoly components. The competitive components (telecommunications service providers and electricity generators and retailers) operate in the general marketplace, and are disciplined by the ability of customers to change provider if dissatisfied.

The monopoly components (the transmission and distribution networks) are disciplined in a different manner – through regulation. The main electricity grid operator, Transpower, is a regulated State-Owned Enterprise. Local electricity distribution companies are also regulated under Part 4 of the Commerce Act 1986. In

addition, the Electricity Authority supervises the electricity market to ensure market rules are followed and competition works. In telecommunications, the network operator Chorus is a privately owned company but regulated under the Telecommunications Act 2001.

The institutional and governance arrangements for the energy and telecommunications industries are elaborate and costly to set up and maintain. They require regulated companies to regularly collect and provide information, and government regulators to analyse that information. In 2014/15, the direct costs of overseeing regulated monopoly utility services[88] were $14.3 million and the costs of maintaining a competitive electricity market were $71.1 million.[89] The justification for these costs derives from the benefit to customers from having a choice of suppliers (at least for the non-network parts of the services). This choice creates competitive pressure on firms to be efficient and innovative. The benefits depend partly on the scale of the networks in these industries and the ability of providers and retailers to compete "over the top" of these network platforms.

The costs of large-scale reform for urban water are likely to be very high

In theory, it would be possible to reorganise the delivery of water services to provide greater competition and choice along the lines of energy and telecommunications. In New Zealand, the water industry body Water New Zealand has outlined a vision for water reform that would include:

- consolidating the sector into fewer providers;
- establishing an economic water regulator;
- retaining public ownership of providers, but with directors appointed on merit;
- obtaining funding directly from customers via fees for service; and
- setting network pricing to help fund deferred investment and lift service levels in smaller communities (Water New Zealand, 2011).

Other jurisdictions have arrangements for water services partly along these lines. For example, water and wastewater services in England and Wales have been fully privatised since 1989. Private operators are responsible for managing water systems, and also own the water assets. An independent regulatory agency, specific to the sector, oversees the water providers. Management of water services in France is awarded to private companies through public tenders. The subsequent contracts set out the rights and obligations of those private companies. The public sector continues to own the water assets. Most countries that follow this model have also created regulatory agencies that supervise the quality of water services and can intervene to resolve conflicts and respond to unforeseen circumstances.

A problem with moving to alternative models is the cost of changing, which can be very high. Indeed, the cost may exceed any likely long-term benefits. The Australian Productivity Commission (APC) assessed the case for moving to a competitive market in the urban water sector and recommended against it. The APC considered that water regulators should move away from price regulation towards price monitoring, and rely more on public owners, operating as active shareholders, to manage the issues associated with natural monopoly provision. The APC considered that the largest gains were likely to come initially from establishing clear objectives, improving the performance of institutions with respect to roles and responsibilities, governance, regulation, competitive procurement of supply, and pricing (APC, 2011b).

The New Zealand Productivity Commission has already considered some of the models used in other jurisdictions, and noted the conclusion of Marques (2010) that no "perfect" model exists, and that each model has virtues and some problems (NZPC, 2015a). The Commission also noted that mergers to achieve scale economies need to be carefully assessed on a case-by-case basis because mergers in other countries have not always increased performance or efficiency (NZPC, 2015a).

[88] Expenditure for electricity lines services, telecommunication and natural gas pipelines (Commerce Commission, 2015).

[89] 2014/15 total expenditure for the Electricity Authority.

In addition, the water sector has some special characteristics that heighten community sensitivity about changing institutional arrangements.

- The provision of safe drinking water and the effective disposal of wastewater have strong external benefits, for people (public health) and for the environment.
- The provision of urban water services is a "merit good" in the sense that many people consider these services should be available, irrespective of a person's ability to pay.
- Wastewater management has some "public good" characteristics in that, once provided, many members of society benefit. At the same time, it is difficult to exclude individuals from enjoying the benefits of a cleaner, healthier environment once the decision is made to collect and treat all wastewater in a community.

Low population density in New Zealand, the high cost of transporting water, and fragmented and small-scale water networks owned by councils make a weak case for merging networks and running a competitive model of urban water supply with a network regulator. So the Commission sees no merit in proposing ambitious reform for urban water services.

F10.6 In New Zealand the case for merging networks, and running a competitive model of urban water supply with a network regulator, is weak. This is due to the fragmented and small-scale water networks, the high cost of transporting water, the uncertain net benefits of mergers, and the high costs of setting up alternative institutions.

Improvements can be gained through more modest actions

Considerable scope exists, however, for improved performance in the delivery of water services. This assessment of the Commission was supported by submissions on its draft report (NZ Institute of Surveyors, sub. DR121, p. 4; Sir Geoffrey Palmer and Roger Blakeley, sub. DR122, p. 19). The Commission continues to support modest actions to improve water governance and regulation along the lines it recommended in its *Using land for housing* report (NZPC, 2015a). These include:

- improving the clarity of the statutory and legal frameworks for water supply, wastewater and stormwater, and improving the alignment between planning objectives of councils and those of council-owned water enterprises;
- reducing the susceptibility of the provision of water services and water pricing to political interference, through developing a clear high-level purpose statement for the sector, improving the discipline and transparency around pricing and connection charges, and through better performance benchmarking and monitoring;
- investing in common national standards for quality, data collection and analysis to support transparency and benchmarking;
- acting to ensure that the council controlled organisation (CCO) model is fit for purpose, including learning and applying best practice from the State-Owned Enterprise model (such as board appointments and other aspects of governance);
- encouraging councils to collaborate through joint CCOs to achieve scale and specialist capability where doing so is cost effective; and
- permitting councils to use a broader range of franchise and public-private partnership (PPP) delivery models for water services.

R10.4

While the Commission sees little merit in a large-scale structural reform for urban water services, the Government and councils should seek improved performance in the delivery of water services. Initiatives to achieve this include:

- improving the clarity of the statutory and legal frameworks for water supply, wastewater and stormwater;
- acting to ensure that the council controlled organisation (CCO) model is fit for purpose;
- investing in common national standards for quality, data collection and analysis;
- greater transparency and benchmarking; and
- encouraging councils to collaborate through joint CCOs to achieve scale and specialist capability where doing so is cost effective.

Greater use of pricing for water services, and reduction of political interference in its use, are particularly important elements of any future planning system, especially for areas facing high rates of population growth. Increased use of pricing – both for connections to the water network and for the use of water – helps to send accurate signals about the costs of delivery. It also encourages more efficient decisions about where to develop, and discourages wasteful use of water. Issues around pricing, contracting and procurement are covered in Chapter 11, including PPPs and joint arrangements with other councils to achieve scale and efficiency.

10.6 Making provision for city-shaping projects

As discussed above, the existing planning system lacks satisfactory mechanisms to identify, assess and facilitate agreement on large city-shaping projects. Such projects are typically transport-related, since transport and land use are fundamentally linked. Changes in the supply of transport infrastructure may affect the level of economic activity; conversely, the level of economic activity can affect the demand for transport. This section discusses the performance of existing transport institutions, the emergence of a process for resolving large-scale transport issues in Auckland, and provisions for collaboration in a future planning system.

Existing transport institutions and governance work reasonably well

Alongside responsibility for the "three waters", local transport is the other key responsibility of councils for network infrastructure that is critical for urban development. Central government plays a key role in funding and in planning capacities. Governance and funding arrangements for transport infrastructure work reasonably well, but scope exists to improve prioritisation and coherence for urban planning and development. As previously noted, the GPS on Land Transport sets national priorities and the NZTA works with local authorities to translate the priorities into regional and local land-transport plans and investment. Central government, drawing on the National Land Transport Fund, pays the total cost of state highways and about 53% of local transport costs.

The Commission has heard positive comments from council staff, developers, and construction firms about the quality of NZTA processes in relation to planning, funding and procurement. NZTA staff participate constructively and collaboratively in developing spatial plans, RLTPs and local plans under the RMA and LGA. Yet the processes are complex because of the multiple players and multiple plans that make coordination difficult for councils – as described in section 10.3. To illustrate this, Table 10.1 lists the functions and responsibilities in relation to urban transport infrastructure in the Wellington region.

Many of the emerging transport planning and coordination challenges are in the upper North Island, particularly in the area referred to as the "Golden Triangle". This area has many local authorities (unitary, regional and territorial) and a group of important and fast-growing urban centres, the three main cities being Auckland, Hamilton and Tauranga. Each smaller city is within 200 km by road from Auckland. Freight values

and volumes between the three cities are already among the highest in New Zealand. The Golden Triangle will likely be home to 45% of New Zealanders by 2043 (Chapter 5).

Governance challenges spring from the transport network crossing many different territorial and regional authorities, and the Auckland unitary authority, and serving multiple large freight users such as ports and airports. In the case of freight, another challenge exists to coordinate the investment plans of the independent (although government-owned) rail operator, KiwiRail, with those of the road authorities (NZTA and the local and regional councils).

As the Commission noted in its *International freight transport services* report, the joint planning process for this region, mostly led by the NZTA, is an example of a "facilitated discussion". An important component relates to freight and the "Upper North Island Freight Story". This Story is a collaboration between central and local government organisations that aims to improve the efficiency of freight transport in the region.[90] The Story's two key elements are:

- establishing a list of issues that participants agree are critical to the efficiency of freight transport in the region; and
- establishing a shared evidence base to support future discussions and decision making (NZPC, 2012b).

F10.7 Facilitated discussions involving central government, local government and private sector organisations can be effective in developing a shared understanding of land-use demand and associated infrastructure needs, and in prompting desirable investments.

Facilitated discussions across a range of parties are just what the Commission envisages should occur in a future planning system during the process of developing RSSs. This process may be only the start of a conversation – in many cases specific infrastructure decisions will necessarily be further down the track. But it is an important start.

Table 10.1 Responsibility for land transport functions in Wellington

Function	Primary Responsibility	Comments
Strategic planning	Regional	The Regional Transport Committee prepares the RLTP. The Committee is made up of representatives from Greater Wellington Regional Council (GWRC), territorial authorities, and the NZTA.
Public transport services	Regional	GWRC plans and procures the bus, rail and ferry services. Transdev is contracted to provide rail services. Private providers are contracted to provide bus and ferry services.
Rail infrastructure	National (KiwiRail)	KiwiRail owns and maintains rail infrastructure as part of the national rail network.
Other public transport infrastructure	Regional and Territorial	GWRC owns or controls railway stations, park and rides, and major off-street interchanges. Territorial authorities are responsible for other public transport infrastructure (such as bus stops) that is located within the road reserve.
State highways	National (NZTA)	The NZTA operates Wellington's motorways and state highways as part of the state highway network.

[90] Members of the collaboration are the New Zealand Transport Agency, Auckland Transport, KiwiRail, and the Upper North Island Strategic Alliance (UNISA). The seven members of that Alliance are the Northland, Waikato and Bay of Plenty Regional Councils and the Whangarei, Auckland, Hamilton and Tauranga City Councils.

Function	Primary Responsibility	Comments
Local roads	Territorial	Territorial authorities are responsible for all roads other than state highways.
Walking and cycling	Territorial	Territorial authorities are responsible for most walking and cycling infrastructure.
Travel demand management	Regional and Territorial	GWRC plans, promotes and provides training for travel planning programmes, while territorial authorities are responsible for implementing the programmes.

Source: CityScope, 2014.

Ultimately the councils decide on the RSS, but with the benefit of the shared information and discussions with various other public and private agencies and organisations. The infrastructure providers will then be obliged to take into account the RSS when later making their specific infrastructure investment plans.

The Upper North Island Freight Story is untypical in covering the land area of three regional councils and many more territorial authorities. Yet the importance of early engagement, information sharing and discussion among the relevant parties remains the same in a single regional council area.

The emergence of a partnership between central and local government on city-shaping projects in Auckland

Sometimes city development calls for unusually large expenditures on city-shaping infrastructure that neither the NZTA nor local councils can fund from their normal budgets. These large investments may have both national and local benefits, so a case exists for central government to contribute towards their cost. A situation along these lines has unfolded over the last decade in Auckland. With Auckland's rapid increase in population and historical under-investment in road and rail infrastructure, its transport system has steadily become inadequate and congested. Despite large investments in recent years, projections see demand continuing to increase faster than planned capacity as congestion worsens (Auckland Transport Alignment Project (ATAP), 2016a). For several years, Auckland Council and the Government disagreed over the way forward. Auckland Council pushed its preferred road and public-transport schemes and argued in public for Government funding. On its side, the Government was undertaking substantial fiscal consolidation and giving substantial funding to the Christchurch rebuild following its earthquakes. It was also not convinced that the Council schemes were the right solutions, or offered best value for money.

The Auckland Transport Alignment Project

Until 2015 no formal institutional arrangements existed to enable effective collaboration between the Government and the Council. Then in September 2015 the parties created the Auckland Transport Alignment Project (ATAP). The broad details are as follows.

- The parties recognised that planning, funding and developing Auckland's transport system is one of the biggest transport challenges for both central and local government.
- Auckland Council identified the need for additional funding from 2018 onwards to deliver its preferred future transport network. The Government recognised Auckland's need for significant investment in its transport system in the coming decades to provide for its forecast growth. Yet the Government will provide Auckland with additional funding or funding tools only if it is confident that the investment will address the region's transport challenges and provide value for money.
- The Government and Auckland Council have agreed to work together to identify an aligned strategic approach for developing Auckland's transport system that delivers the best possible outcomes for Auckland and New Zealand.
- ATAP set up a governance structure under which officials from the Ministry of Transport, Auckland Council, Auckland Transport, the NZTA, the Treasury and the State Services Commission work together to improve alignment between the parties about the way to develop Auckland's transport system.

- The ATAP parties broadly agreed to test whether better returns from transport investment were achievable in the medium- and long-term, measured against a set of objectives. These objectives were to:
    - support economic growth and increased productivity by ensuring increased access to employment and labour (relative to current levels) as Auckland's population grows;
    - reduce congestion (relative to predictions) – in particular, reducing travel time and increasing reliability in the peak period and ensuring congestion does not become widespread during working hours;
    - improve public transport's share as a mode of travel (relative to predicted results), where this will help to reduce congestion; and
    - ensure any increases in the financial costs of using the transport system deliver net benefits to users of the system (ATAP, 2015).

A priority in the early work of ATAP was to compile, research and agree on a set of data and models that could become a common basis for transport planning. ATAP released a foundation report in February 2016 (ATAP, 2016b) and an interim report in June 2016 (ATAP, 2016a). The final report, published in August 2016, recommended an aligned strategic approach, including an indicative package of transport investment for the next 30 years. Box 11.2 in Chapter 11 briefly describes aspects of the interim report, such as the use of congestion pricing.

F10.8 The Auckland Transport Alignment Project was an effective institutional innovation to enable the council of a major city and central government to work together and consider a central funding contribution for a major programme of urban infrastructure with national spillover benefits.

Provisions for collaboration in a future planning system

ATAP was an effective institutional innovation that enabled the council of a major city and central government to work together when a major programme of urban infrastructure has national spillover benefits. Even so, the Commission sees greater merit in the relationship and discussions between the two parties beginning much earlier through the RSS process. In a future planning system, central government should sit at the regional-spatial-strategy table and participate in discussions about the design, benefits and funding of major programmes of urban infrastructure investment with national spillover benefits. This would be the best starting point for collaborations on these projects.

R10.5 In a future planning system central governments and city councils should work together through the regional spatial-strategy process and subsequently, to assess and agree on the design, benefits and funding of major programmes of urban infrastructure investment with national spillover benefits.

10.7 Conclusion

When cities grow and develop, a vital task that falls to local government in New Zealand is to invest in the infrastructure needed to service the land to make it fit for purpose. This task can be challenging, in particular because of the contrast between the highly unpredictable and dynamic nature of city growth and the long-lived, lumpy, highly place specific, inflexible, expensive and irreversible nature of infrastructure assets.

Urban planning systems that effectively support the growth and evolution of successful cities:

- ensure a sufficient supply of development capacity to meet demand;
- align land use rules with the supply of infrastructure (and vice versa); and
- ensure the mobility of residents and freight to and through cities (using a full suite of "city-shaping", structural and follower infrastructure).

New Zealand's current system has struggled with all three tasks.

Among the causes of these problems are legislative arrangements that lack clarity and do not always encourage integrated decisions, institutional and governance arrangements for water services that discourage responsiveness, and a lack of tools to resolve debates about large city-shaping projects. Proposed features of a future planning system outlined elsewhere in this report (especially changes to the regulatory system for land use noted in Chapter 8) will help to resolve some of these problems. The Commission also sees a need for additional changes to help improve planning and infrastructure provision.

The first change is to give well-conceived RSSs greater legal status in LGA and RMA plans and policies. This is because spatial planning can enable:

- a high-level overview and coordination among those responsible for supplying the various different sorts of infrastructure;
- those responsible to plan well ahead and deliver sufficient land for residential and business expansion; and
- many other public and private parties with an interest in city growth and development to make better, more timely decisions.

Spatial planning is important as a means to work through difficult trade-offs. With greater status, compromises reached will be less vulnerable than now to being unpicked at later stages. Spatial planning of future land use and infrastructure should be developed with analytical tools that take account of uncertainty and preserve flexibility, such as real-options analysis.

The current institutional and governance arrangements for water services have some weaknesses owing to natural monopoly characteristics of water and wastewater infrastructure, and to the small, fragmented nature of pipe systems. Even so, the Commission does not see merit in proposing ambitious reform for urban water services. Yet scope exists to clarify objectives, upscale, bring in a more commercial approach and improve the governance of water entities. Efficient pricing of infrastructure services can be an important driver of integration and coordination, and greater use of variable pricing in water services would help to improve performance. Pricing is considered in Chapter 11.

Fast-growing cities may sometimes need large, costly city-shaping pieces of investment that neither the NZTA nor local councils are able to fund or finance from their normal budgets. If these investments have wider national benefits, as they sometimes do, then a partnership approach with central government is called for. While ATAP proved an effective model in Auckland's recent history, a future planning system would see the parties discussing and negotiating jointly agreed approaches in the course of developing regional spatial strategies.

11 Infrastructure: funding, financing & procurement

Key points

- Providing infrastructure to support the growth of cities is an expensive undertaking for councils. The costs can vary significantly from location to location, and councils may face problems recovering these costs.
- Efficient funding would enable council infrastructure owners to cover their costs from beneficiaries through an appropriate mix of user and connection charges, peak-load and congestion pricing and efficient taxes/rates.
- Funding, financial, legislative and political-economy barriers are impeding the efficient provision of infrastructure in New Zealand.
    - Councils argue that "growth does not pay for growth". Available evidence is inconclusive, but suggests that infrastructure projects often only pay for themselves over long periods and this creates financing problems for some councils (particularly high-growth councils). Councils also face "demand risk", where development fails to occur at the rate originally assumed.
    - Current legislation limits the ability of councils to price wastewater use and road use, and to recover the costs of some community infrastructure through development contributions.
    - Community resistance to higher council debt, rates increases and the pricing of water services constrains revenue and limits the supply of infrastructure and development.
- The Commission proposes a hierarchy of funding tools for councils to fund local infrastructure. Pricing and user charges (eg, water and congestion pricing) should be employed where practical and efficient. Where benefits are localised, councils should use development contributions and targeted rates. Otherwise, they can use general rates, value capture and, sometimes, central government funding to ensure costs are fully recovered.
- Self-imposed or externally set limits on council borrowing are curtailing needed infrastructure investment in some high-growth cities. Policymakers and others should work to ease these constraints and also facilitate greater private provision of infrastructure.
- Procurement of infrastructure involves planning for it, sourcing suppliers to construct and operate the infrastructure over its lifetime, and managing the contracts and relationships involved in this process.
- Local authorities should be open to a wider range of delivery models than the in-house or traditional outsourcing of construction they commonly use. Public Private Partnership (PPP) delivery models or alliance contracting could be suitable for some transport and water infrastructure projects and even for services such as street lighting.
- A future urban planning framework should give councils the support and capability to use a wider range of innovative procurement models, such as PPPs. Councils should consider collaborating to scale up investment projects to make innovative procurement models more cost-effective.

As noted in Chapter 10, the planning and provision of infrastructure can be one of the most challenging tasks that local authorities face. Key reasons why local governments often find the timely delivery of infrastructure challenging is the expenditure involved, and difficulties recovering costs. This chapter explores the nature of these challenges, and considers policy responses. It also explores opportunities to gain better quality and more affordable infrastructure through different procurement practices.

For clarity, the chapter draws a distinction between the *financing* and the *funding* of infrastructure.

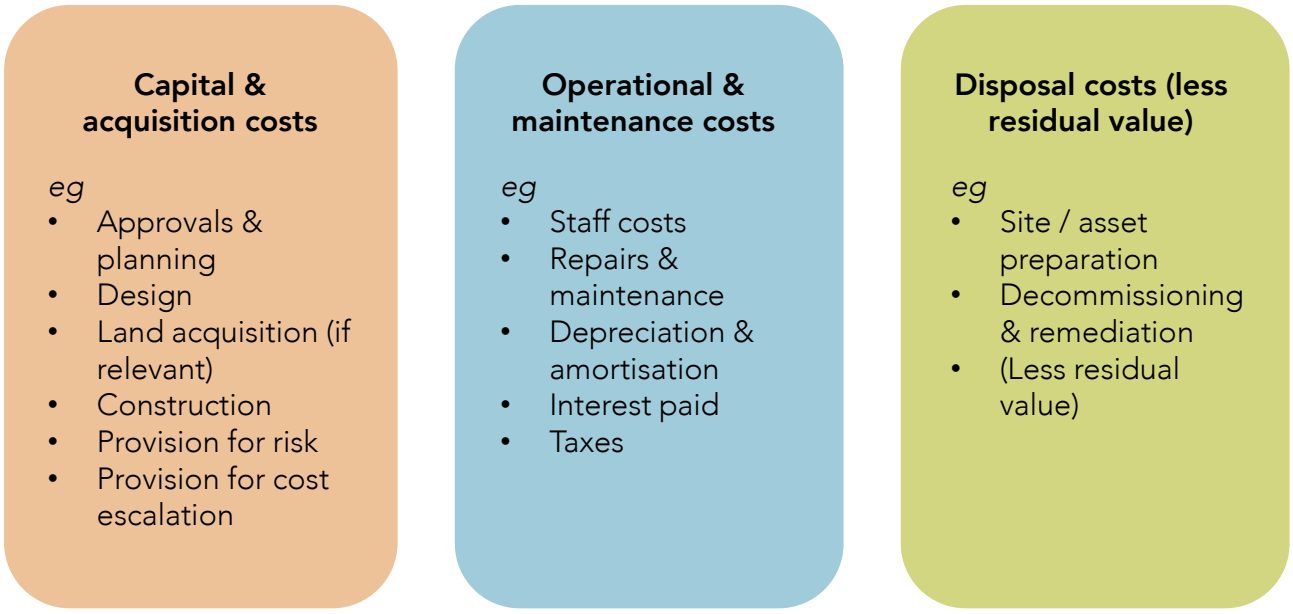
- Financing refers to "arrangements put in place to ensure money is available for the project or service at the time it is needed" (LGNZ, 2015b, p. 44). So, for example, a council may *finance* an infrastructure project through borrowing to ensure that it has the cash on hand to pay the upfront bills.
- Funding tools are the sources of money available to support financing arrangements over time. For example, a council may *fund* an infrastructure project through sources such as rates and development contributions to recover the costs of financing (which would comprise interest and capital repayments in the case of borrowing).

11.1 The costs of infrastructure

Types of infrastructure costs

Installing and maintaining infrastructure assets, such as roads, water pipes, community facilities, sewers and water treatment plants, creates a range of costs for local authorities (Figure 11.1).

Figure 11.1 Whole-of-life costs for public works



Source: Adapted from Department of Finance (Australia), 2014.

In addition to these direct whole-of-life costs faced by councils, infrastructure can create 'spillover' costs for society, such as environmental costs (eg, air pollution from vehicles using roads) and congestion.

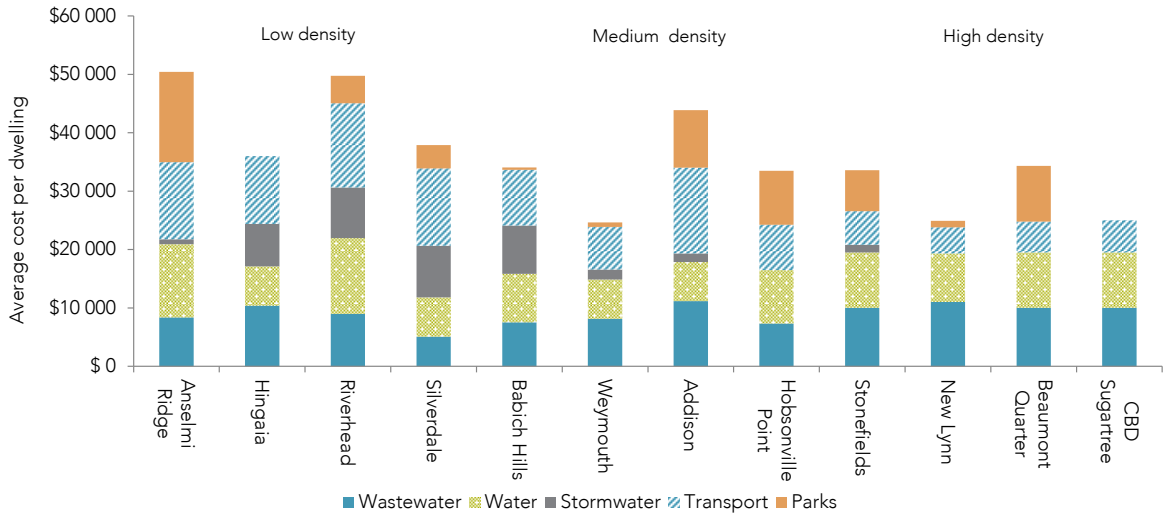
Costs can vary significantly across locations

Developers of new greenfield or infill sites usually provide local infrastructure within a subdivision, while councils provide extensions to trunk infrastructure. The costs that councils incur to provide trunk infrastructure can be large. For example, recently published research into the cost of infrastructure in Auckland showed that, on average, the marginal cost to Auckland Council of providing new infrastructure for housing in high-density or infill areas is close to $30 000 for each dwelling. For low-density or greenfield areas, the cost is close to $45 000 (Centre for International Economics (CIE), 2015).

These costs vary significantly, depending on factors such as the type of dwellings/structures, whether the site is greenfield or infill, and its proximity to existing infrastructure, and housing density. The Urban Taskforce (2009) examined the relationship between urban form and infrastructure costs and concluded that "higher levels of urban density, in general, lead to cities that are cheaper to build and run" (p. 8). However, the Taskforce also noted that costs are very site-specific and depend on the nature of existing infrastructure and whether a development requires a small additional investment in that infrastructure, or a complete overhaul. The Commission reached similar conclusions in its *Using land for housing* inquiry (NZPC, 2015a).

Figure 11.2 shows the CIE's estimates of the costs per dwelling faced by Auckland Council of providing the "three waters", transport and parks in different parts of Auckland. It shows that these costs vary in total from about $20 000 to $50 000 for each dwelling; that the "three waters" is the largest cost item in all areas, but that transport costs vary more between areas.

Figure 11.2 Infrastructure costs in Auckland by development density, 2015



Source: Centre for International Economics, 2015.

11.2 Efficient pricing, investment and funding

Private businesses sell goods and services to consumers. The sales generate revenues that fund firms' costs (eg, inputs of goods and services, wages, rent, interest) and generate profits. The sale prices and volumes reflect market forces. The prices signal important information to consumers about the value of the resources they use. The prices and volumes signal to businesses the value consumers place on their products and when to invest in new plant and machinery.

As discussed in Chapters 3 and 10, urban infrastructure has important characteristics that can make its services different from many services provided in "competitive" markets. While private enterprises provide certain infrastructure services under competition (eg, electricity and telecommunications), central and local government are sole suppliers of others – notably the "three waters" and transport infrastructure. They are sole suppliers because these services have public-good and/or natural-monopoly characteristics (Chapter 3). In the absence of competition, suppliers must decide the prices at which they will provide these infrastructure services, when and in what way they will invest in greater capacity, and how they will fund the infrastructure.

Whether central or local government is the supplier, they should aim to use infrastructure resources in a way that is *socially efficient* and not simply privately profitable for the infrastructure supplier. To achieve socially efficient provision of infrastructure, government suppliers need to (i) set prices that encourage the efficient use of existing infrastructure, (ii) make timely and wise investments in additional infrastructure capacity, and (iii) generate funds efficiently and fairly to cover their costs. The following subsections cover these three aspects.

Efficient infrastructure pricing

The efficient price to charge consumers for infrastructure services (eg, water out of a tap; driving on a road) depends on whether the total demand by all consumers is comfortably within, close to, or above existing capacity. The efficient pricing rule that councils should use for each of these three cases is set out in Table 11.1.

Table 11.1 Efficient pricing rules for infrastructure services

Total demand for infrastructure service	Optimal pricing rule	Efficiency comment
Well within existing capacity	Set price to short-run marginal cost (SRMC) of use.	Cost can vary across consumers. For example, heavy trucks cause significant damage to roads, while cars cause almost none.
Close to capacity	Set price to SRMC, including additional congestion costs on other users.	The marginal user often impairs the services received by other users. Efficiency requires that the marginal user takes this into account by being charged for this negative spillover (externality). This congestion cost is likely to vary by time and location.
At or above capacity	Set price to ration demand to equal capacity.[91]	With congestion pricing, demand may never reach capacity. But some infrastructure services do not suffer congestion until capacity is reached. Pricing to limit demand to equal capacity ensures users who most value the services receive them. When demand fluctuates, this pricing rule is called peak-load pricing. It also has the efficiency benefit of delaying the need for investment in expensive new capacity.

Source: New Zealand Productivity Commission based on principles set out in writings about the economics of infrastructure regulation, such those by Kahn (1988) and Winston (1990).

By setting prices to short-run marginal costs (SRMCs), infrastructure owners create an incentive for users to balance the benefit they receive from the service against the real resource costs they impose through causing the production of additional units of the service. The users will economise on use to just the right extent. For example, users of waste collection services have an incentive to cut waste, water users will look to use water more efficiently and road users may look to car pool or use public transport. Similarly, during periods of high demand, pricing services at their full marginal cost (including congestion costs) can encourage some people to shift their consumption to a less congested time, freeing up capacity to meet the needs of those who value access more.

In addition to raising additional revenue to help pay infrastructure costs, congestion pricing and peak-load pricing have a further important benefit. By encouraging efficient use, they can delay the time when new investment is required. This delay makes for more efficient investment decisions – it buys time for new and more cost-effective technologies to emerge, and it saves residents the cost of having to invest large capital sums earlier.

Efficient infrastructure investment

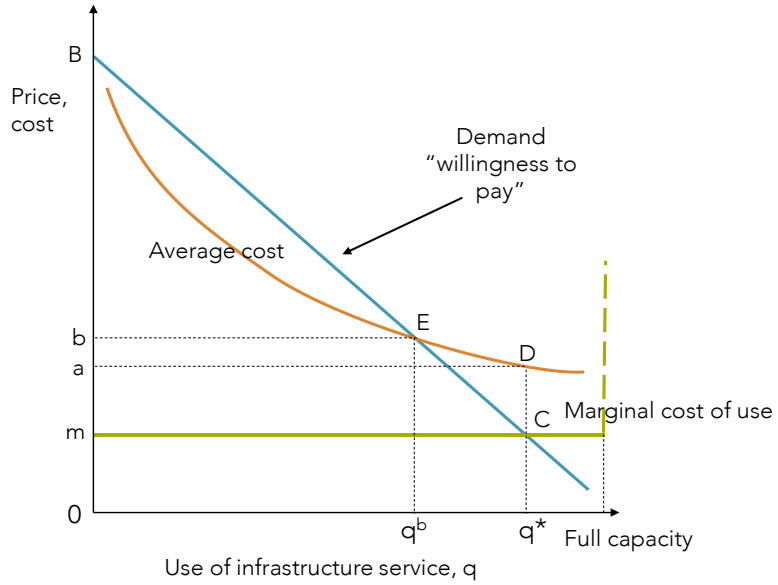
Making optimal investment decisions about large items of transport and water infrastructure is difficult. Private firms are motivated to invest to make money. A few private firms – typically infrastructure owners – have monopoly power that could lead them to hoist prices above costs, exploit consumers and undermine economic efficiency. This is why regulations exist to turn this incentive towards serving the long-term interests of consumers. Councils could likewise make more money from their infrastructure investments by acting as monopolists, but this would lead to both inefficiently low investment in and use of their infrastructure, and harm most residents.

Socially efficient investment in a large and lumpy piece of infrastructure requires a council to estimate the overall social benefits and costs that the project will generate over its lifetime. The council should compare the net benefits of various options and choose the option offering the highest net benefit. Variations in the type, quality, capacity and timing of the infrastructure will generate these options (Winston, 1990).

[91] This is purely the pricing decision of the supplier. Given that demand is at or above capacity, the supplier should already have been considering investment to expand capacity. This decision is dealt with in the next subsection.

Costs include project costs, any harmful spillovers, and operational and maintenance costs. Benefits are more difficult to estimate. Each user will have a "willingness to pay" for successive units of service. This is an indication of benefit. It will normally decline as more of the service is consumed (eg, the first 50 litres of water a day that a household takes from its taps is extremely useful; any litres in excess of 200 are likely to have very low or zero value). Total benefits of a proposed project are the sum of the benefits of individual users at the level of infrastructure use that each individual would choose if faced with efficient prices. Figure 11.3 is a simplified diagram representing the calculation of net benefit. The willingness of consumers to pay is represented by a demand curve that shows total estimated demand for the infrastructure services from the project for each level of price charged. The net benefit of investing in a new piece of infrastructure will be positive only if the total willingness to pay (area BCq*0 in the figure) is greater than its total cost (area aDq*0 in the figure).

Figure 11.3 The decision whether to invest in new infrastructure



Notes:

1. q* = use of service when price set to marginal cost, m = constant marginal cost of use, and a = average cost of q*.
2. Total benefit (TB) = area under demand between B and C, and total cost (TC) = aq* = F + mq*, where F is the fixed cost.
3. Investment should proceed only if TB > TC.

Uncertainty further complicates council decisions about infrastructure investments. The cost–benefit procedure that is outlined above assumes that the future is mostly known. In practice, the future will contain significant uncertainties about population, business, jobs and income growth, the progress of technology, the state of the environment, and political and social preferences. As explained in chapter 10, real-options analysis provides a useful and practical framework for handling uncertainties. Keeping valuable options alive will sometimes mean it is better to delay investments. In other cases where, for example, major irreversible damage to the natural environment could occur, it will pay to accelerate investments.

In summary, to make good investment decisions in new infrastructure projects, councils need to:

- identify investment options and assess them for total costs and benefits based on how much use they will attract when priced efficiently; and
- choose and implement the option that maximises net benefits.

A council may find it hard to operate the best option at a cash profit. The next section examines how councils can best approach the challenge of efficiently funding their infrastructure.

Efficient funding of infrastructure

A future planning system should allow councils to recover the full cost of infrastructure fairly and efficiently. It is fair that, in most circumstances, funding should come from users. Yet the large, lumpy nature of infrastructure investment typically means high upfront (ie, fixed) costs and low marginal costs. Average costs decrease with the scale of use and marginal costs typically will be less than average costs even at high levels of infrastructure use. Setting price to marginal cost to encourage efficient use would then leave the councils with a funding shortfall. If so, how should such a deficit be covered?

The council should first check that prices fully reflect all marginal costs (eg, of congestion) and whether peak-load pricing is justified because demand is at or near to the infrastructure's capacity. Congestion and peak-load pricing are efficient and can provide important additional funding. Yet total revenue may still fall short of total cost.

Another way would be for the council to charge a price high enough to recover full costs (ie, a price of b equal to average cost at point E in Figure 11.1). But this would discourage use of the infrastructure at levels where marginal benefits exceed marginal costs and would be inefficient. Instead, councils could reasonably choose to keep the price at the marginal cost of use and raise revenue to cover the deficit by other means that are efficient and fair. Three broad options are (i) some form of "non-linear" pricing, (ii) development contributions and (iii) taxes.

Non-linear pricing

Private infrastructure owners often use two-part or multi-part tariffs rather than a single price for each unit consumed. The generic term for this is "non-linear pricing". A fixed daily charge, discounts for high use and a menu of plans for different sorts of customers are all possible. Each of these is a form of *price discrimination* where more is charged for units of service that are more highly valued. Each extracts more revenue while keeping prices low and close to costs for consumption at the margin. The aim, as far as possible, is to raise revenue from consumers to cover costs, yet in a way that does not discourage additional consumption (in the region where consumers' willingness to pay exceeds marginal cost). (Kahn, 1988; APC, 2007).

Councils can and do use non-linear pricing. They are free within broad limits to set charges for the services they provide, which could include the equivalent of fixed daily charges for water or wastewater. Or councils might use their power to levy targeted rates to impose fixed daily or yearly charges on their service consumers.

Development contributions and connection charges

Councils can sometimes recoup a portion of capital costs from users at the point of new investment in the form of development contributions and connection charges. Where new developments require an extension of local infrastructure, making the new residents bear the costs of installing the extension is efficient (as well as fair).

When those who benefit from new infrastructure pay installation costs, they automatically consider these costs when deciding where to locate. Effectively, the installation costs are the marginal costs of adding capacity to the network (Kahn, 1988, p. 75 / I). These costs are avoidable; so benefits need to exceed these costs for installation to be justified. If developers and buyers of the newly developed property do not face these costs, they will find locating away from the existing network artificially cheap. This can bias development towards greenfield areas and away from land already serviced by network infrastructure. It can also impose the cost burden on existing ratepayers.

When new residents (or developers on their behalf) contribute to capital costs upfront in these ways, fairness demands that councils should recognise this and not also levy special rates targeted at the new residents. If, on the other hand, they do not contribute, it would be fair to charge the new residents a targeted rate so that the cost burden of the new infrastructure does not fall on existing residents.

Taxes that raise revenue efficiently and fairly

Councils in New Zealand use property rates to raise revenue. Rates are a form of taxation. The "efficiency" with which rates raise revenue refers to how little the rates distort a property owner's decisions about investing in and using their property. The concept of rates "fairness" refers to either (1) the "benefit principle" – rates should be levied in rough proportion to the benefit that that property owner receives from council-provided services, or (2) the "ability to pay" principle – collect tax in relation to some measure of income or wealth of the property owner. Section 11.5 describes efficient and fair ways that councils can tax a property owner.

Public amenities such as parks and reserves are obvious cases for using rates rather than pricing to cover infrastructure costs not covered by pricing or development contributions. The marginal cost of their use is zero or almost zero, and it would in any case be impractical and/or costly to levy a charge on individual users. In other cases too, rates revenue may be a suitable supplement to marginal-cost pricing so that councils can cover the full costs of providing infrastructure services.

But keep in mind that most taxes distort decisions and create inefficiency. If this inefficiency is significant, it may be better for councils to not use taxes to raise revenue. Rather, they might charge for infrastructure use at somewhat above SRMC. The council should choose the setting that causes the least overall distortion and inefficiency.

Optimal funding

As a guide, the optimal approach to fully fund infrastructure when costs are decreasing (so that setting price to marginal cost will not cover full costs) is first to use methods that are both efficient and fair. These methods include well-designed non-linear prices and development contributions. If a shortfall still exists, a fair and efficient tax (such as a well-designed targeted rate), should be used. However, if a tax would itself cause significant inefficiency or unfairness, its use must be balanced against the option of raising prices above marginal costs. As Kahn (1988, p. 130) summarises this situation:

> In short, the problem would be one of weighing the benefits of a closer approach to economically efficient pricing made possible by these [tax-funded] subsidies against the possible departure therefrom involved in the taxes required to finance them.

Councils should make this evaluation before using taxes to cover infrastructure costs. They also need to consider the risk of unfairness owing to taxing one group of residents so as to "subsidise" the infrastructure services enjoyed by another group. Using a rate targeted on the residents who use or indirectly benefit from the infrastructure can often avoid this risk.

F11.1 In providing infrastructure, councils should aim for efficient pricing and efficient investment. Efficient pricing may include congestion charging, multi-part tariffs, development contributions and connection charges. In some instances, rates revenue may supplement these sources of revenue so as to cover the full costs of infrastructure.

Other considerations

Other considerations include practicality and ease of administration, merit goods, public goods, and governance.

- Practicality and administrative ease: Marginal cost pricing requires a way of measuring the level of services that consumers use – typically through some form of metering. The cost and practicality of monitoring service is often rightly raised as an obstacle to more efficient pricing of infrastructure services. Yet, in some cases, advances in technology are reducing the cost of monitoring service use and providing opportunities to develop sophisticated pricing mechanisms. For instance, rapid advances in transport and communications technology have created opportunities for variable road pricing (Box 11.3). Even so, the potential for marginal cost pricing requires weighing up the benefits and cost of each

case. Often benefits and costs can only be known with considerable uncertainty. This calls for sensible approximations rather than pretending that precision is achievable.

- Merit goods: The economically efficient pricing of infrastructure services may not lead to a distribution of services that society considers equitable. While recovering full costs from users is "fair" in that only those who benefit from the services pay for them, there may be instances where the community expects that everyone should have access to a minimum level of service – regardless of their ability to pay. Such examples are sometimes called "merit goods". Deciding which things are merit goods is a value judgement that the community makes through the political process. When it does, the community pays some of the costs of providing infrastructure services. Council should choose how to do this openly and transparently, so that the community has good information about who is receiving, and who is paying for, subsidised infrastructure services.

- Public goods: Some types of infrastructure have public-good characteristics. As discussed in Chapter 3, public goods are those that many people can enjoy simultaneously and where it is impossible (or prohibitively expensive and therefore impractical) to exclude people from benefiting once the good is provided. Examples of local public goods are a park, playground or attractive waterfront. Public goods can be viewed as extreme cases of infrastructure services with high fixed costs and low marginal costs. The marginal cost for additional people to enjoy the services is zero – at least up to the point where the facility becomes congested. The efficient price for these services is appropriately zero, so they require other sources of funding (typically taxes or rates).

- Governance: Even if the requirements for efficient pricing, investment and funding of council infrastructure are clear, governance and other institutional arrangements must support efficiency and fairness. The arrangements need to promote the wellbeing of residents (as both consumers and ratepayers), and protect against provider interests and political pressures that can skew decisions in favour of particular groups. Arrangements could include:

  - assigning operational responsibility for specific infrastructure services to a council controlled organisation (CCO) with strong business capability and a clear focus on economic efficiency;

  - muting short-term political pressures by not allowing councillors or council staff to be directors of CCOs (NZPC, 2012b, p. 201); and

  - developing and publishing performance indicators for service standards and efficiency, and having a system that benchmarks the indicators over time and against those of similar operators.

11.3 What tools are currently available to councils to fund infrastructure?

Current laws give local authorities a number of tools to recover the costs of infrastructure.

- Development contributions: These contributions are charges levied on developers under the Local Government Act 2002 (LGA) to recover the portion of new infrastructure that is related to growth. They can be charged for the capital costs of connections to trunk infrastructure (water, wastewater, stormwater, roads and other transport), and community infrastructure (such as neighbourhood halls, reserves, playgrounds and public toilets). They can be charged when a resource consent, building consent or service connection is granted. Councils are required to set out a development contributions policy that explains how contributions are calculated and explains the underlying assumptions.

- Financial contributions: These contributions are charges set under the RMA that provide councils with resources to avoid, remedy or mitigate adverse environmental effects. Financial contributions can take the form of money or land and must promote the sustainable management of natural and physical resources. They may be applied to fund capital expenditure on similar assets to development contributions, but cannot be used to fund the same expenditure for the same purpose, or to fund operating spending.

- **Prices and user charges:** Under the Local Government (Rating) Act 2002, councils can set volumetric charges for drinking water. They may be calculated as either a constant price per unit of water supplied and consumed, or according to a scale of charges. Councils can also charge per use for services such as solid waste collection, swimming pools, facilities hire and other council-provided services. Such charges help recover operating costs and may contribute to capital costs.
- **Targeted rates:** The Local Government (Rating) Act 2002 allows councils to set targeted rates to fund infrastructure and services that benefit identifiable taxpayers. Christchurch City Council, for example, has targeted rates for properties near new cycleway projects, those that benefit from land drainage and some that are connected to specific water and sewerage schemes.
- **General rates:** General rates are levied on property owners based on the value of property. They are a major revenue source that councils use mainly to fund operating spending. But councils may use general rates in a variety of other ways, including funding new infrastructure assets or the interest costs on debt incurred to finance them.
- **Uniform annual general charges:** These charges are levied at a fixed rate for each property to fund council operating spending.

As an alternative to councils providing trunk infrastructure and recovering costs through development contributions, developers sometimes directly provide infrastructure through **development agreements** (a form of contract with local authorities). Once completed, the infrastructure is vested in the council. In this case, the council does not bear any capital costs for the infrastructure, but will need to meet ongoing operational, maintenance and depreciation costs.[92]

As discussed in Chapter 5, local authorities receive substantial financial support from central government to help meet land transport capital and operating expenses through the New Zealand Transport Agency (NZTA) and the National Land Transport Fund. The Government has also recently established a $1 billion infrastructure fund to "accelerate the supply of new housing where it's needed most" (Minister of Finance (Hon. Bill English) & Minister of Building and Housing (Hon. Nick Smith), 2016). The contestable fund will be open to applications from Christchurch, Queenstown, Tauranga, Hamilton and Auckland Councils and used to "bring forward the new roads and water infrastructure needed for new housing where financing is a constraint" (English & Smith, 2016). Councils will be expected to repay the funds, or buy the infrastructure assets, once houses have been built and development contributions paid.

11.4 Barriers to providing infrastructure efficiently

A number of barriers can or do impede councils from providing infrastructure in a timely and efficient manner in response to growth pressures. Broadly grouped, the main barriers are:

- political economy;
- funding;
- financing; and
- legislative.

Political economy barriers

Pressure from existing residents who are fearful that growth and development will impact them in negative ways is a potent influence on council politics and decision making. A typical fear of existing residents is that the need to fund expensive new infrastructure to accommodate growth will mean rate rises and higher debt burdens for them. As documented in the Commission's *Using land for housing* report, this often leads existing residents to oppose city expansion (NZPC, 2015a). Responding to this pressure, councils are often wary of the big-ticket infrastructure items that successful growth requires.

[92] Councils also incur operating, maintenance and depreciation expenses for assets vested in them within subdivisions or created as part of a resource consent condition.

Resistance to rates and debt increases

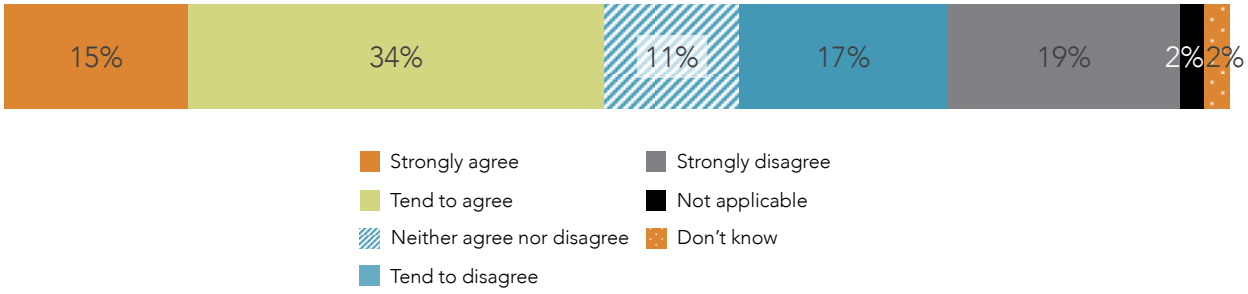
Faced with a large item of infrastructure expenditure, councils have the choice of funding tools listed in the previous section. A key question is whether councils can use these tools to fund the costs of growth out of revenue generated by growth, without imposing a significant burden on existing ratepayers? The most obvious sources of revenue from growth are development and financial contributions, user charges and targeted rates – all of which are or can be aimed at new residents. In addition, new residents add to revenues from general rates because growth produces an increased number and higher-valued rateable properties.

Despite this additional revenue, many councils face opposition from existing residents. While development and financial contributions are capital sums, they rarely cover full capital costs of new infrastructure. Rather than raise rates to cover the difference, councils have the option to borrow and repay the debt over time in line with the life of the asset and the benefits it delivers. Indeed, this is the fair way of spreading infrastructure costs rather than loading them onto current ratepayers (NZPC, 2015a, pp. 207-208).

In practice, councils typically encounter opposition to both higher rates and higher debt. They are not even seen as alternatives. Councils report that they face strong community opposition to debt due to a perception that future repayment obligations will result in rates increases (NZPC, 2015a, p. 211). Respondents to the Commission's survey of local authorities confirmed that many saw rates levels as a barrier to the provision of infrastructure (Figure 11.4).

Figure 11.4 Local authority response to the statement…

"The main barrier to funding our infrastructure needs is we have reached the limit of rating increases."



Source: Colmar Brunton, 2016.

Resistance to full pricing of infrastructure

Political resistance also comes in the form of opposition to charging for infrastructure services. For example, reflecting community opposition, relatively few councils have introduced volumetric charges for water.[93] The Local Government Infrastructure Advisory Group (2013) observed:

> Despite identifiable benefits in volumetric charging, water metering is a contentious issue. The 2009 - 2019 draft LTP from Waikato District Council reported that the most common responses offered by members of the public who opposed water metering included: that metering was a money-making exercise for the council; that other water management tools should take priority, such as water tanks and education programmes; and that it was inequitable for low income households who would struggle to pay for water… There is also a degree of concern that charging for water on a user-pays basis is the first step towards privatisation. This is unfounded. (pp. 93–94)

Funding barriers

Some councils say they have inadequate means to fund new infrastructure

Councils told the Commission in its *Using land for housing* inquiry (2015) that they hold back from investing in infrastructure, or at least take a cautious approach, because they believe that "growth does not pay for itself'' and are concerned about imposing additional cost burdens on existing residents. In a 2015 New Zealand Institute of Economic Research survey (NZIER, 2015), most councils in high-growth areas

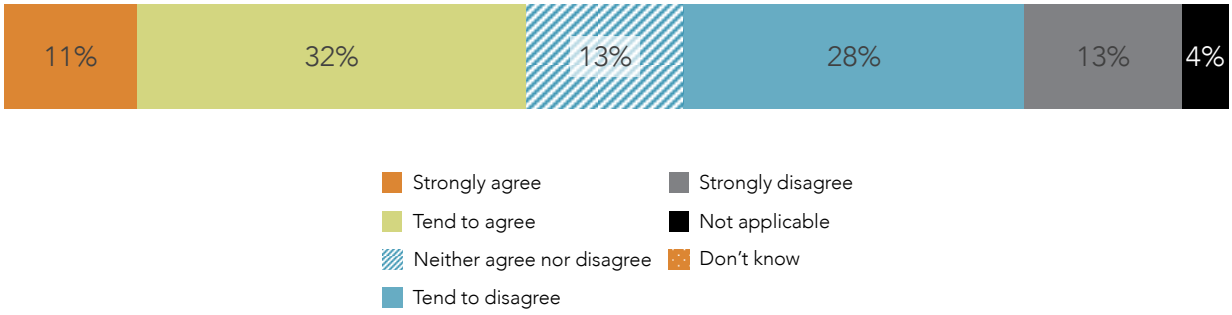
[93] Councils are permitted to charge volumetrically for water but not wastewater (except in Auckland where Watercare is permitted to do so).

reported that the cost of new infrastructure was a very important factor influencing the rate of residential development. More than half cited that city budget constraints were important.

Participants in the current inquiry exhibited similar concerns. Of the councils that responded to a 2016 survey by the Commission, 43% found that the inability to fund infrastructure (despite it having a strong business case) often stops or delays the investment (Figure 11.5)

Figure 11.5 Local authority response to the statement…

"Our council often does not invest in, or delays investment in, needed infrastructure that has a strong business case because it cannot fund it."



Source: Colmar Brunton, 2016.

Notes: Because of rounding, totals may not sum to 100%.

To alleviate these perceived funding barriers, several participants support providing councils with alternative funding options to pay for infrastructure (Box 11.1).

Box 11.1 **Alternative funding options for councils – some views from submissions**

Duncan Rothwell

> Different house building and infrastructure models need to be explored, particularly in the context of delivering physical (road, rail, utilities, etc.) and community infrastructure (such as affordable housing, schools, hospitals, emergency services). The current system is not working and the way infrastructure costs are being paid for is arguably unfair with a significant proportion of costs becoming a financial burden on Government and the average New Zealander (indirectly through taxation). (For example, a recent report by Cambridge Horizons suggests the true costs of community and physical infrastructure can be as much as $115,000 per dwelling; and it is unlikely this figure is met by the main beneficiary.) (sub. 38, p. 5)

SmartGrowth

> SmartGrowth is of the view that alternative funding systems would significantly improve the ability of councils to provide the necessary infrastructure to support growth. A much greater mix of funding tools is required than what currently exists. (sub. DR63, p. 3)

Water New Zealand

> Water NZ supports providing councils with alternative infrastructure funding options as this will assist in addressing the funding shortfall which can often mean delays to the implementation of infrastructure. (sub. DR67, p. 11)

Wellington City Council

> As indicated, the Council is fundamentally supportive of any tool being made available that provides local government with alternative funding options. (sub. DR68, p. 19)

Auckland Council

> The council supports being able to access a broader range of funding tools, this could include the use of road pricing in the form of congestion management tools and the ability to use public private partnerships. (sub. DR86, p. 10)

Does growth pay for itself and if so over what period?

Whether the additional revenue that a council receives from growth covers its costs of needed new infrastructure (and so will not impose any significant burden on existing residents) is a key question. Since revenues and costs arrive at different times, it is best formulated as follows: will the *net present value* (NPV) of the flow of additional revenues that a council receives from a new development over time equal or outweigh the NPV of the costs of providing services to the residents of the development?

To supply these services, a council faces first the large capital cost of installing new connecting infrastructure to the development – mostly the three waters and roads, but also parks and other community facilities. Then it faces the operating costs associated with supplying the services –costs that will continue over many years. On the revenue side, the council (or its CCOs) may collect one-off development contributions and connection charges to put towards capital costs, and, over time, user charges, general rates, and possibly targeted rates from the new residents.

If the NPV of revenues is equal or greater than the NPV of costs, a council will end up in the black – even though it may experience negative cashflow in the early years. Borrowed funds could cover these cashflow deficits and the revenues in later years would cover interest on the loan and eventually repay it. At some point during the life of the asset the NPV of revenues will overtake the NPV of expenditures. This "payback period" is of interest because it indicates the length of time in which finance from council debt (or another source) will be required. Of course, if the NPV of revenues turn out to be less than the NPV of costs then the council would have to resort to funding the difference from another source such as existing residents.

The Commission has examined two modelling exercises that have attempted to estimate the NPVs of costs and revenues from urban growth and how they compare (Box 11.2). Neither has been able to answer it conclusively owing to lack of information on key items.

Box 11.2 Financial modelling of the net costs of growth for local authorities

The Commission contracted SGS Economics and Planning to compare the revenues and costs accruing to Auckland Council from an average new development over a 30-year period. The study also compared these revenues and costs for greenfield and infill developments. The analysis used data for Auckland gathered from historical revenue figures, and costs estimated in an earlier study for Auckland Council by the Centre for International Economics (2015).

SGS also used Auckland Council figures to include their revenues from development contributions and Watercare's infrastructure growth charges. Together these covered a high proportion of their capital costs associated with new developments, leaving user charges, general and targeted rates largely available to cover operating costs. The study's results suggest that the payback periods are remarkably short – around seven years for greenfield developments and less than that for infill developments.

In practice, payback periods could be much longer. This could occur if infrastructure were more expensive, a smaller proportion of the capital costs were recovered from development contributions and infrastructure growth charges, or if operating revenues were lower or costs higher. (The CIE operating costs included only those for road maintenance and public transport.) To illustrate this, SGS estimated that if infrastructure costs for greenfield and infill respectively were $53 000 and $44 000 rather than the CIE estimates of $45 000 and $30 000, and only 60% of general rates of the new residents were available to help pay for the new infrastructure (both quite reasonable alternative assumptions), then the payback periods would extend to 30 years.

Another study, commissioned by the Ministry of Business, Innovation and Employment, used publicly available information to estimate growth-related spending and revenue for nine high-growth councils in New Zealand. The results indicated that the cost of growth-related infrastructure would not generally be fully recovered over a council's 10-year planning horizons, but that most councils would break even or earn a profit over 25 years. Morrison Low emphasised the crude nature of some of the assumptions they had to make, and that their findings were therefore only "tentative". Further work aiming to minimise the number of these assumptions (through discussions with councils) is planned for early 2017.

Source: SGS Economics and Planning, 2016; Morrison Low, 2016.

While both of the studies discussed in Box 11.2 offer some insights into the net costs of growth, their findings should not be used to draw definite conclusions about whether growth pays for itself. Due to lack of accurate data, both studies made several strong assumptions. Further, neither study included infrastructure costs not related to specific new developments. These include community assets such as libraries and sports facilities, expensive city-shaping infrastructure and the costs of securing land for future infrastructure corridors and public open spaces that are required as large, fast-growing cities expand.

Demand risks

The ability of councils to fund infrastructure can also be undermined by demand risks.

- The rates of demand growth factored into development-contribution calculations are by no means certain. The lumpy nature of urban infrastructure extension may lock councils into investments in particular facilities even when lower-than-expected revenue streams to fund the works in question eventuate.
- Risks associated with the fragmented and un-sequenced nature of development in most growth areas can add to roll-out costs compared to the calculations underpinning development contributions.

If councils overestimate future demand, they may face high borrowing and depreciation costs on underused assets, at the same time as facing a rating-revenue shortfall relative to expectations. These risks were highlighted in a number of the submissions to the Commission's recent *Using land for housing* inquiry. For example:

> Councils will normally invest in infrastructure to service growth before the growth occurs – sometimes a long time before growth occurs. This time lag is further complicated if growth is lumpy or unpredictable, which could lead to a significant time lag between infrastructure provision and the ability to recover the costs of growth through development contributions or rates. (Christchurch City Council, sub. DR90, p. 9)

> It should be acknowledged that Councils take on huge financial risks to manage and facilitate urban and population growth. In most cases where people and organisations take on risk it is because of the expectation of reward. TCC's view is that this risk/reward framework is missing and is the fundamental key to addressing issues like land supply and housing affordability. (Tauranga City Council, *Using land for housing*, sub. 47, p. 18)

> Despite this council has decided to mitigate the risk that the growth assumptions do not transpire by setting aside a portion of general rates to ensure that if required costs can be covered where infrastructure has already been provided. (Waikato District Council, *Using land for housing*, sub. 12, p. 21)

Faced with such uncertainty, any other investor in infrastructure funded by a user-pays stream would require a significant risk premium built into their tariffs or tolls. In the absence of this, some councils respond to the uncertainty about whether and when their investments will pay for themselves by taking a very cautious approach that in turn leads to shortages of "ready to go" land for development.

Funding pressures for councils in areas with declining populations

Councils facing the prospect of a population decrease in their town or region must continue to fund their infrastructure needs with a smaller rating base. While population decline removes any need to invest in

growth infrastructure, councils still need to maintain services and replace their infrastructure assets over time. As property rates are the primary source of local government income, doing so can be challenging. Gibb (cited in Radio New Zealand, 2014) explains how declining councils can struggle to fund their essential infrastructure services.

> A lot of these smaller towns in rural New Zealand that have got reticulated supplies are facing static or declining populations, which causes challenges round supplying water services because, of course, they depend on funding…These services are capital intensive. So if you've got static and declining populations and your funding base, through your rating base, is put at risk then you're faced with a situation such as Ohura is, where the council has said, 'Well look it's actually cheaper to take the reticulated services out and put catchment from roofs in place' (p. 1).

Many territorial authorities projected to experience population decline comprise small towns and rural areas (Chapter 4). As McKinlay and Selwood (2014) comment, having a small population can pose a challenge for councils.

> Many local authorities are very small scale entities. Local funding mechanisms lack economies of scale. Within the transport sector central government funding is skewed by subsidy rates that favour state highway solutions (funded at 100%) over local roads (which require 50% local funding). Failure to meet local share requirements reduces funding for local roads in favour of state highways. The net result is insufficient money to do the job (p. 11).

F11.2 When a council faces a population decline in the area it serves, the council's rating base will decrease. This means the council could face a struggle over time to maintain and renew essential services. This will be especially true for smaller councils that lack economies of scale.

Financing barriers

To meet the costs of infrastructure investments, councils have a choice between pay-as-you-go financing, and borrowing – between paying up front, and spreading payments over the life of the asset. The Commission explored this choice in its *Land for Housing* report. For long-lived assets not specific to a new development, it saw borrowing as the way to go because of intergenerational equity, ability to bring forward needed investments, and ability to service debt from rates income (NZPC, 2015a p. 207, F9.1).

Debt is the largest source of finance for capital spending for most councils (Figure 5.8). Yet councils' use of debt has been very conservative: a study by Grant Thornton (2014) found all high-growth councils rated "sound" or higher. NZIER estimated an average gearing ratio for local authorities of 6.8% (ratio of debt to existing assets). Gearing ratios of local authorities have been much lower than for central government (Figure 11.6) and large companies in the private sector. Contact Energy, Fletcher Building, and Vector had gearing ratios of 36%, 27%, and 44% respectively in 2016.

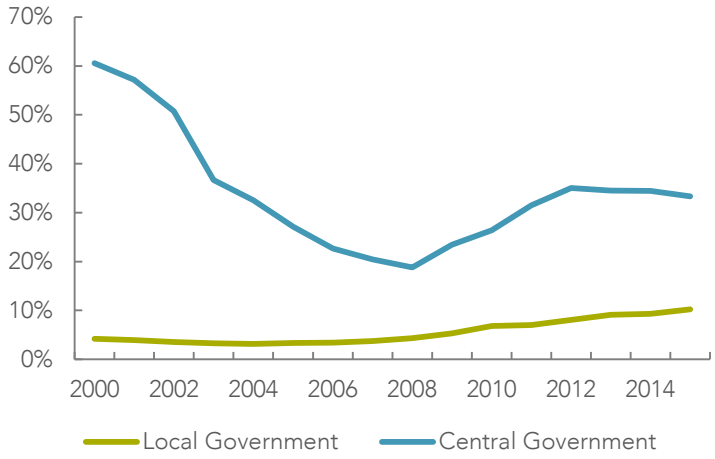
Self-imposed debt limits or those that are externally set can lead councils to tightly ration the supply of new infrastructure, as a number of submitters to the *Using land for housing* inquiry commented:

> The Productivity Commission needs to recognise and appreciate that significant public and Government scrutiny has been placed on local government debt and rates increases. (Palmerston North City Council, *Using land for housing*, sub. DR95, p. 4)

> The Council's ability to provide infrastructure faster to facilitate development is constrained because of … the need to balance this investment against management of the city's debt, including debt to revenue ratio, maintaining our credit rating, and maintaining affordable rate increases [and] [t]he Council's obligations to comply with the Local Government (Financial Reporting and Prudence) Regulations. (Hamilton City Council, *Using land for housing*, sub. 70, pp. 8–9)

> Councils are constrained by revenue / debt ratios and their impact on Council credit ratings. Together with political pressure to keep rates and debt levels low a constant tension exists between providing infrastructure for the growth of our cities and communities and meeting the expectations of current communities. (Te Tumu Landowners Group, *Using land for housing*, sub. 40, p. 13)

Figure 11.6 Local and central government gearing ratios



Source: Statistics NZ.

Barriers to councils making more use of debt can be an important cause of urban development failing to keep pace with demand. Even if infrastructure investment to support growth provides a net financial gain to councils over reasonable payback periods, an inability or unwillingness to borrow to finance the investment may well stop it going ahead.

Reasons for councils not taking on more debt

Several reasons are possible for councils not taking on more debt:

- credit-rating risk;
- debt benchmarks in the Local Government (Financial Reporting and Prudence) Regulations, 2014 which are monitored by the Department of Internal Affairs (DIA);
- Local Government Funding Authority rules; and
- political pressures.

Credit-rating risk

Some councils are rated by one of the three main credit-rating agencies – Standard & Poor's (S&P), Moody's and Fitch. Of the 24 rated councils, 14 have an AA rating, 5 an AA- and 5 an A+. In the last three years, four councils have had their ratings upgraded and none has suffered a downgrade (LGFA, 2016). Agencies have their own methodologies for making credit-rating assessments of local authorities. Debt-to-revenue ratios are only one factor. Even so, S&P has warned Auckland Council of a rating downgrade if its debt-to-revenue ratio exceeds 270% (New Zealand Herald, 2016). Harbour Asset Management (2016) estimated Auckland Council's ratio to be close to 250% in September 2016 (based on Harbour's assessment of S&P's methodology) and forecast to rise.

Unlike for most councils in New Zealand, debt constraints have a very real bearing on the ability of Auckland Council to invest in necessary infrastructure, compromising its capacity to deal with a rapidly increasing population. It is clear from its latest 10-year (2015–2025) long-term plan (Auckland Council, 2015b, section 4.2) that the Council does not have the balance sheet capacity to do all the projects it would like to do:

> The gap between the demand for infrastructure and our funding constraint is so large that efficient and innovative infrastructure management will not be sufficient to solve the problem. …..
>
> For transport alone, the gap between the 30 year funding requirement identified in the Auckland Plan and currently available funding sources was estimated to be $12 billion.

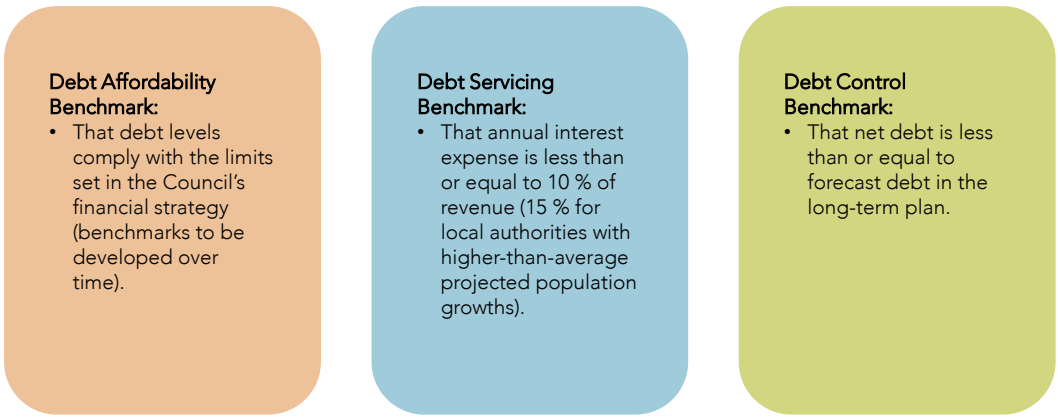
What would be the likely consequences if a council such as Auckland suffered a credit downgrade? Specialist finance staff at Auckland Council and the LGFA told the Commission that it would likely lead to an increase in the interest cost of new debt of 0.1% to 0.15% (10 to 15 basis points) or $1 million to $1.5 million a year on a loan of $1 billion. This may not seem large, yet the Council's reputation in the eyes of credit-rating agencies and investors would take a serious hit if it made a deliberate choice to exceed a limit knowing that it would cause a downgrade.[94] Also, a two-notch downgrade of Auckland would very likely cause a downgrade of the LGFA's credit rating, leading to a rise in the cost of borrowing for all councils in New Zealand.

Debt benchmark regulations

Central government has increased its scrutiny of local authority debt levels. Regulations introduced in 2014 require councils to report (in their annual plans, annual reports and long-term plans) their actual and planned performance against a number of financial prudence benchmarks (Figure 11.7). One of these benchmarks is the debt-servicing capacity of local authorities. It is met if the costs of servicing loans for the year are no greater than 10% of revenue. For high-growth local authorities, this threshold is set at 15%.

The regulations focus on financial plans and are not "hard" limits. They require councils to prepare disclosure statements about compliance and related information. Central government has graduated intervention powers. Any council acting "imprudently" is likely to be noted in the Office of the Auditor-General's report to Parliament; the council could be subject to a request to report to the Minister, the appointment of a Crown Observer, a Crown Manager or, in an extreme case, replacement by Commissioners or an early election (Minister of Local Government, 2012).

Figure 11.7 Local government financial prudence benchmarks



Local Government Funding Agency rules

The Local Government Funding Agency (LGFA) was established by local authorities in 2011 with central government support. The LGFA's task was to apply scale and specialisation so as to access national and international sources of debt finance more cost effectively. The LGFA undertakes its own internal credit assessment and rating process for all council borrowers. The primary criteria are:

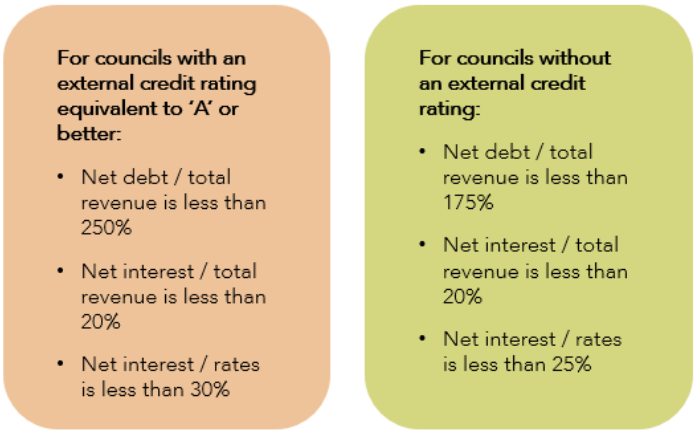
- debt levels relative to population;
- debt levels relative to asset base;
- ability to repay debt;
- ability to service debt (interest cover); and

[94] Even the current prospect of future debt strain has led Harbour Asset Management (2016) to advise investors to be cautious: "Auckland Council's significant operating surplus is testament to its current prudent fiscal management. However, it has been dealt a difficult hand with a need to provide infrastructure to a growing population who will only pay for the upfront cost over time. Until a sustainable solution is reached, the risks make us cautious as a debt investor."

- population trends.

The LGFA imposes lending covenants on council borrowers. Local authorities with a long-term credit rating of 'A' equivalent or higher (currently all rated councils) are subject to slightly less restrictive financial covenants (Figure 11.8).

Figure 11.8 LGFA financial covenants



Unlike the benchmark regulations these are "hard" limits. Non-compliance will preclude a council from borrowing and trigger a review. Default will occur if a council fails to meet an interest or principal payment and after 30 days the LGFA can seek repayment of all loans. As at 30 June 2015 all member councils were compliant with these ratios. A further LGFA rule limits its exposure to its largest single borrower – Auckland Council – to no more than 40% of LGFA total funding (currently it sits at 33%).

Political pressures

As documented above under "Political economy barriers", councils can face strong political pressures from ratepayers not to increase their debt levels. Often this is due to a perception that future repayment obligations will result in rates increases. Several submitters to the Commission's *Using land for housing* inquiry noted community pressure on councils to constrain debt:

> … a lot of Councillors use "reduce debt" as one of their election platforms. (Carrus Corporation, sub. 10, p. 5)

> … debt reduction was the primary election platform that the majority of the Tauranga City Council Councillors stood on in the 2013 Local Government elections. (Te Tumu Landowners Group, sub. 40, p. 13)

Legislative barriers

Current legislation is relatively enabling of local authorities to recoup infrastructure costs. However, prohibitions prevent them from using some funding tools.

- Targeted rates: Under the Local Government (Rating) Act 2002, councils are unable to impose targeted rates based on changes in the value of property. This prevents councils from introducing funding tools that capture some of the uplift in property values generated by infrastructure investment.
- User charges: Councils (or their subsidiary infrastructure providers) are not permitted to charge volumetrically for wastewater. Auckland (where water services are delivered through the CCO Watercare) is the only area where volumetric charges are used for wastewater. Current legislation also provides only limited opportunities to apply user charges for roads (eg, tolls and congestion fees). Under the Land Transport Management Act 2003, tolls may only be established with the approval of the Minister of Transport and only applied to new roads.

In other cases, councils face pressure from developers to reduce development contributions:

> Most Councils are under pressure from developers to reduce or eliminate development contributions. This is particularly the case going in to and during periods of low construction demand when developers (and some councillors) believe development contributions are an unreasonable impediment to growth. (Christchurch City Council, DR90, p. 9)

> Auckland Council's 'per lot' contribution was seriously under calculated meaning that there was a negative cascade effect on all parts of the council that rely on funding through growth DCs for their projects… Too often developers react aggressively to their DC bill and council agreement to reduce the bill is common. This is not a sustainable approach. (A L Christensen, *Using land for housing*, sub. 7, p. 2)

The net benefit from removing barriers to efficient provision of infrastructure

The Commission has heard and read much evidence that the lack of timely investment in infrastructure is a critical cause of councils in high-growth urban areas failing to provide sufficient "ready to go" land to meet demand for development. Yet such investment would have a very high social rate of return. This is evidenced by extremely high and growing prices of such land reflecting people's willingness to pay for housing and the benefits they perceive they will receive. Costs also appear to be high, but that is deceptive. The economic cost of land is its next best alternative use, and that price is well below urban land prices in fast-growing cities. For example land prices within Auckland's Metropolitan Urban Limit (MUL) were nearly 10 times more expensive than prices outside the MUL in 2014 (NZPC, 2015a, p. 312).

Interest rates are also at historical lows because of low inflation pressures, and many savers are competing to put their money into relatively scarce investment opportunities. Yet, here are very secure investment opportunities with high social rates of return that are not being taken up. It is very important that a future planning system overcome the barriers preventing this.

To recap, the reasons that councils invest too slowly or under-invest in infrastructure are that:

- a good proportion of the increase in revenue resulting from growth is received many years after the initial investment, creating short-term financing burdens for councils;
- councils face demand risks;
- debt limits constrain some councils from financing the large upfront costs;
- the cost of securing infrastructure corridors and public open spaces typically need to occur well in advance of development (Chapter 10);
- councils do not fully use existing funding tools; and
- councils face political pressures from ratepayers not to increase rates or debt.

Given this array of factors, the Commission believes that the funding and financing toolkits of councils should be expanded to improve councils' ability to provide infrastructure, and the land needed for future infrastructure and public open spaces, adequately and more efficiently.

F11.3 Councils, particularly in high-growth areas, often invest too slowly or underinvest in infrastructure, even though the additional revenues from growth are likely to cover the costs over the lifetime of the asset. Reasons include the front-loaded costs of infrastructure relative to growth revenue, debt limits, reluctance to fully use existing funding tools, and political pressures to keep rates low and avoid debt. City-shaping infrastructure and securing land corridors and public open spaces for future expansion put additional demands on revenue sources.

F11.4 Legislative, political, funding and financing barriers are limiting the ability of local authorities to provide sufficient infrastructure for development despite the high social returns that investing in such infrastructure would deliver.

R11.1 Growth should pay for itself. Councils' funding and financing tool kits should be expanded so councils can cover the costs of growth – infrastructure investment and securing land for future infrastructure corridors and public open spaces – adequately, efficiently and fairly.

Section 11.5 describes the Commission's proposals for expanding the funding toolkit of councils in a future planning system. Section 11.6 describes its proposals for improving their financing toolkit.

11.5 Funding infrastructure in a future planning system

Section 11.3 described how infrastructure should be provided efficiently, while section 11.5 identified some of the funding, financial, legislative and political barriers to efficiency within the existing planning system. This section lays out how the Commission believes infrastructure should be funded in a future system. It focuses on how councils should use the funding tools currently available, such as development contributions, targeted rates and user charges. It also discusses the merits of some alternative funding options. Where legislation prevents councils from introducing funding tools that the Commission considers would deliver net benefits, it identifies the changes needed.

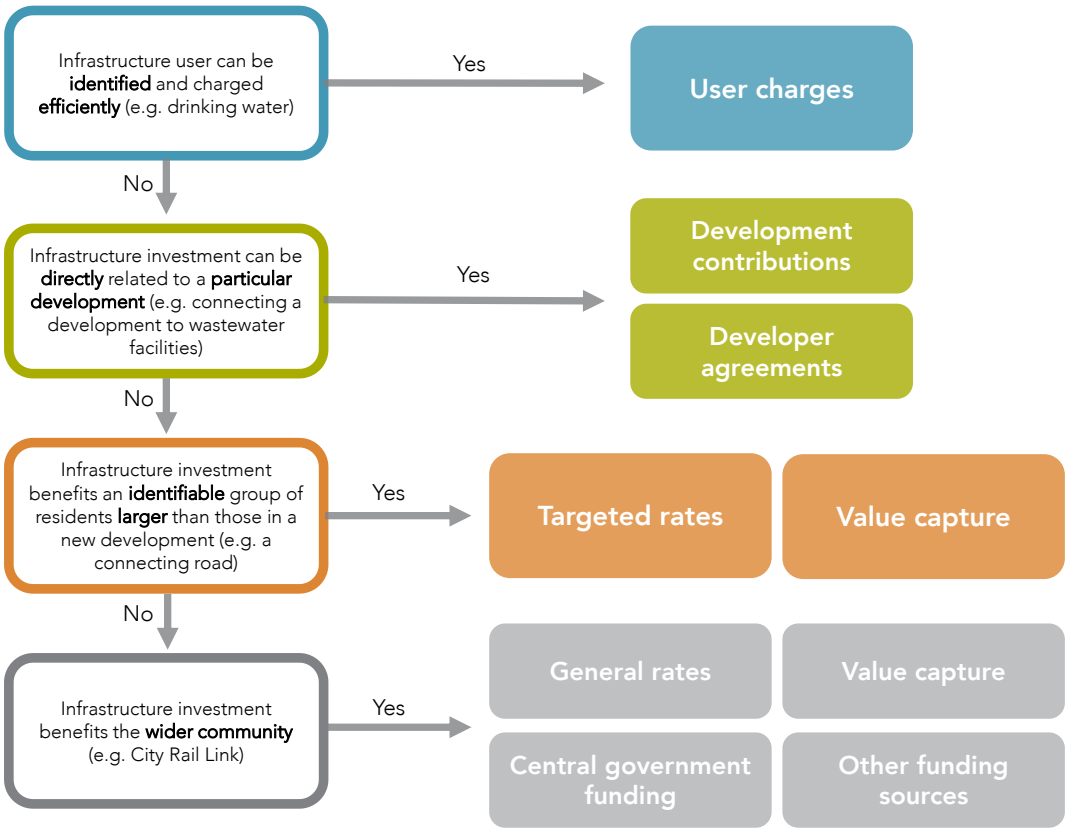
Decision framework for funding infrastructure

A future planning system should allow councils to recover the full cost of infrastructure fairly and efficiently. Funding infrastructure efficiently means providing it to the extent that its benefits exceed its costs. Doing so fairly means that the revenue raised to recover costs should roughly reflect the benefits people receive from council-provided services. It may also be appropriate in some cases for contributions to reflect ability to pay.

Estimating the benefits of an infrastructure investment is not always straightforward. Where the benefits of an investment are localised, linking the costs to a particular development or infrastructure user is relatively easy. For instance, in the case of a local park, a reasonable estimate of the benefits would be based on the number of local residents who use the park (including how often and for how long). Yet other types of infrastructure spending can deliver benefits that are less predictable and more dispersed across a community. For example, the expansion of a city's public transport network would likely improve connections between people, increase commercial activity for nearby businesses, provide new job opportunities and improve the quality of life for many city residents.

Different types of infrastructure investments are therefore suited to different funding arrangements. Following its draft report, the Commission contracted Robin Oliver to prepare a report evaluating options for funding local infrastructure. Based on Oliver's report (Oliver, 2016), the Commission has developed a decision framework for councils as a guide to the most appropriate funding arrangement for an infrastructure investment. Figure 11.9 is a diagram of this framework.

Figure 11.9 Decision-making framework for funding infrastructure



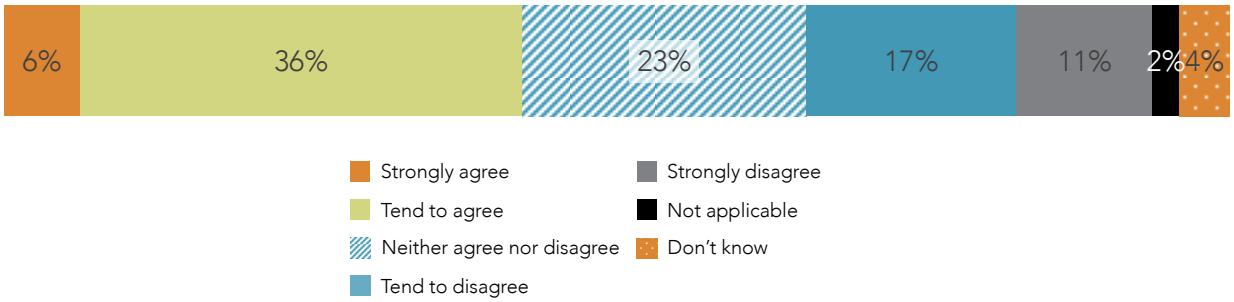
The framework represents the hierarchy of tools that are or, in the Commission's view, should be available to councils to fund local infrastructure. The appropriate tool to fund an infrastructure investment depends on the nature of the benefits the infrastructure provides. It also depends on whether it is possible to apply the funding tool practically and efficiently. For instance, where the user of an infrastructure service can be identified and charged efficiently, councils should implement user charges. Where this is not the case but the benefits are localised, councils should consider development contributions and targeted rates. Investments that benefit a wider range of residents and business across a city or town may be better suited to revenue sources such as value capture, general rates and central government funding.

Use of pricing and user charges, where practical and efficient

The legislative barriers to volumetric charging for wastewater, and to the use of tolls and congestion charges to manage demand on existing roads, impede the development of a more efficient funding system without a clear rationale. They unnecessarily limit the revenue sources of local authorities and their ability to ensure the efficient use of their assets and resources. Over 40% of the respondents to the Commission's survey of local authorities thought greater use of user charges was needed (Figure 11.10). And a majority of respondents to a 2015 survey of 5 000 Auckland residents favoured the introduction of a motorway user charge to fund a more comprehensive transport network (Colmar Brunton, 2015).

Figure 11.10 Local authority response to the statement…

"The problem of funding urban infrastructure could and should be addressed through more extensive use of user charges."



Source: Colmar Brunton, 2016.

Note: Due to rounding, figures may not sum to 100%.

Water consumption and road use are two of the largest infrastructure services provided by councils. Other countries make more use than does New Zealand of charging for water consumption and road use. This is partly a result of legislative restrictions. For example, New Zealand has three toll roads: the Northern Gateway Toll Road (north of Auckland); the Tauranga Eastern Link Toll Road; and the Takitimu Drive Toll Road (in Tauranga). No roads in New Zealand have a congestion charge. The United Kingdom has congestion charges in London and Durham, and charges on parts of the M4, M6, M25 and M48 motorways as well as on many bridges and tunnels on other roads. In the case of water, all urban water businesses in Victoria, Australia charge their customers for water by volume. Such charges for water are rare in New Zealand.

Councils in New Zealand that have introduced water metering and charging have seen significant behavioural changes.

- After Kapiti Coast District Council brought in volumetric charging and water metering, more than 340 water leaks (amounting to a daily loss of 1.8 million litres) were detected on private property (Local Government Infrastructure Advisory Group, 2013).
- Universal water metering in Auckland has led to a significant reduction in demand. Gross consumption per person declined from about 400–425 litres a day (in the 10 years before meters were introduced) to about 274 litres a day in 2013 (Watercare, 2013).
- Universal water charging in Tauranga reduced peak demand by about 30% and average demand by about 25%. This meant that construction of a proposed new water scheme, and upgrades to wastewater treatment and collection systems, could be delayed. The 30-year NPV of the savings generated by metering and charging has been estimated at $83 million (Sternberg & Bahrs, n.d.).

Greater use of road pricing is likely to have benefits, especially in Auckland (Box 11.3).

Box 11.3 **Reducing traffic congestion in Auckland**

Traffic congestion in Auckland is estimated to cost about $1.25 billion a year compared with free flow conditions (Wallis & Lupton, 2013). The Organisation for Economic Co-operation and Development (OECD) points out that while continuing investment in new road infrastructure will probably provide net benefits, better ways are available to manage demand. Charging higher tolls at peak times could help to shift road use away from the peaks (OECD, 2015d, p. 33). Also,

> [c]omplementing the additional investments in road infrastructure with better mechanisms to manage the demand on the network is essential to improve efficiency and reduce costs, particularly in Auckland, where the level of congestion and variability of travel times during peak hours is high. (OECD, 2015d, p. 97).

The Ministry of Transport commissioned two studies in 2006 and 2008 (Auckland Road Pricing Evaluation Study 2006 and Auckland Road Pricing Study 2008), which examined how pricing could reduce congestion and raise revenue for investment in land transport. Most recently, the Auckland Transport Alignment Project (ATAP), conducted under the auspices of the Government and Auckland Council, has been reviewing the strategic approach to transport investment in Auckland.

The report found that transport in Auckland will have to cope with a rapidly growing population, with people spread across the city but having to travel to and from work and for other reasons. The freight task will also grow strongly. Projections under Auckland's current transport plan indicate deteriorating access for private cars and worsening congestion, with significant subregional differences across Auckland. The analysis points to a need to improve access to jobs, reduce congestion, and increase the use of public transport.

An interim report released in June 2016 (ATAP, 2016a) took the analysis further. It found that building Auckland's way out of its transport problems is inferior to an approach that takes:

> advantage of new demand-side opportunities that have previously not been available. Rapid advances in transport and communications technology provide opportunities to influence the demand for private vehicle travel, through variable road pricing and the emergence of "mobility as a service" technologies. In addition, advances in intelligent transport system (ITS) and vehicle connectivity provide the opportunity for significant gains in network productivity. Our analysis has shown that, in combination, these initiatives have the potential to provide a step change in system performance. (ATAP, 2016a, p. 5)

ATAP's final report recommended that an effective transport strategy should combine influencing travel patterns (eg, through variable road pricing); making better use of existing resources; and providing new infrastructure services. It specifically recommends that "preparatory work on smarter pricing should be progressed with urgency, to develop an ambitious but feasible programme for implementation" (p. 46).

Source: ATAP, 2016a; ATAP, 2016b; Ministry of Transport (MoT), 2006; MoT, 2008; NZPC, 2015a.

Pricing to reflect the marginal cost of additional water use, or to ration supply when capacity is reached, or to make users take account of the congestion costs they impose on others, is fully in line with the efficiency principles in section 11.2.

A proposal to introduce tolls or congestion charges to existing roads would need to consider their implications for equity, in particular their impact on those in a vulnerable position who are likely to be significantly affected by the new pricing arrangements. Options include ensuring the availability of alternative (cheaper but slower) routes, or public transport (with possible concessionary rates for low-income users). A more general equity measure would be to reduce other charges on car ownership (eg, licence fees and/or fuel taxes) so that, on average, the total taxes and charges that motorists pay do not increase. If central government sustained these cuts in revenue, local government could still gain net revenue from congestion charging.

R11.2

A future planning system should allow councils to:

- set volumetric charges for both water and wastewater; and
- price the use of existing local roads where this would enable more efficient use of the road network.

How development contributions and targeted rates should be applied

Under the Commission's proposed funding framework, development contributions and targeted rates would be used to recoup the costs of infrastructure where the need for an investment and its benefits are clearly localised to a particular developer or group of residents, such as within a new subdivision.

Comparing development contributions and targeted rates

Councils seem to find development contributions more attractive than targeted rates. The likely reason is that development contributions are paid upfront to cover upfront capital costs. Targeted rates are paid incrementally over a longer period and typically require a council to borrow to finance the upfront capital costs. In their submission (sub. DR90, p. 9), Christchurch City Council pointed out that "the longer the gap between the investment and cost recovery, the more likely there will be a higher charge on the existing community through rates". In the course of the Commission's *Using land for housing* inquiry several other councils also raised concern that delays in recovering the costs of infrastructure can place pressure on their finances. For example, Tauranga City Council observed:

> In respect of targeted rates being used instead of development contributions we wish to point out our significant concerns with this proposal, especially in respect on the increased rates burden it would place on [new] home owners and the additional debt it would place on council balance sheets… The increase in debt is caused by the delay in receiving revenue caused by receiving small payments over a number of years through a targeted rate instead of a substantial upfront development contribution charge… in order to not breach its debt limits TCC would need to substantially decrease its expenditure which may compromise investment in growth-related infrastructure and other investment. (*Using land for housing*, sub. DR102, pp. 24–25)

In the same inquiry some councils also expressed concern that targeted rates shift the risks associated with new infrastructure from the development community to the council and the wider community:

> This change would transfer the risk associated with the provision of infrastructure to the council, and if after the services were installed the development was not completed the council and its community would have to carry the debt incurred. In a system based on private developers operating in a market economy with the objective of making a profit the transfer of private risk to the community in such a way would be unacceptable. (Waimakariri District Council, *Using land for housing*, sub. DR108, p. 10)

Yet, for given capital expenditure on infrastructure to connect a new subdivision, it should make little difference to the beneficiaries – the new residents of the subdivision - whether that infrastructure is funded through development contributions or targeted rates.

- Funding from development contributions: The developer will recoup the cost of the contributions through higher selling prices to the new residents. In turn, the residents will require higher mortgages, and bear higher ongoing costs in interest and mortgage repayments.
- Funding from a targeted rate: The residents will pay less for their properties and have lower mortgages, but will face ongoing regular payments in the form of the targeted rate.

In the first case the debt is on the balance sheets of residents, and in second on the balance sheet of the council, but both debts are ultimately serviced by the new residents. In this respect, the outcome is much the same. However, the difference may be important if councils are more debt-constrained than residents (section 11.6) or less well positioned to manage the risks of unexpectedly low demand than developers (as pointed out above by Waimakariri District Council).

Development contributions (and developer agreements) in a future planning system

It is fair and efficient that developers should meet the costs of infrastructure required for a development to proceed. It is fair because the beneficiaries pay (indirectly) and it is efficient because the developers face the marginal cost of servicing the development with infrastructure. Locations that are more expensive to service would require higher contributions than less expensive locations so as to encourage developers to make efficient location decisions. Accordingly, the Commission agrees with the Oliver report that the developer should make contributions to cover "those council costs [that are] most directly related to the development" (Oliver, 2016). Development contributions can also help to increase the existing community's acceptance of growth (NZPC, 2015a, p. 216).

The sorts of infrastructure suitably funded by development contributions in a future planning system include (but are not limited to) the following:

- connecting a new subdivision from a subdivision boundary to existing trunk networks for water, wastewater, stormwater and transport; and
- community facilities that exclusively serve a subdivision such as a park, reserve, or community hall.

This use of development contributions is similar to current arrangements. Yet, under current arrangements difficulties and tensions can arise between councils and developers. The Commission examined these in its *Housing affordability* and *Using land for housing* reports. They included complexity and lack of transparency in the basis for charging development contributions, overcharging and "double dipping". In relation to the last of these, the Property Council alleged cases where councils collected revenue for depreciation of existing assets (through either rates or user charges) and then charged the replacement cost as growth-related expenditure. In its submission to the current inquiry, the Property Council argued:

> Property Council's experience with councils' calculation of development contributions is that while most calculate development contributions well, a few do not…. Property Council's analysis has found that for individual developments and over longer timeframes, the NPV model results in significant over-recovery because of the poor assumptions made. In this instance, growth is overpaying for growth. (sub. DR118, p. 14)

In its *Using land for housing* report, the Commission (NZPC, 2015a, Chapter 9) noted the scope for improvements by councils in the following areas:

- charging development contributions that reflect the varying and actual costs of infrastructure across different locations;
- avoiding undercharging and passing costs to existing residents through general rates; and
- instigating discussions with developers about proposed development contributions before the contributions are charged. This approach is used by some councils and enables both sides to clarify how the contributions have been calculated and voice any differences of opinion.

The Commission also endorsed the set of development contribution principles introduced in a 2014 amendment to the LGA: "Application of these principles should go a long way toward ensuring that councils' approach to development contributions encourages efficient locational decisions" (NZPC, 2015a, p. 218 and Box 9.3).

The same 2014 amendment to the LGA also introduced a process that enables development contributions to be challenged if considered excessive. Making it easier for developers and others to do this is an important check on the monopoly power of councils in setting development contributions. Such a process also strengthens the incentives on councils to follow good practice when they set and implement the charges.

All these improvements should be part of a future planning system.

The Commission also recommends greater flexibility and openness by councils to proposals from developers to provide directly the infrastructure normally funded by development contributions. Agreement to such proposals would be in the form of developer agreements rather than development contributions.

R11.3 Development contributions (and developer agreements) should be part of a future planning system as an important means to fund council infrastructure needed for new development to go ahead, and which is mostly for the use of those benefiting from the development. In setting and implementing development contributions, councils should:

- be open and transparent;
- reflect the actual cost of the infrastructure in a particular location and avoid over and undercharging;
- follow the development contribution principles set out in section 197AB of the LGA;
- have processes that allow developers and others to challenge development contributions if considered excessive; and
- maintain an open dialogue with the developer community.

Targeted rates in a future planning system

Under the Commission's recommended decision framework for funding infrastructure, councils should use targeted rates for three main purposes.

- Councils should use targeted rates as an alternative to development contributions for infrastructure that serves a new development, where developers and residents prefer to spread the upfront cost over time rather than pay it upfront, and where the council is able to extend its debt to enable this.
- Councils should use targeted rates to fund broader community infrastructure that benefits a wider group of ratepayers than those within a new development. Development contributions would not be appropriate in cases such as this because they target only developers (and the customers of developers). This case also assumes that user charges to recover full costs would be either not practical or not efficient.
- Councils should use targeted rates to form part of an efficient scheme of non-linear pricing for infrastructure services. All service consumers could pay the targeted rate in addition to the unit charges they face (based on marginal cost). The rate could proxy the uniform daily charges used by private utility operators and help councils to recover full costs from users.

Many councils make good use of targeted rates – particularly for the second purpose. A few of the examples described in the Commission's *Using land for housing* report (NZPC, 2015a, pp. 220–221) are:

- construction of road access (Riverhead Drive, Auckland) to those properties accessible only by boat;
- properties in a number of Tauranga subdivisions (that have benefited from wider roads, more numerous gardens, reserves, and more streetlights);
- properties that are near new cycleway projects in Christchurch; and
- properties connected to the Governors Bay water and sewerage schemes (where ratepayers could elect to pay as a lump sum or over time).

Targeting rates towards those ratepayers who benefit from an investment is a fair way of allocating this burden. Targeted rates can be used "where a council decides that the cost of a service or function should be met by a particular group of ratepayers (possibly even all ratepayers) on a basis different from that of its general rate" (Local Government Rates Inquiry, 2007, p. 44). They can be applied to a whole council area or to specified localities. Ensuring that those benefiting from the additional infrastructure bear the financial cost also reduces the burden that infrastructure expenses place on general rates. This overcomes some of the political-economy barriers to growth that councils face.

As mentioned, targeted rates can be an effective way to recover from beneficiaries the costs neither practically nor efficiently recoverable through user charges. For example, people who never use a community facility may benefit from it. Retailers might benefit from a community centre or library that attracts people to their area, even if the retailer never uses the facility.

In a future planning system, councils should continue to use targeted rates for all these reasons, and make more use of them when that use is indicated by the decision framework for funding infrastructure.

R11.4 Councils should continue to use targeted rates in a future planning system as a way to recover the costs of broader community infrastructure from the beneficiaries, to the extent it is neither practical nor efficient to do so from user charges. Councils should also be open to the use of targeted rates as a means of non-linear pricing of infrastructure services, and as an alternative or complement to development contributions to recover the costs of infrastructure specific to a new development.

The Commission favours councils having access to an expanded funding toolkit – especially for those in high-growth cities responsible for delivering much needed infrastructure. Yet local authorities should continue to exercise strong discipline across all their spending to ensure value for money for their communities.

The unimproved value of land is a more efficient and fair rating base than capital value

Even after all other sources of revenue (such as user charges, development contributions and grants) are counted, councils still need to raise around half of their total revenue from rates (Figure 5.7). This subsection compares the efficiency and fairness of land value and capital value as alternative rating bases and explains why the Commission recommends the former.

The base a council uses to set its rates matters for residents and businesses. While the choice of base will not change the total amount of rates revenue a councils receives, it can affect the amount an individual landowner pays in rates. This can then affect how owners decide to use, or invest in, their properties. Section 11.3 noted that an efficient rating system would distort these decisions as little as possible. The rates an owner contributes should also be fair by reflecting either the benefits received from council services, ability to pay, or a balance between these.

New Zealand is unusual in giving local authorities the ability to choose the basis on which they levy general rates. They can choose the capital value, land value (or unimproved value) or annual value of a property.[95]

Over recent decades, an increasing number of local authorities have shifted from a land value rating system to a rating system based on capital values. In 1985, about 85% of councils were using land value and about 10% were using capital value. By 2006/7, as noted in the 2007 *Report of the Local Government Rates Inquiry* (the Shand Report) only about 42% were using land value and about 52% were using capital value. Currently, Auckland, Wellington, Christchurch, Queenstown, Hamilton and Tauranga councils all rely on capital value rating.

Councils often cite the findings from the Shand Report to justify moving towards capital value rating. The report recommended promoting a common system of valuation for rating purposes, and strongly favoured a capital value system. It considered this system better reflected the residents' ability to pay. Other arguments often made in favour of using capital values include: capital valuations are more reliable than land valuations; and capital values best fit the benefits received from council services (NZPC, 2015a).

Yet after examining these claims in its *Using land for housing* report, the Commission (NZPC, 2015a) concluded that the arguments made in favour of capital value rating are weak at best.

[95] The annual value of a property is the greater of either the estimated gross yearly rental less 20% (or 10% if no buildings are on the land) or 5% of the property's capital value.

- *Ability to pay* – both land value and capital value are strongly associated with income, and some national evidence shows that the relationship between land values and income is stronger. This is because high-income people tend to live in areas where land prices are high.
- *Accuracy of valuations* – the evidence that land valuations are less reliable than capital valuations is inconclusive. Further, the distributional effects of a systematic incorrect valuation of land on the rating burden may be greater under a capital value rating system than a land value rating system.
- *Better fit with benefits received* – councils use targeted rates and user charges to fund a range of council services, while the benefit of other services is capitalised into the value of land. So, general rates levied on land values are a better fit for benefits received by the ratepayer rates levied on capital values.

Further, the Commission explained the well-established economic result that a rating system based on the unimproved, or land value, of a property is more efficient than one based on capital values because it does not discourage owners from putting their land to its highest-value use. By contrast, rating based on capital value is a tax on improving land, and will discourage development. LGNZ (2015b) noted:

> When a pure land tax is introduced, the owners of the land subject to a land tax suffer an immediate loss in the value of the land and hence their wealth and this would likely impact on their future decisions, but the land would remain in its best use.
>
> Rates levied on improved values do not share the economic efficiency characteristics of a pure land tax, and may discourage investment in improvements and thus come with an efficiency cost. (p. 68)

Oliver (2016) emphasised the efficiency benefits from using land value rating in the context of investing in infrastructure, and the incentive for landowners to hold on to unimproved land rather than develop it under a capital value system.

> In all cases as a way of funding infrastructure investment, a base of the unimproved value of land … is the only base that can be seen as matching the benefits of urban development with its costs. This is also in economic literature the most efficient tax base. Taxing capital value on the other hand is not so closely related to the benefits flowing from council infrastructure investment and penalises investment in improvements. As a way of funding urban growth, rating based on improved value has major drawbacks in that it encourages land banking and other activities detrimental to efficient urban development. (p. 2)

While a shift to land value rating would result in one-off administrative costs for some councils, the Commission believes that, in a future planning system, local authorities should levy their general rates based on the unimproved value of land. Where this would involve a change from a different base, the reform should provide for a reasonable transition period.

F11.5 Many councils have adopted rating systems based on capital value, owing to a common belief that capital value rating is best practice. Yet the arguments in favour of this approach are weak at best. Basing rates on capital values acts as a tax on improving land: this discourages development. National evidence indicates that capital value may be less fair in terms of ability to pay. A shift towards land-value rating would produce more efficient and fair outcomes in urban areas.

R11.5 In a future planning system, councils should levy property rates on the unimproved value of land. Where this would involve a change from a different current base, the reform should provide for a reasonable transition period.

Value capture as a funding tool in a future planning system

Urban infrastructure delivers a range of benefits to residents, including better connection to employment opportunities, reduced congestion, improved amenities, and basic services such as drinking water and

electricity. It is therefore not surprising that these benefits are usually reflected in rising land and property values (Box 11.4).

Box 11.4 **The impact of urban rail upgrades on property prices**

Auckland's passenger rail network was upgraded over the 2000s, in an effort to improve the mobility of residents through the city. Grimes and Young (2013) examined the effect of upgrades to the Western Line, which included double tracking of the rail line from the central business district (CBD) to the western outskirts of Auckland's urban area, station redevelopment "and related urban renewal projects" (p. 1). They compared developments near the Western Line stations in Waitakere City with those elsewhere in Waitakere City, to estimate the impact of proximity to train stations before and after the announcement of the network upgrades.

Grimes and Young found the houses adjacent to a Western Line rail station did rise in price following the announcement of the upgrades in 2005, albeit with some variations:

> Houses within 8 km of a station rose in value upon the announcement, but with a non-linear distance effect, reflecting positive amenity value from improved transport access balanced against negative amenity value from being located very near to a rail station. For the outer two station groups, this meant that houses close to a station did not increase in value quite as much as houses 2 km away. For houses close to New Lynn station, the positive amenity value associated with town centre redevelopment outweighed any such negative amenity effect so that house price increases were most pronounced close to the station. (2013, p. 5)

In total, Grimes and Young estimated the total increase in land values resulting from the rail updates at $667 million; a sum that broadly matched the $620 million cost of the rail developments.

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Increases in land values generated by public action such as rezoning or investments in infrastructure directly benefit private landowners. In its previous inquiry into *Using land for housing*, the Commission (2015) investigated mechanisms that capture some of these private benefits. The Commission concluded that "value capture" tools would enable councils to generate funding for infrastructure projects that would otherwise be difficult to initiate, while allocating the financial burden more fairly towards those who enjoy a direct windfall benefit.

In recent years, value capture has become more widely accepted as a way of funding infrastructure. Recently, the Australian Government (2016) published a discussion paper about the use of value capture to help fund land transport infrastructure. The paper supports the wider use of value capture, and recommends the Australian Government set up a national methodology and guidelines to help state and local governments and businesses. A number of cities around the world use value capture to help fund large-scale infrastructure projects (Box 11.5). Value capture mechanisms show considerable variation.

Box 11.5 **International examples of value capture**

London Crossrail

London's Crossrail railway line is currently under construction. The Greater London Authority (GLA) is raising £5.2 billion out of the estimated £14.8 billion project cost from value-capture sources. The primary source is a Business Rates Supplement – a 2% levy on non-domestic properties with a rateable value of over £55 000. For example, the owner of a property valued at £100 000 would be obliged to pay a yearly contribution of £2 000 to reflect the project's boost to the local economy. Legislation was introduced in 2009 to give the GLA this levying power.

Parramatta Light Rail

The NSW government plan to fund a new light rail network in Parramatta, in part, by levying a Special Infrastructure Contribution (SIC). The new network is expected to "activate a priority growth area" and "kick-start revitalisation and jobs growth along a 22-kilometre corridor" (Baird, 2015). The SIC is expected to be set at around $200 per square metre of gross floor area of new residential developments within the Greater Parramatta to Olympic Peninsula priority growth area. Any revenue received from the SIC will be hypothecated to recover the costs of the project and associated infrastructure including new schools and road upgrades. Consultation will be undertaken with industry before the SIC is finalised.

Gold Coast Light Rail

To help cover the estimated $1.3 billion project cost of Gold Coast's light rail network, a broad based transport improvement levy (TIL) was introduced in 2012. The TIL required each ratepayer in the Gold Coast City to contribute $111 a year. This levy has been raised recently to $117 a year. There is no scheduled date when the TIL will discontinue. SGS Economics and Planning (2015) estimated that the TIL could raise up to $28.75 million a year and noted that the project has been widely hailed.

It is reasonable that a portion of the windfall gains of landowners (in good part created by councils' infrastructure spending) should be retained for the benefit of the community. Currently, councils can use targeted rates to indirectly capture this benefit. These are usually levied through a fixed charge or on a proportion of a property's value. Yet, neither of these approaches strongly reflect the windfall gains that a private owner receives. A more effective way of capturing the windfall gains would be to tax landowners directly – through a tax on the uplift in land values.

Several submitters on the Commission's draft report, including Auckland Council (sub. DR86), New Zealand Planning Institute – Auckland Branch (sub. DR88) and Goodman New Zealand (sub. DR102), supported the draft recommendation to allow councils to capture windfall gains by imposing a targeted rates on increases in land value. Current legislation does not allow this (section 11.5).

In his analysis of revenue funding options for local councils, Oliver (2016) emphasised that there is considerable scope for value capture to be used in New Zealand to help fund the infrastructure needed to support growth. His report concluded that value capture tools could be used to help recover the costs of infrastructure investments where the benefits are widely and unevenly dispersed throughout a city or town.

F11.6 Value capture is a fair way to recover a portion of infrastructure costs because it targets the windfall gains of property owners that arise from the infrastructure. Tools that capture these gains are used overseas to help fund large infrastructure projects.

Offshore examples illustrate a range of ways to design a value-capture tool. The London Crossrail project levies property owners within a designated area based on the value of their property. Property owners are charged different rates depending on the distance between the property and the infrastructure. Other arrangements are blunter, such as the Gold Coast Light Rail project that levies a fixed charge on all property owners across a wider region or city. In its policy paper discussing the use of value capture, Infrastructure Victoria (2016b) concluded that "value capture funding may be more acceptable to the community if mechanisms are simple and broadly applied to align funding with benefits received" (p. 15).

The Commission continues to see merit in implementing value capture in New Zealand by allowing councils to levy a targeted rate on the uplift in land values. A council would identify an area that would benefit from an infrastructure investment. Only those properties (within the designated area) that increase in value sufficiently greater than the general property inflation in the wider region would be subject to the rate. The council would choose a threshold of increase in value beyond which the rate would apply (eg, gains in value 20% above the measure of general property inflation).

Box 11.6 explains how this approach could be implemented.

Box 11.6 **Potential method for applying value capture**

The following simple example illustrates how value capture could be applied. Suppose the unimproved value of a property benefitting from new infrastructure investment increases from $100 000 to $250 000 (ie, 150%) over five years. Further, assume that:

- over the same period, land values across the wider region increased on average by 100%;
- increases in land values greater than 20% above this average increase are rateable (so, in this case, increases in value greater than 120% are rateable); and
- the targeted rate on the uplift in land value is 10%, and is payable over a five-year period.

Under these circumstances, the property would be rated on the increase in value above the 120% threshold: $250 000 – $220 000 = $30 000. So the landowner would be required to pay 10% of uplift: $3 000 over five years, or $600 a year. The payments would be due over the five years *after* the value increase.

Another property that increased in value from $100 000 to $180 000 over the same measurement period would not be subject to the rate since the gain lies below the 120% threshold.

Source: Oliver, 2016.

Targeting above-average increases in land values would be efficient. Some submitters to the draft report argued that it can be difficult to determine the extent that an increase in a property's value is caused by the provision of new infrastructure. Factors other than public action and expenditure (such as the development of private amenities) can also influence neighbouring properties. But the key point for tax efficiency is that any gain in the unimproved value of land (or reduction in it owing to a rate levied on it) is unaffected by a landowner's actions, and therefore would not distort their incentives to make improvements or put their land to its highest value use in other ways.

The tool would also be fair because it would target only those who have made substantial windfall gains in the value of their property where those gains have substantially arisen from infrastructure investments by others. Instances could arise where landowners have substantial increases in land values but lack funds/earnings to pay the targeted rate. However, the general rating system already deals with this situation (eg, through rates rebates for landowners with low incomes). Similar arrangements could be put in place.

The Commission considers that such a tool should be available to councils in a future planning system. Allowing councils to charge targeted rates based on land value increases would require a change to current legislation, and the development of robust processes within councils for estimating changes in land values. Councils can refer to Oliver (2016) for more detail and guidance about how these processes might work.

One potential use of the revenue raised from this proposed form of value capture would be to fund the securing of land corridors and public open spaces needed for future city growth. Councils too often neglect this important planning task (Chapter 10).

R11.6 A future planning system should include a value-capture tool for councils' optional use to help fund infrastructure projects that benefit broad parts or the whole of a city. One way of applying value capture that would be feasible, efficient and fair is to enable councils to levy targeted rates on changes in land values. This would require a change in legislation.

Should central government contribute to funding local infrastructure?

Where there are wider national benefits from providing local infrastructure, it may be appropriate for central government to contribute to its cost. Investments in local transport infrastructure tend to fit into this category. The Government contributes substantially to the costs of local transport assets and services (eg, public transport, local road improvements and extensions) (Chapter 5). Reasons for this are that it is in the national interest for people and goods to move freely through and to cities (Chapter 7) and because local roads are part of the national transport network that is managed and funded by the NZTA. It is also efficient to have fuel taxes and other transport levies are collected through a single national system.

As Chapter 10 discusses, growth pressures in cities often demand additional large investments in expensive city-shaping infrastructure that have both national and local benefits. Such cases may also warrant central government making a contribution. The cost-sharing agreement between central government and Auckland Council that came out of the ATAP is an example. Central government has agreed that it will fund 50% of the cost of Auckland's City Rail Link, estimated to be between $2.8 billion and $3.4 billion. Collaborative arrangements such as ATAP can help to assure central government that its investments in infrastructure deliver value for money, while providing councils with a valuable source of funding (Chapter 10).

As noted in Chapter 10, the lack of responsive provision of local authority infrastructure is currently impeding the supply of affordable housing and other desirable urban capacity in the face of growth pressures. This is having serious negative national spillover effects. Yet the Commission considers that meeting these infrastructure needs should remain the primary responsibility of local government. With existing and new funding tools, and other recommendations that the Commission has made for a future planning system, councils should be in a much better position to respond to growth pressures and recover infrastructure costs.

The Government recently announced a $1 billion contestable fund to help high-growth councils fast-track substantial new infrastructure investment to enable new housing. Funding initiatives such as this may be needed in exceptional circumstances, such as if a high-growth council is hitting borrowing constraints that limit its ability to finance infrastructure investment.

F11.7 Where wider national benefits arise from investment in local infrastructure, a case exists for central government to contribute to its cost.

Funding challenges can also arise from lack of growth rather than growth. As noted in Chapter 4 and earlier in this chapter, a significant number of New Zealand towns face population decline. In some cases people numbers and incomes will be too low realistically to fund the replacement of ageing assets such as water and wastewater treatment plants and distribution networks. Rangitikei District Council observed that

> Council's preference would be to retain reticulated water/wastewater services in small communities. However, the tools for growing communities are not obviously applicable to declining ones. Some Government funding seems the only realistic option to enable reticulated systems to be affordable in declining communities. Community desire to retain waste water services was recently demonstrated by the Mangaweka Community's response, when they received notice that Council was considering alternative options for waste water supply (individual septic systems). Alternatively, the Government could lead a national approach to developing standards and affordable systems for safe potable water and disposal of wastewater in smaller communities with declining populations. (sub. DR71, p. 3)

Given that the factors driving decline (eg, urbanisation trends, structural labour market shifts) are usually very difficult to counter (Chapter 4), central government should consider providing funding assistance and advice to councils in areas with declining populations to help meet infrastructure needs. Some form of infrastructure fund that assists these councils as they renew or replace infrastructure assets, conditional on sensible adaptation to demographic change, may be desirable. In 2005, the Government introduced a fund to help small centres struggling to meet higher drinking-water standards. The fund totalled $137 million over 10 years. Grants to councils and other water suppliers came with technical advice on upgrading water systems.

F11.8 The factors driving population decline in smaller centres are often very difficult to counter and are likely to result in funding shortfalls that affect a council's ability to provide basic infrastructure services.

R11.7 Central government should consider providing funding assistance and advice to councils in areas with declining populations to help meet infrastructure needs. This should be conditional on councils taking sensible steps to adapt to demographic change.

Are more far-reaching changes needed?

A number of commentators argue that more far-reaching changes to the funding system are needed to improve local authorities' incentives to welcome and accommodate growth. Two suggested approaches are to:

- allow councils to set taxes based on local income and expenditure; and
- introduce revenue sharing between central and local government where councils receive a portion of existing national revenues from taxes such as goods and services tax (GST) or income tax.

The Commission has considered the merits of these suggestions (see below).

Another suggestion is to enable councils to auction development rights in particular circumstances. A councils would set a specified development limit (eg, to construct a certain number of buildings up to a certain height limit and floor-area) and then sell the right to develop to the highest bidders. The Commission assesses the merits of this approach in Chapter 12.

Local income and expenditure taxes

Local income and expenditure taxes are sometimes used internationally as a revenue source for local governments. For example, in the United States about 6.9% of local government revenue comes from local sales taxes and 1.9% from individual income taxes (Urban-Brookings Tax Policy Center, n.d), while about 70% of local government revenue in Sweden comes from personal income taxes.

Providing councils with a new tax base (such as local income and expenditure) that increases with local economic activity would ensure that they benefit more directly from growth. For example, councils would receive greater revenues as a result of the spending and income of an increased population as well as from the spending and income earned from investing in the infrastructure to serve the larger population. The relationship between rates revenue and local growth is not as automatic (NZPC, 2015a). As LGNZ (2015b) notes,

> [a]nother issue for using property tax revenues to fund the cost of infrastructure expansion is that such taxes respond less quickly to changes in the economy than taxes on income or sales, because economic growth is not capitalised fully into real estate investment and land ownership. (p. 55)

Yet linking council revenue sources more closely with economic activity would risk more volatility in council finances. Wildasin (2009) notes that

> it is noteworthy that German municipalities depend heavily on the taxation of local business activity as a principal component of own-source revenues, while deriving very modest amounts of revenues from taxes on land, another permissible source of municipal tax revenue. The revenues of these municipalities are consequently comparatively volatile, since the business tax base is more highly variable than land values. (p. 17)

If council revenue was partly tied to the state of the local economy, declining councils would face an even greater funding shortfall than they currently do. The younger, more productive residents are often the first to leave declining cities and towns. This leads to the contraction of their local economy. While a local income or expenditure tax could provide these councils with greater incentives to adopt innovative policies to reverse

economic and population decline, the structural drivers of population decline are typically very difficult to overcome (Chapter 4).

Local income or expenditure taxes would also be costly to implement. As LGNZ (2015b, p. 68) has noted,

> [the] administrative economies of scale of administering our income tax are large. A true local income tax – where the tax was determined and collected locally – would require local authorities to replicate IRD resources and hence would be prohibitively expensive.

Adding a new tax would increase complexity for individuals and firms and reduce the overall efficiency of the tax system. Two strengths of New Zealand's tax system are its simplicity and broad bases. As explained above, the unimproved value of land is a highly efficient tax base because it does not distort an owner's decision about how to use their property. By contrast, taxing income or expenditure distorts incentives to work, invest, and consume.

Revenue sharing between central and local government

Some form of revenue-sharing arrangement between central and local government would be a more practical way to generate additional revenue for local government. For example, central government could share a portion of GST or income tax revenue with local authorities, based on where the spending or income takes place or according to an allocation formula incorporating various characteristics of areas.

Internationally, these arrangements are common. They are typically used to resolve fiscal "imbalances" between different levels of government rather than to improve local government incentives. In a number of countries, local governments are responsible for funding services such as education, health and social services, where there is wider national interest.

Implementing revenue sharing in New Zealand would have practical challenges such as attributing income or expenditure to a particular territorial authority or regional council. In his report evaluating local government funding tools, Oliver (2016) highlighted that

> (a) local authority income tax could be implemented as a surcharge on the existing income tax with the surcharge set by each region. However this form of tax would require complex rules to allocate the revenue to each local authority – an internal web equivalent to our international tax treaties… These rules would need to decide, for instance, where to allocate the tax on a company with a Christchurch Head Office, owned by shareholders in Dunedin, manufacturing in Wellington and selling in Auckland.

Oliver (2016) also points out that sharing GST revenue with local authorities would disadvantage areas (such as Taranaki and Southland) where a high proportion of economic activity consists of exports of goods and services. Exports are not liable for GST.

One way to avoid these complexities would be to allocate a portion of national tax revenue to local authorities, based on an easy-to-measure characteristic of each jurisdiction such as its population, or fuel sold within its boundaries. Another recent suggestion that falls in this category is for each local authority to receive a portion of the GST on construction activity within its boundaries (Seymour, 2017).

Section conclusion

The Commission's view is that the existing funding tools it has endorsed and the new ones it has recommended are sufficient to fully recover the costs of infrastructure, providing councils with adequate means and incentive to support growth.

The addition of either a new a local income or sales tax, or a revenue-sharing arrangement between central and local government would be complex and difficult to implement. Such tools would also risk introducing undesirable volatility into council budgeting, and make it even more difficult for councils in cities or regions with declining populations to maintain existing services.

Therefore, these tools should not be a major part of a future planning system. Among narrower forms of sales tax, the Commission sees local fuel taxes, and tourist-related (visitor) levies and a portion of GST on new buildings in the area as the most promising options. Their main advantages are that they are easier to attribute to a local authority area, they address a specific issue or externality, they would be relatively easy to administer, and would have relatively low efficiency costs.

F11.9 Local income and expenditure taxes are sometimes used in other countries as a revenue source for local governments. However, implementing such tools in New Zealand would be complex and difficult. Such taxes would also make it more difficult for councils in towns or regions with declining populations to maintain existing services.

F11.10 Internationally, many central governments share a portion of their tax revenue with local governments. This revenue typically helps to fund expensive services such as health, education and social welfare. Yet local governments do not provide such services in New Zealand. Further, allocating tax revenue to particular councils is a complex task.

R11.8 Broad taxes based on local income and expenditure or revenue sharing between central and local government should not be part of a future planning system because they are complex, less efficient than rates based on land values, and should not be needed when councils use the full range of funding tools recommended by the Commission.

11.6 Financing infrastructure in a future planning system

Solutions to financing barriers

As noted in section 11.4, self-imposed or externally-set debt limits are preventing high-growth councils from investing in much needed infrastructure. Such limits have high social costs – the large foregone net benefits from preventing highly-valued development (well in excess of its opportunity costs) from going ahead. Further, capital is not in short supply. Particularly now, with the world awash with cheap capital looking for secure and reasonable returns, this is a large system failure. It is damaging the wellbeing of many thousands of New Zealanders because, for example, housing is unaffordable for them.

The key constraint in Auckland (where the problem exists most acutely) comes from the threat of the credit downgrade that would be triggered by its debt-to-revenue ratio going over 270%. Possible solutions include to:

- generate additional revenue that in turn will allow more debt without breaching the 270% ratio;
- find sources of finance that will not require Auckland Council's debt to rise; and
- relax the debt limits and/or regulations.

The following subsections examine each of these possibilities with a view to discovering the best ways forward.

Additional revenue

To finance more infrastructure through borrowing without breaching a strict debt-to-revenue ratio, Auckland Council could generate more revenue. The most obvious source would be higher rates and/or user charges. As previously discussed, higher user charges could raise both efficiency and revenue. Otherwise, the higher revenue would come at an efficiency cost. This approach would also run the risk of political opposition since it would impose the cost of growth on current residents (given that investment needs to precede the revenue streams arising from new residents and new businesses). For example, Auckland Mayor Phil Goff's stated intention is to limit rate rises to no greater than 2.5% a year will not allow Auckland to solve its problem by this means.

It is worth noting that S&P's rules for what counts as revenue do not include development contributions since these are capital in nature and dedicated to a particular purpose. However, operating grants or revenue from central government would count.

Other sources of finance

An outside source of finance would involve putting the debt on someone else's balance sheet. This is easier said than done. For example, public-private partnerships (PPPs) can introduce private sources of finance, but the obligation on the council to pay back the PPP entity by some means over time counts as council debt.

The Government's $1 billion Housing Infrastructure Fund may seem a lifeline. Yet, if as stated, distributions to councils are in the form of 10-year, interest-free loans, the obligation to repay will count as council debt and could therefore still trigger a downgrade for Auckland Council. This leaves only relatively clean forms of central government capital grants – such as the contributions the Government is making under ATAP to transport investment in Auckland – as solutions from this source.

A way to allow non-council capital to take the strain may be to allow and encourage private developers to finance large new subdivisions, service them with infrastructure, and have the ability to recoup costs from new residents. This would put the additional debt on the balance sheets of households purchasing new properties through their mortgages. This option is further explored in Chapter 12. Desirably, the higher upfront costs of infrastructure for homeowners could be offset with lower land prices through making markets for urban land more competitive.

Taking this idea a step further, the debt needed to pay for the infrastructure investment of a new large subdivision might be assumed by a body-corporate type entity with the power to service and repay the loan over time through levies on the homeowners. Yet this too could be problematic since the entity might fail, which would put a council under political and moral pressure to step in. The risk would therefore sit as a contingent liability on the council's balance sheet. Only a measure as strong as a law forbidding the council assuming any liability for the entity whatever its degree of distress would avoid this.

Another source of finance for infrastructure investment could be generated internally by Auckland Council selling existing assets. For example, it could sell a portion of its ownership of Ports of Auckland or Auckland International Airport. A downside of this is that it would reduce the Council's revenue from these assets (in the form of dividend income) and adversely impact its current debt-to-revenue ratio.

Relax the debt limits and/or regulations

Whether it would make sense to solve the problem by relaxing debt limits and regulations on councils depends on whether (a) that would be a good choice from a prudential perspective and (b) the body setting the limit could be persuaded to do so. The two conditions are connected in that they both concern the risks of higher borrowing, and the creditworthiness of the borrower.

Local governments in New Zealand are extremely creditworthy. This is based on the exceptional security of their main revenue source – rates – the collection of which is underpinned by a very strong, ultimate power to foreclose on the real property of residents in the event of non-payment (Moody's Investors Service, 2012).

Coupling this creditworthiness with Auckland's rapid growth, its urgent need for infrastructure and high likelihood of strong future revenue from that growth adds up to a strong case for permitting higher debt. It seems to the Commission that the Government should carefully consider supporting higher limits, especially if Auckland Council commits to fiscal restraint in other areas.

Yet governments cannot order credit-rating agencies to change their criteria and rating judgements. Ideally, agencies are independent and work for and serve the interests of investors. Yet they are generally willing to listen to a case and take on board information. Stressing the powers that make councils very creditworthy, as well as the unique features of Auckland (most notably its rapid growth rate) might succeed in persuading an agency to allow more debt and either not downgrade Auckland, or at least reassure investors that a downgrade is not a signal to be unduly alarmed about. Rather it should be seen as a slightly higher return that is appropriate for a slightly higher level of risk.

Yet another solution would be reassurance to investors by means of some form of central-government guarantee of the additional debt. While such guarantees are generally undesirable, it might well in Auckland's case be the least-worst solution to the serious problem of the Council being unable to borrow enough to finance essential infrastructure to keep pace with demand for development.

F11.11 Barriers to high-growth councils taking on more debt are an important explanation of shortfalls in infrastructure investment that have high net social returns. The main barrier in Auckland's case is the threat of a credit-rating downgrade. Other potential barriers are opposition to higher debt from existing ratepayers, and overly conservative prudential debt limits and Local Government Funding Authority rules.

R11.9 Councils such as Auckland that face a binding constraint on greater investment in infrastructure with high net social returns should tackle this serious problem by some combination of:

- raising more revenue so it can borrow more within prescribed debt-to-revenue limits;
- financing more infrastructure on the balance sheets of others, such as private homeowners and body-corporate entities in large new subdivisions; and
- working with central government and finance experts to make the case to credit-rating agencies to impose less stringent limits in return for assurances on creditworthiness and fiscal prudence.

Central government should consider capital grants or some form of debt guarantee, if that proves necessary to enable councils such as Auckland Council to invest in sufficient infrastructure for growth.

11.7 Procurement of infrastructure

The recommendations earlier in this chapter aim to strengthen the incentives and capacity of councils to provide infrastructure, when it is needed to facilitate new developments. If councils are to expand infrastructure efficiently, their procurement processes need to be well planned, fit for purpose, and secure value for money (New Zealand Government, n.d.)

What is procurement?

Procurement involves acquiring goods or services, usually from an external source. The Government procurement website identifies three broad stages in procurement: planning, sourcing and managing. The website provides extensive resources including a toolkit, which provides information on procurement policy, including rules, guides, tools and templates covering each of the stages (New Zealand Government, n.d.).

This section focuses on two aspects of procurement, which would most likely be considered during planning.

First is the choice of delivery model that governs the relationship between the commissioning agency and the provider(s). This choice matters.

> Selecting a delivery model that is inappropriate for the project in question has the potential to increase project risk and negatively impact the achievement of a value-for-money outcome. A thorough procurement options analysis will substantially reduce the risk of this occurring. (APCC, 2014, p. 18)

Second is the choice of entity that commissions infrastructure and, in particular, whether the commissioned work is undertaken within a council, by a group of councils, or by a joint central government/council body. The appropriate choice may depend on the scale of the infrastructure to be commissioned and the type of delivery model.

What is a delivery model?

A delivery model is an "approach to the delivery of a construction works or services project" (APCC, 2014, p. 8; Box 11.7). While sector-wide data is not available for New Zealand, councils likely use "construct" and

"design and construct" delivery models for smaller infrastructure projects. Auckland Council, which has the largest infrastructure budget in New Zealand, has

> historically procured major capital expenditure projects using traditional procurement approaches centred on construction based models, with elements of risk transfer to the private sector in terms of design and construction but generally with no ongoing obligations in terms of asset maintenance and operation. (Hodges, Proctor & King, 2013, p. 1)

In Australia councils and government agencies use traditional models across the civil (road and bridge) and non-residential building sectors. Australian councils and government agencies also occasionally use "managing-contractor", "construction management" and "direct managed" models. They have used "alliance contracting", "early contractor involvement" and "public-private partnership" (PPP) models for major (ie, high-risk and/or high-value) projects (APCC, 2014).

This section discusses two delivery models not regularly used by councils: alliance contracts and PPPs. It considers why this is so and whether the social costs of sluggish infrastructure investment would be lower if they were used more.

Box 11.7 **Types of delivery model**

The types of delivery model vary. The more important types are noted below.

- *Construct*: Under this "traditional" delivery model, the project owner secures the project design and calls for competitive bids from contractors to construct in line with that design. Following construction, the project owner is responsible for maintaining and/or operating the asset.
- *Design and construct and variants:* The project owner selects a single contractor to deliver both the design services and construction. Following construction, the project owner usually assumes responsibility for maintenance and operation. Under *design, construct and maintain* and *design, construct and operate* variants, the contractor takes responsibility for the maintenance or operation.
- *Managed (eg, managing contractor, construction management)*: The project owner appoints a *managing contractor* to provide advisory and management services. This includes creating work packages, sourcing and entering into contracts with designers and subcontractors, and coordinating and supervising the work. A managing contractor may directly undertake some of the work for a construction project.
- *Direct managed*: The project owner manages the full project delivery, provides the plant and resources or obtains them from subcontractors, and accepts all the delivery and interface risk.
- *Alliance contracting*: A public sector agency works collaboratively with private sector parties. All participants make unanimous decisions on key issues about project delivery.
- *Early contractor involvement*: A two-stage, relationship-style, delivery model that resembles an *alliance contracting* model during the first stage of the project and a *design and construct* model during the second stage.
- *Public-private partnership:* A long-term contract to deliver a service, where provision of the service requires the construction of a new asset, or enhancement of an existing asset. Private sources finance the asset, while the Crown retains full legal ownership.

Source: APCC, 2014; New Zealand Treasury, 2015c.

Alliance contracts

The NZTA has been using alliance contracts. For instance, it has formed an alliance with five partners to build the MacKays to Peka Peka Expressway north of Wellington, at an estimated cost of $630 million. The alliance contract allows the partners to work on a number of areas at once, overlap different phases of a project and

gain efficiencies through early constructor involvement. As a result, the alliance can deliver major projects faster, using innovative approaches (NZTA, n.d.).

Under alliance contracting, the government and private participants share risks. The Australian Productivity Commission (APC) argued that alliances may offer value where substantial risk cannot be clearly allocated to one party because risks are difficult to identify and quantify or the price is disputed. However, the overall cost of construction can be uncertain and there is potential to put off rather than deal with risk early (APC, 2008).

The ability under alliance contracting to delay decisions so as to be able to respond to new information at later dates makes sense in a real-options framework (Chapter 10). It will likely pay to wait for further information or developments beyond the control of all partners, and, down the track, decide what is best to do. Conversely, it is likely to be difficult and inefficient to try to anticipate all contingencies in a formal ex ante contract.

Public-private partnerships

PPP refers to a

> model in which government contracts with the private sector for new or refurbished infrastructure, with providers designing, building, financing, owning, maintaining and in some cases, operating all or part of the facility over an extended period (usually 25 or 30 years, but sometimes as much as 50 years). (Sturgess, 2012, p. 39)

PPPs take many forms suited to different situations (PPPIRC, n.d.).

Government policy and the advantages of PPPs

The Government established a PPP programme in 2009, when it created a PPP Centre of Expertise within the Treasury. This Centre has published PPP guidance and developed a standardised set of "model terms" for PPP procurement. The Treasury guidelines specify that "[p]rocuring entities that are planning any 'significant investment' (including any arrangements with Local Government Authorities seeking Crown funding or support) must evaluate all procurement options, including PPP procurement" (New Zealand Treasury, 2015c, p. 13). The requirement to consider PPPs applies to projects that use Crown funding and so covers only a minority of significant local government infrastructure projects.

According to the Treasury,

> [t]he key policy characteristics of the New Zealand PPP model include:
>
> - the specification of service outcomes …
> - the construction of a new infrastructure asset or substantial enhancement of an existing asset …to facilitate the delivery of the service outcomes
> - the delivery of services outcomes by a private sector partner for a defined period (often between 20–30 years)
> - the efficient allocation of risk to the party best able to manage that risk
> - the separation of ownership (retained by the public sector) and financing (provided by the private sector partner), to provide meaningful risk transfer and management, and
> - the application of a payment-for-performance regime to incentivise the delivery of specified service outcomes and penalise non-performance. (New Zealand Treasury, 2015c, p. 3)

The key advantages of PPP procurement include:

- increased focus on the specification and performance of service outcomes;
- integration of asset design and a flow of services;
- a 'whole-of-life' perspective that provides greater cost certainty; payment for good performance and abatement for poor performance;
- active management and optimal allocation of risk; and

- wider benefits to New Zealand's infrastructure sector as a result of private sector expertise, experience and innovation, and enhanced procurement discipline (New Zealand Treasury, 2015c, p. 8).

Cost savings are another potential advantage. In Australia, on average, 15% of non-PPP projects over-ran their budgets compared to an average of 1% of their PPP counterparts and, on average, 24% of the non-PPP projects were behind schedule, while on average the PPP projects ran 3% ahead of schedule (Bridger, 2012, p. 56). However, because of a lack of data, the studies demonstrating such benefits do not enable a complete comparison of the efficiency benefits of PPPs over the project life (APC, 2008).

The use of PPPs in New Zealand

The number of PPPs in New Zealand has expanded since the National Infrastructure Unit (NIU) was set up in 2009. Between 2012 and 2014, agencies were planning or had six PPP projects under way, with a total value of $1.5 billion (Drew, 2014).

For example, a PPP between the NZTA and the Wellington Gateway Partnership will design, construct, finance, operate and maintain the new 27 km Transmission Gully highway for 25 years after the five-year construction period. The NZTA expects that the PPP

> will deliver the project at a lower 'whole of life' cost than the public sector could expect to through conventional procurement. The incentives built into the PPP contract will ensure the completed highway will be flatter, wider, and straighter with enhanced safety features making it safer and more resilient to natural disasters and closures. …The PPP model also encourages the most advanced technology and innovative approaches from overseas to be brought to the project. We can then apply these innovations on other roads right across New Zealand to make travel safer for everyone. … the PPP will also release flow-on benefits onto the whole New Zealand transport network by introducing new, innovative road safety approaches which can be applied to save more lives in other parts of the country. (NZTA, 2014)

The NZTA entered into a PPP for the Puhoi to Warkworth motorway (NZTA, 2015b). The New Zealand Council for Infrastructure Development (NZCID)[96] anticipated that construction would get under way "a decade or more faster than if the project had been constrained by traditional funding limitations" (NZCID, 2016b).

The Ministry of Education is engaged in a PPP to construct four schools, with an estimated cost of construction and maintenance above $200 million, and plans to continue to consider the use of PPPs for projects of sufficient scale (Ministry of Education, n.d). Three of the four schools opened early this year.The Department of Corrections' current Auckland prison PPP has design features intended to create pathways for prisoners' rehabilitation and reintegration (Department of Corrections, 2016).

Auckland Council is currently setting up a PPP for the Auckland Harbour Bridge cycleway, a $33 million project (Box 11.8). The Vector arena, also involving Auckland Council, and Wellington City Council's "Clear Water" sewage treatment project are other examples of local government PPPs.

Box 11.8 **Auckland Harbour Bridge pedestrian and cycleway PPP**

In July 2016 Auckland Council agreed to proceed with the $33 million Auckland SkyPath, with the Finance Committee unanimously agreeing to enter into a PPP with HRL Morrison & Co. Auckland Council hopes the SkyPath will both provide a key missing link in the city, allowing commuters to ride to work and present a popular tourist attraction with views over the harbour and city. The project could be completed as early as 2018.

The partnership terms mean that users will pay a small toll, with profits going to the investment management company for the first 25 years. Auckland Council will underwrite the project to an agreed level (meaning that if toll revenue does not meet this level the council will have to pay out, but if the level is exceeded the council will profit). Under the terms of the PPP agreement, Morrison & Co's Public

[96] NZCID is now called Infrastructure New Zealand.

Infrastructure Partnership Fund will finance, build and maintain the path for 25 years. Then ownership will revert to Auckland Council.

Source: Lawton, 2016; Slade, 2016

European councils have found PPPs for road lighting attractive. Twenty-five local governments in Europe were using PPPs for road lighting by 2011, and a further 20 PPPs were 'in the pipeline' (Bridger, 2012). Bridger and King (2014) looked at the possible use of PPPs for road lighting in Wellington.

Possible reasons for limited use of PPPs by local government in New Zealand

PPPs are used less in New Zealand than in some other countries, and even less by local government. Between 2012 and 2014, about $1.5 billion of PPP projects were undertaken in New Zealand, representing about 1% of nominal investment activity, compared to about $66 billion in Australia, representing about 4% of nominal investment activity (OECD, 2015d). In the United Kingdom, more than 700 PPPs were implemented between 1992 and 2012 to deliver schools, hospitals, highway maintenance, street lighting, waste management, social care, prisons, libraries, and fire stations (Hodges, Proctor & King, 2013).

Possible reasons for limited use of PPPs in New Zealand could include:

- regulatory or institutional barriers;
- features of local government projects that make PPPs unsuitable; and
- insufficient capability in local authorities to set up PPPs successfully.

Yet Drew (2014) argued that PPPs face no regulatory barriers to their use. Consistent with this, Auckland Council has a PPP policy that follows Treasury guidance and gives it flexibility to consider PPPs (Hodges, Proctor & King, 2013).

The rest of this section looks instead at whether the small scale of local government projects make them unsuitable for PPPs; and whether council capability to implement PPPs is a barrier to their use.

The small scale of projects and limited capability may reduce local government use of PPPs

Small scale is the most obvious feature of local government projects that may make them unsuitable for PPPs.[97] Even for suitably scaled projects, councils may lack the capability to implement PPPs successfully. A perceived lack of capability and lack of scale may make private investors wary of local government PPPs.

Contract scale

Negotiating and managing PPPs can involve prohibitive transaction costs for small projects. The New Zealand guidelines do not set a minimum size before PPPs are considered, but require that PPPs are considered for 'significant' projects. Such projects are those above $15 million.[98] Bridger (2012, p. 59) suggested that it may be worth negotiating PPPs for street-lighting projects above $10 million.

Many councils have few if any projects above these minimum size thresholds, although Auckland is an exception:

> Many of the projects essential for enabling urbanisation in Auckland cost hundreds of millions of dollars. For example, as outlined in Auckland Transport's evidence to the Independent Hearings Panel, the 'trunk' transport infrastructure for the 'Future Urban Zone' land in the PAUP has been estimated to cost $5.9 to $7.7 billion. The lead time for this infrastructure is significant. For example, evidence to the Independent Hearings Panel on the PAUP cited a 10-year time period to complete the consultation and

[97] Conditions that suit PPPs are discussed in APCC (2014) and New South Wales Government (n.d.).

[98] In terms of financial or risk thresholds, "significant" generally means investments that require Cabinet or Ministerial approval as per Cabinet Office Circular (15) 5. Such investments are high-risk proposals or proposals with whole-of-life costs in excess of $15 million, no matter how funded. For further information, visit the website for the Departments of the Prime Minister and Cabinet (DPMC) at www.dpmc.govt.nz/cabinet/circulars/co15/5 (New Zealand Treasury, 2015c, p. 13).

> consenting requirements for the $734 million (excluding enabling works) Central Interceptor to store and convey wastewater. (Auckland Council, sub. 47, p. 7)

Other councils may be able to create projects of sufficient scale by assembling joint projects, by negotiation or through joint companies. For example, Wellington Water is a CCO jointly owned by four city councils – Hutt, Porirua, Upper Hutt and Wellington – and the Greater Regional Wellington Council. Wellington Water manages the three water networks (drinking water, stormwater and wastewater) across the region on behalf of the councils and provides advice on how best to invest in the future development of the networks.

Local authority capabilities to manage complex risks and measure performance

Project risks occur in construction, scheduling, functionality of design, financing, demand and the long-term performance of the asset. Project costs can be reduced by efficiently assigning these risks, along with the responsibility to make decisions to manage them, taking into account each party's ability to influence the risk factor and to absorb the risk (APC, 2008). PPPs permit the transfer of more risks to the private sector than do other delivery models. Yet assessing the risks and determining where to assign them is a skilled task and councils using PPPs could unwittingly increase their risk exposure. Indeed, Hodges, Proctor and King (2013) argued that even the largest New Zealand council may not have the expertise required for PPPs.

Some councils may also not have sufficient capability to develop meaningful performance indicators and measure against them.

Summary

Regulatory barriers do not seem to prevent councils from using PPPs. Large council projects should be no less attractive for PPPs than are central government projects. However, the small scale of many local government projects and a lack of experience with PPPs may make councils and the private sector reluctant to engage in PPPs.

F11.12 Regulatory barriers do not seem to prevent councils from using Public Private Partnerships (PPPs). Yet the small scale of many local government projects and a lack of experience with PPPs may make councils and the private sector reluctant to engage in PPPs.

Despite the barriers of small-scale projects and lack of experience, there appears to be untapped scope for councils to make greater use of PPPs for projects of a suitable size. The government could encourage councils to make more use of PPPs by extending the current requirement to consider PPPs to include all significant projects involving local government.

R11.10 Councils should consider public-private partnerships for all significant local government infrastructure projects, not just those seeking Crown funding.

If the government does decide to extend the requirement to consider PPPs in this way, it is important that the right institutional arrangements for councils exist. Two critical requirements are scale and specialised capabilities.

Designing commissioning entities with scale to manage larger projects

Local authority project commissioning arrangements that favoured larger-scale projects and developed deeper commissioning capability would likely increase the use of more complex delivery models. Such models include PPPs, alliance contracting and early contractor involvement.

Two options to increase scale and capability are a new commissioning agency, and some form of joint procurement.

A new commissioning agency

The NZCID proposed a specialist local government procurement agency (NZCID, 2015b). Functions of such an agency could include consolidating procurement on behalf of councils; and consolidating advice and assistance to councils.

Consolidated procurement

A new entity could source, procure and manage contracts on behalf of local government. Canada has agencies that perform these roles for large projects. The NZCID argued a similar agency should be created in New Zealand, with responsibilities extending across portfolio areas and levels of government (NZCID, 2016b).

The entity would have more bargaining power and specialist capability than individual councils and could develop a pipeline of projects. The entity could reduce transaction costs by improving information and providing a single point of contact. It would hire staff with commissioning expertise. The LGFA, a CCO operating under the LGA 2002, is a precedent. The LGFA helps local authorities access less costly and more diversified funding (section 11.4; LGFA, n.d.).

Councils would need to delegate decisions about when and from whom to procure infrastructure and to reach agreement about how to measure and share the benefits of joint purchasing power. Smaller councils have most to gain from delegating procurement decisions, but may be concerned that larger councils would dominate decision making.

Consolidated advice and assistance

An agency that advises councils about procurement may reduce the costs for councils of using more complex delivery models. Councils would have fewer concerns about losing their autonomy than with an agency that undertook consolidated procurement. The agency could advise each council about the council's choice and implementation of service delivery models. This might reduce transaction costs, and encourage the council to consider a wider range of delivery models.

Yet a new agency risks crowding out private-sector organisations that might operate in this area. And the scope of the role would need to be carefully designed to ensure that it did not expose the government to risks associated with PPPs taken on by the councils it had advised.

The NZTA performs a role like this for land transport. The procurement page on its website has links to a procurement manual, a state highway procurement strategy and a contract procedures manual, together with guidance on many of the models outlined in Box 11.7.

The NIU and PPP teams in the Treasury already provide advice on infrastructure and PPP issues. It might be more efficient for councils to use this existing expertise for advice and support, instead of creating a new agency. The PPP team has already had discussions with Auckland, Wellington and Christchurch councils.

Joint procurement

Rather than relying on a new commissioning agency, councils could enter into joint procurement arrangements. There could be "virtual clusters" (formal or informal structures) through which a small number of councils jointly procure one-off or infrequently purchased goods or services. Regional clusters are another possibility, involving neighbouring councils and potentially other organisations, such as regional hospitals or schools (Department of Planning and Community Development (Victoria, Australia), 2008).

Joint procurement arrangements have many of the same advantages as consolidated procurement (Sustainability Victoria, 2015), yet may be more attractive to councils than a new commissioning agency. Joint procurement allows councils to work out for themselves whether the benefits outweigh the disadvantages and only undertake joint procurement for as long as this is the case.

Some councils already use joint procurement. For example, the councils in the Hawke's Bay have formed the Hawke's Bay Local Area Shared Services structure (HB LASS n.d.). Nine councils in the Waikato Region have established the Local Authority Shared Services (LASS) company. The LASS company and the Waikato Mayoral Forum enable a strategic approach to planning infrastructure across a region (Box 11.9).

Other groups of councils, for example in the Wellington region, collaborate on procurement in areas such as water infrastructure. They have recently developed a regional procurement strategy through their jointly owned CCO, Wellington Water. The DIA noted that it is "possible that several small, rural councils could decide to jointly enter into a procurement arrangement covering water services across a larger area" (DIA, 2010b, p. 6). Similarly, Bridger (2012) suggested rationalising road-lighting PPPs into three or four areas to cover the whole country.

Box 11.9 **Cooperation between councils in the Waikato region**

Local Authority Shared Services Limited

LASS, created in 2005, is jointly owned by Hamilton City, Hauraki District, Matamata-Piako District, Otorohanga District, Rotorua District, South Waikato District, Taupō District, Thames-Coromandel District, Waikato District, Waikato Regional Council, Waipa District, and Waitomo District. LASS can, on behalf of constituent members, enter into contracts and agreements with external suppliers and provide value by reducing costs. It also provides councils with a company structure under which they can develop and promote services to other local authorities and to external parties. Member councils pay a small yearly levy, depending on their size. Services are funded on a user-pays basis.

LASS's projects include the Waikato Regional Transport Model (WRTM), the only strategic, regional, transport modelling resource in the Waikato. The WRTM has been used in more than 60 projects that have supported land transport investment in excess of $3 billion. Projects include the Waikato Expressway Network Plan, Southern Links, and Hamilton City's Wairere Drive project. The WRTM provides:

- an evidence base to inform decisions;
- a collaborative technical and management framework enabling councils and the NZTA to identify, and jointly resolve, policy and investment issues; and
- efficiencies from joint procurement, operation and delivery of modelling advice for the whole Waikato region.

Waikato Mayoral Forum

Established in 2012, the Forum provides a venue for the mayors in the Waikato region to promote the wellbeing of their communities. Its purposes include increasing the efficiency of council services, such as roads, water and wastewater. The Forum is developing a "Waikato Plan", which will set strategic directions; identify settlement, infrastructure and service needs; and provide an evidence base to support policy and investment decisions. The plan will coordinate decisions across local authorities, central government and other parties to determine the future location and timing of critical infrastructure. It will help to align regulation, funding and implementation across the partner agencies.

Road Asset Technical Accord

The Road Asset Technical Accord (RATA) seeks to enhance collaboration in the road sector within the Waikato region. In its first 18 months, the RATA generated $350 000 in initial savings. Between 5% and 10% of total costs could eventually be cut each year through efficiencies gained by working together.

Water and wastewater

A review has indicated that at least several million dollars of savings could be delivered each year by councils working together on water and wastewater services.

Source: LASS, 2015; Ward, 2016.

Increasing capability to use innovative infrastructure delivery models

New Zealand councils are not leaders in using more complex infrastructure delivery models, such as alliance contracts or PPPs, although they have made some use of them. Examples such as the Waikato region LASS

illustrate the advantages for councils from joint procurement of infrastructure, particularly when this extends beyond the boundaries of individual councils.

Councils could secure unexploited value by making more use of complex delivery models or joint procurement. Yet councils without a sophisticated approach to risk management could face significant exposure if they entered into a PPP or alliance contract that left them bearing large risks. A future urban planning framework should provide institutions that give councils the capability to manage complex delivery models successfully. Taking advantage of specialist advice and support on offer to councils from the Treasury specialist PPP unit, and building on current shared services arrangements, look like promising ways forward.

F11.13 Existing specialist capability in the Treasury Public Private Partnership unit is available for councils to draw on. Examples such as the Waikato region's Local Authorities Shared Services Limited illustrate the advantages for councils from joint procurement, particularly when this is founded on a regional approach to planning for infrastructure that extends beyond the boundaries of individual territorial authorities.

R11.11 A future urban planning system should give councils the capability to use a wide range of innovative infrastructure delivery models, including public-private partnerships. Councils, either alone or through joint agencies, will need to develop the capabilities to operate such models successfully. Future arrangements could build on existing specialist capability in the Treasury and current regional shared-services initiatives that increase project scale and develop project-commissioning expertise.

11.8 Conclusion

The quality of life in New Zealand's cities depends on the quality of their infrastructure. A high quality of life needs infrastructure to be maintained, renewed and, where populations are growing, expanded. Planning and funding infrastructure can be a challenge for councils – delivery costs can vary significantly between locations, and local authorities can find it hard to recover the costs or borrow as much as they need. Where they face problems recovering costs from beneficiaries, the burden falls on the broader rating base.

Ideally, a planning system should allow councils to cover the full cost of infrastructure from beneficiaries either through user charges, development contributions or targeted rates. User charges should be set to short-run marginal costs to encourage the efficient use of existing infrastructure, and signal to consumers the additional cost of a unit of service. When it is not efficient to recover full cost from user charges, development contributions and targeted rates are suitable tools, the former being more suitable for infrastructure whose benefits are specific to new developments.

However, full cost recovery faces a number of barriers, including financial shortfalls, legislative prohibitions on some forms of pricing and user charges, and political economy issues.

Some of these barriers can be removed by lifting legislative prohibitions on pricing tools, greater use of development contributions and targeted rates to recover the costs of community infrastructure, and introducing the ability for councils to levy targeted rates based on the increase in land values that results from public action.

The borrowing constraints that sometimes restrict high-growth councils from infrastructure investment with high social returns are difficult, but should not be impossible, to overcome, and it is important to do so.

Some commentators have argued that New Zealand's local government sector needs different revenue sources if it is to truly respond to, and accommodate, growth. The Commission sees no case for local income or expenditure taxes, but recommends introducing and using value-capture tools.

To expand infrastructure efficiently requires each council's procurement processes to be well planned, fit for purpose, and able to secure value for money. Collaborative procurement can enable a council to:

- share the cost of specialist procurement and share expertise, experience and information about suppliers and their performance history;
- permit standardised specifications; and
- facilitate large-volume procurements that attract more competition and keener pricing.

Opportunities may also exist for councils to use more complex delivery models such as PPPs, provided that they have first developed the specialist capabilities required, or have accessed them from an existing source (such as the Treasury's PPP unit).

12 Other development models

Key points

- Three development models outside the mainstream of urban planning in New Zealand could each contribute to solving the serious problem of an inadequate supply of land and infrastructure to meet the demand for urban living and working in high-growth cities.
- The *first model* would supply more land and infrastructure at the fringe of cities by giving private developers greater scope to invest in large new subdivisions and supply them with the trunk transport and three-waters infrastructure normally supplied by councils.
- Land prices would fall towards their social opportunity cost; and investments with high social returns that are currently not happening (despite the availability of cheap capital) would begin to be realised.
- Competitive urban land markets would disrupt a well-entrenched trio of forces currently sustaining and increasing land and house prices. Those forces are land-use plans that allow only incremental geographic expansion of cities, council infrastructure providers who want to keep costs low by only expanding their existing networks incrementally, and landowners at the fringe and beyond who hope for large capital gains.
- Several options exist to address the ownership, funding, financing, operational and succession issues of new autonomous communities under the competitive urban-land-markets model. Legal clarity and policy support would be needed for developers, investors and prospective residents to have the confidence to proceed.
- A future planning system should allow and support competition in urban-land and infrastructure markets. These would complement other measures the Commission has proposed to make the planning system more responsive to the demand for urban growth.
- The *second model* establishes local urban development authorities (UDAs). New Zealand's largest urban councils are already adopting UDAs to redevelop existing urban areas of their cities. UDAs are a response to the challenge of delivering greater density within cities. Auckland and Christchurch have UDAs and Wellington is establishing one.
- UDAs offer the potential to redevelop sites to deliver large numbers of new dwellings. They can also take advantage of economies of scale to generate efficiencies, and foster a larger, more efficient and more capable construction industry.
- In a future planning system, government should pursue a range of opportunities to support local UDAs. These include providing for streamlined planning processes, and granting them powers of compulsory acquisition, within certain areas that are designated for redevelopment.
- The *third model* – the auctioning of development rights – has the potential to regulate density (eg, by increasing the number of multi-storey apartment blocks in an area up to a desired limit) and provide revenue to fund associated infrastructure costs or additional amenities to "compensate" affected communities.

This chapter presents three development models outside the current mainstream of urban planning in New Zealand (although examples are found in other countries). Each has the potential to help solve New Zealand's serious problem of inadequate supply of land and infrastructure to meet the demand for urban living and working.

This report, and the Commission's previous reports on *Housing affordability* and *Using land for housing,* all argue that much can and needs to be done to improve New Zealand's planning laws and institutions and the culture and capabilities of key players in the planning system. If this fails to happen, the current outcomes of lack of affordable housing, transport congestion, and poorly functioning urban labour markets will continue to impose high economic and social costs in high-growth urban areas.

The recommendations in this report to improve the planning system include a streamlined plan-making process, clearer statutory recognition of the benefits of developing the built environment while protecting the natural environment, and more and better ways to fund infrastructure. Yet the problem of the current system's inability to respond adequately to strong demand is likely to be deep-seated and, even with these changes, hard to shift.

The Commission offers the models in this chapter with an eye to applying even greater impetus and vigour to the problem of insufficient supply of development capacity at both the extensive and intensive margins of cities. By way of introduction, the essential ideas behind the three models are described below.

- Competitive markets for urban land and infrastructure supply. Under this model developers would have greater freedom and autonomy to establish new communities beyond the current urban footprint. This would include taking responsibility for transport, three waters and community infrastructure, and so relieve councils of the funding and capacity burdens for these. The model would directly attack the high price of land at the urban boundary, a key cause of unaffordable housing.
- Urban Development Authorities. This model is well established in other countries and is in use in Christchurch to rebuild its central business district (CBD) after the 2010-11 earthquakes. UDAs typically have access to special powers and streamlined land-use rules tailored to development needs in particular areas. These are geared to address the large risks of hold-out problems in trying to amalgamate key pieces of land in inner-city redevelopments.
- Auctions of development rights. Under this model councils have the power to auction development rights for denser development within cities. When inner cities densify, existing residents typically resist. Yet if larger, higher buildings were controlled in number, location and possibly other characteristics, there would be fewer bases for opposition. At the same time, limiting development opportunities creates valuable rights for those awarded them. Scope exists to allow councils to densify in this way and to auction the rights created. This is another form of value capture (Chapter 11). One use of the proceeds would be to enhance amenities in the new densified area, further reducing community resistance to development.

12.1 Model 1: competitive markets for urban land and infrastructure

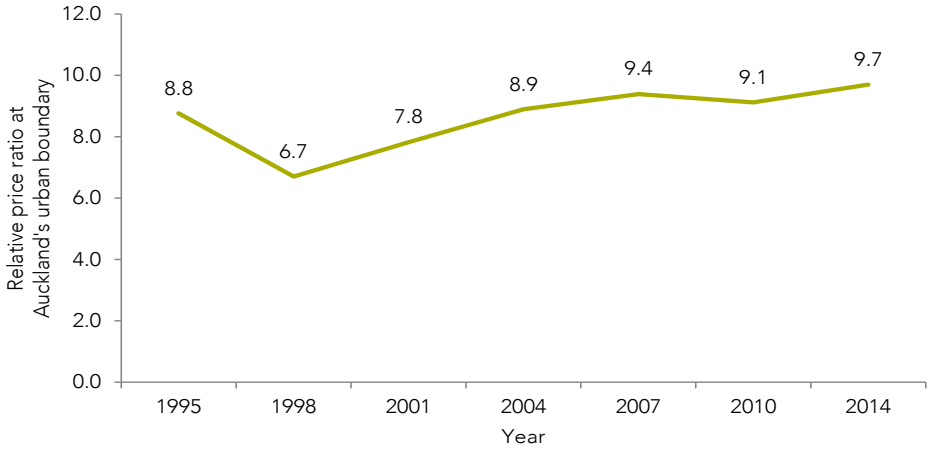
The problem

Land markets in New Zealand's high-growth urban areas suffer from constricted supply. This is largely because councils release land zoned for development in relatively small tranches at the existing urban boundary. While this pattern of release may seem logical because it is neat, consistent with a compact urban form, and minimises the costs of connecting with existing infrastructure networks, it comes at a high social cost. The striking manifestation of this cost is the large discontinuity in land values at city boundaries between land zoned for development and land that is not.

The Commission investigated the ratio of land prices up to 2 km inside Auckland's Metropolitan Urban Limit (MUL) to 2 km outside the MUL in its *Using land for housing* inquiry. As shown in Figure 12.1, land inside the MUL was almost 10 times more expensive than land outside the MUL in 2014 and the ratio has generally increased over time.

The value of land up to 2 km outside the MUL will be influenced upwards by the prospect of it being one day zoned for residential use. Another comparison is between agricultural land in the Auckland region which has a market value of $20 000 to $50 000 a hectare, and average land values within the city that range from $8 million to $14 million a hectare – well over one hundred times greater.

Figure 12.1 Ratio of residential land prices inside the MUL against land prices outside the MUL



Source: NZPC, 2012a; Productivity Commission analysis of Quotable Value data.

These figures and large ratios illustrate several things.

- Supply of land for urban use is severely restricted – reflecting that councils zone only limited land (newly released land is almost always simply an incremental extension of the existing urban boundary); and that councils find it cost-effective only to release land close to existing infrastructure networks. The price differential also explains, and is partly explained by, speculation in housing markets and land banking. Speculation in the former adds to demand for land that is ready-to-go for housing. Speculation in the latter restricts supply when zoned, but unbuilt land is in relatively few hands – the landowners hold back sales to boost prices.
- The opportunity cost of more land for urban development (ie, its next best alternative use) is actually quite low – it is around its value for agricultural use. In turn this shows how valuable the economic activity of turning raw land into new houses (and other urban uses) is. The high prices people are willing to pay for houses indicate benefits to society. The cost to society (of at least the land component) is its next best alternative use and is far less. Yet artificially high land prices and other barriers to development mean that society is foregoing this large net benefit.

Measures already proposed

As mentioned, a number of measures proposed by the Commission in this report are geared to overcoming the restricted supply of land for urban uses in high-growth areas. For example:

- the use of independent hearing panels (IHPs) to review and approve council-proposed land-use plans (Chapter 8) will help to ensure that plans provide realistically for the growth of cities and the adequate release of land;
- the price-trigger mechanism, also described in Chapter 8, will prompt councils to take action to release more land to avoid the price difference between urban and rural land exceeding a certain threshold; and
- the guidance, funding tools and procurement tools described in Chapter 11 will help high-growth councils stay ahead of demand for infrastructure capacity that is an essential complement to raw land in making land available for houses and other urban uses.

Chapter 8 also describes a recent important measure that central government has taken to tackle inadequate land supply in high-growth urban areas – the coming into force of the National Policy Statement on Urban Development Capacity (NPS–UDC). This policy statement

> … provides direction to decision-makers under the Resource Management Act 1991 (RMA) on planning for urban environments. It recognises the national significance of well-functioning urban environments, with particular focus on ensuring that local authorities, through their planning, both:

- enable urban environments to grow and change in response to the changing needs of the communities, and future generations; and
- provide enough space for their populations to happily live and work. This can be both through allowing development to go "up" by intensifying existing urban areas, and "out" by releasing land in greenfield areas. (New Zealand Government, 2016, p. 3.)

The Commission recommendations and the NPS–UDC would together place greater pressure on councils and improve their ability to provide more infrastructure-serviced land supply. Yet these measures could still struggle to shift the current deep-seated patterns of behaviour that restrict supply. To shift them requires disrupting and changing three powerful interests: planners wedded to the paradigm of a compact city form; infrastructure providers who favour incremental network expansion so as to minimise costs; and landowners at the city fringe hoping for maximum capital gains.

A further measure that the Commission has examined could also help disrupt these interests. It would free up new suppliers who are willing to meet the demands of consumers. It would enable them to enter the market, and compete among themselves and with existing suppliers of land and infrastructure services. The effect would be to better meet currently unmet housing and business needs. A well-designed opening up of the market for urban land to competition could reinforce other measures and help reduce high and rising land prices to levels much closer to the opportunity cost of urban land. This would remove a key driver of high and rising house prices.

F12.1 The forces that restrict the supply of new urban land and cause its price to greatly exceed its marginal opportunity cost are well entrenched. To shift them may require another measure to supplement the Commission's other recommendations and the new National Policy Statement on Urban Development Capacity. Opening the supply of urban land and infrastructure to greater competition would likely be an effective additional measure.

How competitive urban land markets would work

Competitive urban land markets (CULMs) would greatly increase the freedom of entrepreneurs to supply development capacity anywhere within a broad band on the outskirts of growing cities. The freedom would be subject to not intruding on land designated for future use as public open spaces, infrastructure corridors, areas of significant conservation value and sites of significance to mana whenua. This is consistent with recommendation 10.1 that high-growth cities need to plan for several decades of future growth, including by making provision for these vital land-use categories.

The important new feature of CULMs is that new urban development would not have to be contiguous with existing urban areas. This is key to breaking the stranglehold on development land held by owners and land bankers at the fringe of cities that drives up land prices to multiples of its true opportunity cost. Indeed, the very possibility of developers buying land further out would make the market for urban land more competitive and force those landowners at the fringe to accept lower prices.

The CULM model would tackle the infrastructure barrier to the supply of ready-to-go land by giving developers greater autonomy to supply the infrastructure needs of new communities.[99] Developers would have a choice of investing in standalone arrangements for the three waters or connecting to existing networks. Either way, developers taking responsibility would relieve councils of the financial and capacity burdens that currently constrain infrastructure supply and, as a result, development. While developers would face higher upfront costs from having more responsibility for infrastructure, they can expect to offset these partly or completely through lower outlays when buying land.

[99] Predominant current practice is that developers are responsible for infrastructure within the boundaries of their subdivisions (eg, roads, footpaths, and underground services such as water, stormwater and wastewater pipes). Councils are responsible for connecting subdivisions to existing networks and ensuring that large fixed assets (eg, water supply and treatment, and wastewater treatment) have sufficient capacity. Developers make development contributions towards the costs incurred by councils (Chapters 10 and 11).

The simultaneous benefits of tackling both land and infrastructure bottlenecks in a manner that is "market-led" rather than "planner-led" underlie the potential power of CULMs. This power can realise the large social benefits of development not being realised now because of these bottlenecks. By reducing the market power of a small group of landowners and increasing housing supply, CULMs could make a significant contribution to the prize of affordable housing.

Table 12.1 Comparing subdivision development under conventional and CULM models

Development component	Current model	CULM model
Land for subdivision	Land for subdivision is restricted to planner-designated land at the city fringe.	Development is free to occur anywhere in the area designated for future expansion in a Regional Spatial Strategy, with some exceptions. Development is not free to occur in infrastructure corridors, public open spaces, land with high conservation value and sites of significance to mana whenua.
Resource consent	Resource consent for a subdivision is conditioned on contiguity with existing urban areas and infrastructure networks, and on infrastructure capacity.	The resource consent allows for discontinuous development and for autonomous provision of three waters and connecting transport infrastructure.
Transport and three waters infrastructure[1]	The developer is responsible for the infrastructure within a subdivision; the council is responsible for connecting that infrastructure.	The developer is responsible for the infrastructure within a subdivision and for connecting that infrastructure (subject to quality and environmental conditions).
Funding[2]	Developers fund both the infrastructure within a subdivision and any development contributions (DCs). The funding comes from a portion of the sale price of properties they sell to new residents. Councils may levy targeted rates on the new residents. Operating costs are funded from user charges, targeted and/or general rates.	Developers fund both the infrastructure within a subdivision and any connecting infrastructure. The funding comes from sales to new residents and possibly also from a loan that then becomes the responsibility of residents. Operating costs are funded by residents through user charges, some form of "body corporate" levy, and rates (to the extent they use council infrastructure).
Financing[2]	Developers finance projects through short-term loans from banks or other sources. Residents normally finance house and land prices through a bank mortgage. Councils may borrow on wholesale markets to fund the capital costs of infrastructure not covered by DCs.	Developers have a larger and more complex financing task. They must finance potentially greater infrastructure costs, and recover these from new residents. In turn, the residents are likely to need a body-corporate entity to hold and service the loan, and collect levies for operational costs.

Source: NZ Productivity Commission.

Notes:

1. Energy and telecommunication infrastructure – and social infrastructure (education and health facilities) – are not mentioned because these are provided on a demand basis that is unlikely to differ across the models.
2. As explained in Chapter 11, funding refers to obtaining enough funds in total to pay for infrastructure, while financing is using financial tools such as borrowing and lending to meet cash-payment obligations when they are due.

Table 12.1 sets out a comparison of the typical components of a subdivision development under the currently conventional New Zealand approach and under the CULM model. As previously explained, the main differences lie in where the development can take place, what the developer is responsible for, and how development and infrastructure costs are funded and financed. The CULM model resembles, in some

respects, the model of Municipal Utility Districts (MUDs) or Special Districts common in some states in the United States. MUDs and their specific design features grew out of fiscal constraints on US local authorities, and the longstanding US tax concession to holders of local authority bonds (the interest on such bonds is tax exempt). New Zealand rightly has no such tax concession, so a New Zealand MUD model having a different design may well be appropriate.

The rest of this chapter refers to communities created under a CULMs model as Autonomous Community Districts (ACDs). The next section examines design options for CULMs and ACDs.

Design choices for CULMs and ACDs

The main design choices for new communities under the CULM model concern:

- funding and financing;
- the roles of, and relation between, the developer and the legal entity that takes over from the developer in owning and managing the collective property and debts of the community; and
- the relationship between an ACD and the city it is linked to by proximity, jobs and other economic ties, including residents' access to city-level local public goods such as major recreational and cultural facilities.

What developers do now

It is helpful to note what some developers in New Zealand do now. They undertake developments that, to a considerable extent, rival the scale and scope of ACD projects. For example, some developers are lead investors in large new subdivisions with many hundreds of properties. They buy large blocks of land, invest in (within-subdivision) infrastructure at scale, and finance their projects with risk capital amounting to many millions of dollars. Box 12.1 gives some examples. So ACDs are not unrealistic – some large developers already have the capacity to handle their scale and complexity.

Examples also exist of developers investing in connecting infrastructure:

- Fulton Hogan built and paid for motorway interchange ramps at its Millwater development in Auckland[100] and then handed ownership to the local authority or the NZTA.[101]; and
- Progressive Enterprises paid and built essential stormwater infrastructure when developing its Countdown store at Hobsonville (sub. DR55, p. 3):

> [W]hen developing its Countdown store at Hobsonville, significant stormwater works were required to establish the supermarket. In order to progress development of the supermarket and satisfy increasing demand, Progressive paid upfront for the stormwater works to be constructed, rather than wait for the Council to carry out the works at some undetermined future time. Hobsonville Countdown is an example of why the planning system needs to provide sufficient flexibility for the provision of infrastructure to service residential and business development. While land identified for potential development may not currently be serviced by infrastructure, there may be situations where a developer is prepared to fund or construct the infrastructure in order to bring the development of that land forward.

Box 12.1 **Examples of large developer-led subdivisions in New Zealand**

Pegasus town, North Canterbury

Pegasus town is 25 km north of Christchurch in the Waimakariri District of Canterbury. It is still being developed, with plans for a population of 6 000 and 1 700 houses. In May 2016 the population was over 2 500, with 970 houses completed. The town has retail stores and office space, a school, a golf and sports club, a recreational lake and is adjacent to the coast. The project was first proposed by Southern

[100] The cost of the ramps added around $5 000 to the price of each section in the development, but the arrangement was an effective means of overcoming delays in the provision of a vital piece of infrastructure.

[101] A developer told the Commission that it would have been willing to contribute to the construction of a water main, the lack of which was holding up a large amount of development, but existing processes were too rigid and rule-bound to allow this sort of deal.

Capital with Infinity Investment Group as the developer. Major earthworks began in 2006 and the first residents moved into the town in September 2008. It ran into financial trouble in late 2012 with the developers going into receivership. Todd Property Group bought the assets and undertook infrastructure investment to complete the project.

Pauanui, Coromandel Peninsula

Pauanui is a beach resort that the Hopper brothers, who worked as developers on the north shore of Auckland, began in the late 1960s. The area had dense mature pine trees, no infrastructure and difficult vehicle access. The developers worked with an Auckland urban designer on layout and infrastructure plans – roads, water supply, wastewater, stormwater, and parks and reserves. They then financed and undertook the work. Thames Borough Council (which later became Thames-Coromandel District Council) backed the development, most crucially with consents and in securing funds for the 11 km access road. The development proceeded in stages, each stage releasing further sections for sale. The permanent population is less than 1 000, but this swells to around 15 000 in the peak summer period.

Whitby, near Wellington

In 1967 Whitby Developments Consortium bought 3 000 acres in the Pauatahanui area to develop a new community, which was to have been the first of several "neighbourhoods" for the new Pauatahanui city. The first sale of sections took place in 1970. Rapid development started in the early 1980s. Whitby began under two local bodies, Porirua City and Hutt County until local government reform in the 1980s when it came entirely under Porirua City. A shopping precinct, schools, library and community facilities were built in the 1980s (the last two by the local authority). Whitby Consortium sold its remaining holdings, including the golf course to Whitby Coastal Estates in 2000. The golf course was subdivided to become the Duck Creek subdivision. In 2012 the southern section of the subdivision was sold to Todd Property Investments for subsequent development. The current population and number of dwellings are about 12 500 and 4 000 respectively.

Source: Mitchell, 2016; Whitby Residents' Association, 2013.

Yet these large projects in which developers played a leading role still required the permission of, and resources from, local planners and other public agencies (eg, the NZTA). Without such permission and resources, no development takes place. In addition, even if a future planning system granted developers greater autonomy to undertake them, uncertainties about critical design features could undermine the confidence of developers, financiers and home buyers to the extent they would not happen. This may be the reason behind the observation in the Commission's *Using land for housing* report (NZPC, 2015a) that "(t)here appear to be few barriers to pursuing this [MUD] model of development in New Zealand and little enthusiasm for the model among the development community".

Funding and financing under the CULMs model

A key feature of the CULMs model is that developers are responsible for funding and financing all water, transport and community infrastructure required to make a new settlement viable, and not just parts within a subdivision. Aspects of such infrastructure could include a safe source, treatment and piping of water, collection and treatment of wastewater and stormwater to environmental standards, and a new or upgraded connecting road. These are expensive items, so developers and investors could be liable for large capital raisings and additional financial risks.

On the benefit side, councils and the NZTA are freed from these burdens. This removes their budget constraints and debt limits that often cause holdups to urban development. Essentially, the debts from the funds borrowed to finance these capital works are shifted from public to private balance sheets.

A developer's business model is of course to earn a return on investment. In the case of an ACD project, as with subdivisions under the current model, the return comes from the sale of properties to new residents

who in turn typically finance this cost by conventional mortgage arrangements. The developer's costs that need to be covered under the current model may well include development contributions to councils for the full or partial cost of connecting infrastructure. Again, once passed onto property purchasers, this process puts costs fairly immediately onto private balance sheets. To this extent, an ACD development would not be very different from what happens now.

However, beyond a certain point, the new residents of an ACD may be unwilling or unable to take on upfront their share of the large infrastructure costs incurred by the developer. An alternative, typically used by MUDs in the United States, is to set up an entity that takes over financing responsibility from the developer in return for ownership of the infrastructure assets. This entity then services and repays the debt over time by means of levies on residents who contract to pay these when purchasing their properties.

The need for a body-corporate type entity

In addition to taking over any remaining debt obligation, an entity will be needed to manage the ongoing ownership, operation and maintenance of the infrastructure on behalf of the community. Leaving this in the hands of a private business such as the developer, or a firm taking over from the developer, opens residents to the risk of exploitation by a monopoly supplier. These risks could be reduced either by terms in the original purchase contract, or by setting up a body-corporate entity that represents the collective interests of residents. A further reason for such an entity is that, even if direct user charges cover most of the operating and maintenance costs of the community's infrastructure services, an entity will need to take collective decisions to deal with particular situations that arise from time to time. Two such situations are storm damage, or the opportunity to join a local pest eradication scheme to encourage native flora and fauna.

An important design issue for ACDs is therefore the structure and governance of the body-corporate entity and its powers to set charges, take collective decision and levy residents. One option is to simply use a standard body-corporate legal structure common in multi-dwelling apartment blocks in New Zealand. In the United States, MUD governing bodies have revenue-raising powers akin to the rating powers of local authorities.

The relationship between a MUD and its local authority

An ACD developer and the relevant local authority should work constructively with each other. Yet because the developer would take care of infrastructure needs and impose a minimal burden on council resources, local authorities would be bound to grant resource consent to developers for an ACD providing the proposal satisfied clear criteria. The choice of criteria is a design question, but likely inclusions would be along the lines that the development:

- lies within the area designated for urban growth over the next several decades;
- does not intrude on spaces designated in the Regional Spatial Strategy (RSS) as infrastructure corridors, public open spaces, areas of high conservation value; or sites of particular significance to mana whenua;
- complies with capacity needs and quality standards for infrastructure and the built environment; and
- complies with the Regional Policy Statement for the Natural Environment (RPS-NE).

When an ACD is up and running, it will of course be subject to the local authority's regulatory jurisdiction on matters such as liquor licensing and dangerous dogs. Scope may exist for the ACD community to purchase council services such as solid rubbish collection and disposal. If the ACD has chosen to connect to mains water and wastewater, it would of course be subject to council rates and charges for ongoing water and wastewater services. The guiding rule should be that charges for services are set to recover the cost that an efficient provider would incur, including a reasonable return on capital and for risk.

Residents of an ACD community will stand to enjoy the broader benefits of the nearby urban area such as access to jobs, education opportunities and cultural and recreational facilities. To the extent this provision costs the urban council money not recovered by user charges and relies on rates funding (eg, the cost of roads and other amenities with the character of local public goods (Chapter 3)), it would be proper and reasonable for the ACD residents to pay a rate to the council. But the rate would be less than for city residents because of the self-sufficiency of the ACD in providing its own infrastructure and amenities.

A final set of design issues relates to how an ACD's status and arrangements might change once the main nearby urban area expands to become contiguous with the boundary of the ACD. At this point it may be sensible (for economic and administrative reasons) for the local authority to take over the ACD's infrastructure and public amenities. If the local authority did not, it could be faced with a balkanised patchwork of ACDs interspersed with conventional developments. This would raise difficult boundary issues[102], and is unlikely to be efficient for this reason and for not taking the opportunity to exploit scale economies. Clearly the principles governing takeovers of ACD assets should be clear and agreed from the start. They would include provisions for dealing with any debts still on the books of the collective entity and for the local authority to acquire some or all of the entity's equity interest in its assets on fair terms.

A range of models exist

In setting the laws and institutions for CULMs, choices exist in the degree of autonomy accorded developers; the funding and financing of ACDs; the structure, governance and powers of their body-corporate entities; and the rules for local authorities to take over ownership and responsibility for infrastructure assets and services once urban areas expand to encompass an ACD. These choices imply a continuum of possible arrangements. Given the novelty of CULMs in New Zealand, it would be important to resolve the many gaps and uncertainties so that developers, investors and prospective residents gain the confidence to proceed.

F12.2 A continuum of possible arrangements exist to address the ownership, funding, financing, operational and succession issues that would arise for new communities constructed under the competitive urban-land-markets model. Legal clarity and other reassurance will be needed for developers, investors and prospective residents to have the confidence to proceed.

Preferred model for CULMs in New Zealand

This subsection examines the form of CULMs that would work best in New Zealand. It places CULMs in the context of a future urban planning system for New Zealand as set out in this report. Other parts of this system will provide important pillars to help make CULMs work to benefit society. Those main benefits are making housing affordable and prompting adequate responses to demands for greater urban capacity. Other features of the system will make important parallel contributions to achieving these benefits.

Effective CULMs will depend on the new approach to plan-making recommended by the Commission. The key is to develop RSSs that provide a platform for integrating spatial and infrastructure strategy and land-use planning (Chapters 10 and 13). The RSS will define the long-term envelope of land available outside current city boundaries where developers can choose to buy land and initiate ACDs. Augmenting the RSS will be a city's district or unitary plan and its infrastructure plan that will make clear the scope for the city to densify within its existing footprint. Armed with this information and population growth projections, developers can make sensible decisions about whether or not to invest in an ACD and the extent it would require infrastructure investment.

Developers would be very conscious of price information, comparing the relative costs of densifying within the city (if that is permitted) and greenfield development, and weighing these against the demand for different types of residential living. If the choice is greenfield, the price of land at the city fringe versus further out will be another key consideration. As argued above, the possibility under the CULM model to go further out will put competitive pressure on landowners at the fringe and deny them the market power they currently enjoy. This, plus removing impediments to infrastructure supply, is key to cutting land prices and building enough urban capacity to meet demand.

Requirements for more private development initiatives

One impediment to private investment in trunk infrastructure to support an ACD is that few mechanisms exist for private developers to secure long-term payment obligations from, and governance by, groups of property owners who benefit. As noted, it is common to use body-corporate arrangements to fund and

[102] An example of difficult boundary issues is sorting out responsibility for corrective action and cost when a downstream infrastructure problem is caused by a deficiency in the upstream infrastructure on the other side of a boundary.

govern common services to a defined building, campus, or development. While it may be theoretically possible to extend body-corporate or other bespoke contractual arrangements to cover the funding and governance of a large infrastructure project, such as an ACD, the Commission is not aware of any examples in New Zealand. In contrast, in jurisdictions where this form of development has legislated mechanisms, such arrangements are regularly used.[103]

The Commission recommends developing a legal vehicle that is purpose-built for handling the challenges of financing and governing large ACD projects that potentially yield benefits to a large number of property owners and which are likely to run for 20–30 years. Developing the details of a vehicle along these lines is a significant piece of work that the Commission does not attempt in this report. Even so, it would expect this work to address the following issues (some of which have been already noted above):

- The procedural requirements to propose and establish an ACD. The need is for a clear set of procedures for the initiator of an ACD to follow when proposing to establish one.
- The basis for consent by the participating property owners. The financial obligations of an ACD would certainly fall on the homeowners who choose to purchase properties within it. However, they could also fall, with consent, on other property owners located within a defined area and on other developers who benefit from access to the newly installed infrastructure.
- The extent and nature of the property-owner obligations to pay and how payment amounts are determined through time.
- The governance of the ACD and its associated trunk infrastructure, and the role of the various stakeholders in governance (eg, the roles of participating property owners, any equity and debt providers, the local authority, and central government agencies with a possible significant interest such as the NZTA and the Ministry of Education).
- The terms of reversion of the assets to the local authority or the NZTA once all financial obligations have been met. The assets of an ACD would likely revert to the relevant local authority or government agency once all financial obligations have been met, similar to most BOOT (Build Own Operate Transfer) arrangements.
- The ability of the local authority to buy out the ACD prior to reversion. As noted, it would be useful for the local authority to have an option to buy out the ACD under certain circumstances.
- How to handle any force majeure events.

In addition to the above issues, greater private willingness to invest in trunk infrastructure to make possible large ACD projects is likely to require supporting policies in the following areas.

- Commercial interconnection agreements. The efficient involvement of a private provider to supply trunk infrastructure in a market dominated by a single council or CCO supplier (eg, in the three waters or in transport) may require commercial interconnection terms for connection to the existing networks. And once the additional trunk infrastructure is in place, situations may arise where others (eg, another developer, or council infrastructure provider) wishes to negotiate interconnection terms with the private provider. The development over recent years of interconnection terms in other sectors in New Zealand dominated by single-suppliers (eg, in telecommunications and electricity) has been slow and litigious. The development of such terms should be based on legislated economic principles. It could also be assisted by appointing the Commerce Commission, which has extensive experience in setting interconnection terms in other sectors, to resolve any disputes.
- Setting of physical or service-potential standards. In situations where assets built by one party vest with another, either immediately or after an extended period of time (eg, after 20 years under an ACD as described above), the vestee party (eg, the council or a CCO) will likely need to be able to define the

[103] Examples of such jurisdictions include the US states of Texas and Florida.

quality of the assets from a physical or service-potential perspective. This standard setting process is also likely to require a dispute resolution procedure.

F12.3 Enabling private providers to develop Autonomous Community Developments beyond current city footprints and to invest in associated trunk infrastructure to support them would make land and infrastructure markets more competitive and likely yield high social returns through meeting demand for urban expansion and affordable housing.

R12.1 The government should facilitate Competitive Urban Land Markets in a future urban planning system. This would include creating a policy and legal framework to support private developers and investors to build and finance trunk infrastructure and Autonomous Community Developments.

12.2 Model 2: urban development authorities

To provide sufficient urban capacity in high-growth cities effectively and efficiently is likely to require cities to grow both out and up. While CULMs focus on growing cities out, the Commission also recommends the judicious use of UDAs to support cities to densify existing urban areas.

In its *Using land and for housing* inquiry, the Commission identified the important roles that UDAs can play in enabling urban regeneration and residential development (NZPC, 2015a). This section discusses:

- several models of UDA overseas;
- UDAs and economies of scale in development;
- local initiatives that are very similar to UDAs within New Zealand;
- the roles and functions of UDAs; and
- measures to support the operation of UDAs, including:
  - powers to amalgamate land;
  - the availability of streamlined planning and consenting processes for specified developments; and
  - other measures such as making Crown land available, partnering in specific projects, and ensuring that the Government's housing agency cooperates where relevant.

International experience with urban development authorities

Government land organisations (GLOs) – generally known as urban development agencies – play an important role in urban regeneration and residential growth strategies in Australia, the United Kingdom, Hong Kong and parts of the United States. Urban development agencies have a range of forms and functions, but typically lead the development of specified areas. They may be permanent or time-limited bodies. In some cases, they may have compulsory acquisition or planning powers, allowing them to amalgamate smaller landholdings and rezone the combined site.

The Australian Productivity Commission (APC), in its review of planning, zoning and development assessments, concluded that GLOs can play an important part in speeding up and de-risking development:

> Greenfield subdivision developments seem to proceed more 'smoothly' in areas where some development has already occurred. As such, there may be a role for GLOs as the first developer into new settlement areas. This would provide precedent planning decisions on which other developers could base their due diligence and ensure major 'lead in' infrastructure was in place. (APC, 2011c, p. 184)

Discussing VicUrban (now Places Victoria), the APC pointed to the usefulness of GLOs in initiating complex brownfield developments:

> VicUrban is a recent example of the increasing trend for GLO activities to be directed toward infill [brownfield] developments. In these developments, some of the projects are so complex and high risk that they are unable to attract private sector interest at least in the early stages of development. As a result, many GLOs work to reduce the complexity of projects (for example, by remedying issues such as fragmented land holdings … and 'derisk' development sites (for example, restore contaminated soil) to a level where it is feasible for private sector developers to subsequently complete projects. (p. 153)

Davison et al. (2012) cites other possible benefits from the involvement of UDAs in land development, including:

- the potential for UDAs, as the owners or regulators of the land, to attach conditions to its final use to achieve social objectives (eg, greater provision of lower-cost housing);
- greater scope to manage urban renewal, so that "processes of change proceed in a co-ordinated manner"; and
- an enhanced ability, as the owners of amalgamated or renewed land, to capture some of the uplift in land value that accrues from redevelopment for community use (pp. 87–88).

UDAs also play a role in bringing affordable housing to market in some Australian states, but their effectiveness appears to depend on the agencies having sufficient planning powers, independence and clear targets (Davison et al., 2012, pp. 88–89). Kelly's (2011) review of "place-based development" concluded that

> [m]any of the most successful organisations have used temporary planning powers, owned or acquired substantial amounts of land, and combined public and private investment. (p. 20)

In its *Using land for housing* inquiry, the Commission heard that some UDAs in Australia were pioneering the development of new housing typologies, such as smaller apartments and new design formats. These strategies were aimed at increasing housing choice. This innovation also sets a precedent (and gives confidence) for private sector developers to follow (ie, a "demonstration effect") (NZPC, 2015x).

F12.4 Urban development authorities are commonly used overseas and can play an important role in de-risking development, providing a demonstration effect for private sector developers to follow, and bringing land to market.

Taking advantage of economies of scale in development

UDAs can undertake large-scale developments. This offers a number of benefits, including the ability to generate economies of scale that can drive down infrastructure and construction costs. Larger developments are also important to attract overseas developers who may be better able to innovate and operate at scale.

The Hobsonville Land Company provides an example of what a UDA of similar or larger scale could achieve. The Company was able to attract successful tenders from AV Jennings to be its building partner because of the size of the development opportunities presented. AV Jennings is one of Australia's leading development companies, and had not previously operated in New Zealand. Growing the size of New Zealand construction firms, or attracting large firms to operate in New Zealand, is likely to require large-scale developments on large sites.

New Zealand initiatives to establish urban development authorities

A number of entities have suggested UDAs for New Zealand.

- In 2006 a report commissioned by the Ministry for the Environment proposed creating both national and regional urban transformation corporations, to undertake urban regeneration, and demonstrate commercially viable, sustainable developments (SGS Economics & Planning, 2006).

- A 2008 discussion paper from an inter-agency Sustainable Urban Development Unit sought feedback on a development organisation to coordinate planning and investment, assemble land, and operate streamlined planning and consenting processes.

- The Urban Taskforce (2009), reporting to the Minister for Building and Construction, recommended creating "an Urban Development Agency model based on a set of clear partnering principles to deliver urban development projects" (p. 4). It said:

> To accelerate both the quantity and quality of urban development, a tried and tested approach to complex urban development is needed. Urban development agency models are commonly used to bring all the parts of an important development package together in a consistent and integrated manner. (p. 3)

New Zealand's three largest cities either have a UDA or intend to establish one.

Auckland

In May 2015 Auckland Council set up Panuku Development Auckland as a council controlled organisation (CCO) formed from merging two existing CCOs involved in developing property. Panuku manages Auckland Council's property acquisitions and disposals, and manages and supports urban redevelopment projects in areas such as Wynyard Quarter, Ormiston and Hobsonville Point. It held $700 million in assets in 2016, and budgeted for operating expenditure of $60 million and revenues of $74 million in 2017 (Panuku Development Auckland, 2016a, p. 36).

The mission of Panuku is to

> rejuvenate urban Auckland, from small projects that refresh a site or building, to major transformations of town centres or neighbourhoods. Panuku improves the uses of land and buildings that Auckland Council owns, attract private investment and together we unlock their potential to create spaces Aucklanders love. (Panuku Development Auckland, 2016b, p. 5)

Panuku's activities cover four broad areas:

1. Redevelopment of urban locations and council owned land within the rural urban boundary
2. Redevelopment of council non-service property and, where appropriate, review of council service property
3. Management of council non-service property and a range of other council owned commercial assets
4. Other property related services such as strategic property advice, acquisitions and disposals.

(Panuku Development Auckland, 2015b, p. 5)

Wellington City

The Wellington City Council plans to establish a UDA to "unlock development potential in the city by removing barriers to development " (Wellington City Council, 2016a, p. 48). The Council anticipates that the agency will:

1. Lead and co-ordinate the regeneration of strategic precincts – assemble and prepare land for development, procure private partners and undertake other co-ordinating actions to deliver broad-scale urban regeneration in key parts of the city.
2. Increase supply of affordable housing – support delivery of new medium-density and affordable housing in strategic locations (eg around suburban shopping centres).
3. Deliver large-scale Council development projects – deliver Council development projects above a specified value threshold that would otherwise be delivered from in-house.
4. Catalyse the market through demonstration projects – conceptualise and lead delivery of demonstration projects to catalyse the market in support of Council objectives (quality medium-density housing, high-quality urban design, green buildings).
5. Optimise development outcomes on strategic sites – intervene and take a leadership role in strategic areas where earthquake-prone building issues are preventing a timely market response. (WCC, 2016b, p. 6)

The Council is working on a detailed proposal to establish the agency. That proposal covers "what type of entity the agency will be, its accountability and monitoring arrangements, its funding model, and areas of focus" (Wellington City Council, 2016a, p. 48).

Christchurch

The Christchurch City Council and central government have each established their own UDA in Christchurch over the last three years; and have jointly established a third.

The Council established Development Christchurch Ltd (DCL) in 2015 as a CCO owned by Christchurch City Holding Ltd (CCHL) – also a CCO. DCL's role is to provide commercial and strategic advice to the Council, seek development opportunities to benefit the city, and engage with outside interests through an "investor-ready city" strategy. CCHL funds DCL in the form of equity, currently set at $1.5 million each year (Development Christchurch, 2016).

Two other UDAs were established when the Canterbury Earthquake Recovery Authority (CERA) was wound up in April 2016.

Central government established Ōtākaro Ltd as a Crown company listed on schedule A of the Public Finance Act 1989 and governed by an independent board. The Minister of Finance and the Minister supporting Greater Christchurch Regeneration are the shareholding Ministers. Ōtākaro manages Crown land and delivers anchor projects such as the planned convention centre, in consultation with the other two agencies. It has been set up for a limited term of no more than seven years, with the purpose of

> contribut[ing] to the regeneration of Christchurch by adding value to defined anchor projects and Crown land in a manner which balances a desire to achieve good commercial outcomes against the Crown's regeneration objectives, and by supporting the Crown's exit over time on favourable terms. Ministers expect Otakaro to:
>
> - deliver defined Crown anchor projects and investments within expected time, cost and quality criteria;
> - act as a credible market participant in project procurement, contracting and land transaction;
> - add value to the Crown's investment in defined anchor projects and land; and
> - support the Crown's exit from these interests held through Otakaro on favourable terms. (Minister supporting Greater Christchurch Regeneration, 2016)

Central government funds the capital and operating expenditure of Ōtākaro Ltd. In 2017 Ōtākaro is projected to have operating expenses of $137 million and revenue of $121 million in the year to 30 June 2017, with capital assets of $166 million at the end of June 2017 (Ōtākaro Ltd., 2016).

The Greater Christchurch Regeneration Act 2016 established Regenerate Christchurch as a statutory entity for a period of five years. The Council and central government each appoint members to its governing board, one on the nomination of Te Rūnanga o Ngāi Tahu. Central government and the Council each contributes $4 million a year to fund Regenerate Christchurch's operations (Regenerate Christchurch, 2016).

Regenerate Christchurch works with the Council on Regeneration Plans, including for land in the residential red zone and the central city (Minister supporting Greater Christchurch Regeneration & Mayor of Christchurch, 2016).

Regenerate Christchurch has a number of other statutory roles. It:

- makes recommendations and provides advice to the Minister on the development, revocation and amendment of planning instruments and changes;
- facilitates increased investment;
- comments on regeneration outcomes and interventions and the contribution of Ōtākaro Limited and Development Christchurch Limited; and

- provides independent advice on regeneration activities to the Council and the Minister (Greater Christchurch Regeneration Act, 2016, s. 123)

At the end of Regenerate Christchurch's life in 2021, the Governor-General may appoint a CCO nominated by the Council as a successor organisation to take over its assets and liabilities (Greater Christchurch Regeneration Act, 2016, s 134).

F12.5 New Zealand's largest cities have established local urban development authorities or are planning to establish them.

Submitters to the *Using land for housing* inquiry were positive about the role that a UDA could play in enabling residential development in our fastest-growing cities. Some argued that UDAs should focus on affordable housing goals, or the needs of Māori whānau.

Submitters generally preferred local UDAs rather than a single national UDA. The Commission agreed that a national UDA was likely to be counterproductive, particularly if it competed with local UDAs already established or being established (NZPC, 2015a).

The role, functions and powers of urban development authorities

The Commission considers that local councils should be responsible for determining how local UDAs are governed, structured, and capitalised, and for determining the focus of their activities.

Using land for housing inquiry participants had a range of views on the role, functions and powers that UDAs should have (NZPC, 2015a). Common suggestions were that UDAs:

- should be able to focus on affordable or social housing;
- need to operate collaboratively with local government, central government, communities, and the private sector;
- need to be well structured, well governed, and well capitalised; and
- would benefit from having regulatory powers, in particular the power to compulsorily acquire land as a last resort to assemble sites.

Where UDAs focus on delivering affordable housing, this should be consistent with the findings in Commission's *Land for housing report* on policies targeting lower-cost housing (eg, through contributions of public land). However, UDAs may benefit from additional regulatory and acquisition powers to support their activities.

Supporting local urban development authorities

The Commission agrees that local UDAs are most likely to be effective where central government supports them as they undertake their work.

The Housing Accords and Special Housing Areas Act 2013 (HASHA Act) has introduced common and streamlined approval processes for particular types of residential developments in declared areas. The Governor-General may designate "qualifying developments" and "special housing areas", where more permissive planning rules and streamlined consenting processes would apply. Most local authorities who discussed the HASHA Act in the *Using land for housing* inquiry were positive about it (NZPC, 2015a). The HASHA Act was due to begin expiring in September 2016. However, Parliament amended the Act in September 2016 to postpone the start of the expiry period until 2019.

Support for local UDAs should build on the relationships that local and central government have developed through Housing Accords. This model of designated developments offers the potential for central and local government to agree on redevelopment projects that offer the potential to deliver significant volumes of housing, within which the UDA will operate with different powers and land use rules. This is similar to the models that Places Victoria and Economic Development Queensland use in Australia.

R12.2 A future planning system should include a legislated regime similar to Special Housing Areas, in which certain developments undertaken by local urban development authorities are designated by Order in Council as having the potential to deliver significant numbers of dwellings, and within which the urban development authority will operate with different powers and land use rules.

To be clear, UDAs would be able to operate outside such 'designated developments', but would not have any special powers or streamlined planning and consenting requirements in doing so.

The HASHA Act defines a qualifying development in a special housing area as a development that will:

- be predominantly residential; that is, the primary purpose of the development is to supply dwellings; any non-residential activities provided for are ancillary to quality residential development (such as recreational, mixed use, retail, or town centre land uses);
- have dwellings and other buildings no higher than 6 storeys, and a maximum calculated height of 27 metres;
- contain no fewer than the prescribed minimum number of dwellings to be built; and
- contain not less than the prescribed percentage (if any) of affordable dwellings.

These requirements will be too limiting for the type of urban development that UDAs are expected to undertake. In particular, the redevelopment of town centres will require higher buildings. Further, to be economically viable, redevelopment of town centres will also need to facilitate uses that are not just ancillary to residential activities.

R12.3 A future planning system should provide for "designated developments" undertaken by local urban development authorities to allow higher height and storey limits than in the Special Housing Areas regime, and to allow non-residential uses that may be necessary for the development to be economically viable.

Amalgamating land

In a 2006 paper for the Ministry for the Environment, R Neil Gray argued that the "land problem" in New Zealand was different to other countries:

> In the UK and US and Australia, urban regeneration is often proposed as a means of revitalising large tracts of derelict land (redundant docklands, factories etc). By contrast, New Zealand (particularly Auckland) has few such areas. Nor does New Zealand have large tracts of contiguous Crown land within its urban borders, or tracts of leasehold land. The problem in the New Zealand context is how to amalgamate small parcels of valuable urban land, into larger blocks that permit meaningful development. (p. 5)

Auckland is not entirely without such large contiguous sites, but they are rare. Many of the largest developments that are under way or currently being completed have involved repurposing brownfield sites, such as Hobsonville, Stonefields, and Three Kings. However, it is notable in each case that little or no amalgamation was integral to the project, with sites owned by either the Crown or Winstone.

Many submitters to the *Using land for housing* inquiry considered land fragmentation to be a problem as it made it difficult to take advantage of economies of scale in development, increased the difficulty of coordinating and allocating the costs of infrastructure, and created risks of holdouts due to raised expectations about future land values (NZPC, 2015a). A review of the Auckland Regional Growth Strategy noted that progress towards more intensive development was being hindered by, among other things, the difficulty of amalgamating sites in key areas (Regional Growth Forum, 2007).

In its 2012 report on *Housing affordability*, the Commission noted the desirability of "bringing significant tracts of both greenfield and brownfield land to the market in Auckland and Christchurch" (p. 102). Significant scale economies can be achieved in land development and building, but this often requires the aggregation of smaller parcels of land. The Ministry of Business, Innovation and Employment (MBIE) has also identified fragmented land ownership as a constraint on residential housing supply, limiting the opportunity for large-scale development opportunities (MBIE, 2014b). The Urban Taskforce report (2009) identified "difficulty in aggregating significant areas of residentially zoned land" as a barrier to high-quality, larger-scale urban developments (p. 17). The Commission concluded in its draft report on *Using land for housing* that a failure in coordination was preventing many large residential developments.

In its draft report on *Using land for housing* the Commission discussed at length the economics of land assembly, and the case for compulsory acquisition powers to address housing shortages. The Commission came to a number of conclusions around the use of acquisition powers (see Appendix B of NZPC, 2015a).

- Holdouts in land assembly projects impose a supply-side externality, with the direct implication that government can correct the allocative inefficiency through compulsory acquisition (known as "eminent domain" in the United States) (Miceli, 2011).
- Assembly problems are more significant in the centre of cities, because lot sizes are generally smaller and ownership more dispersed than greenfield land on the fringe of cities. As a result, holdout problems in urban areas bias development towards the urban fringe.
- Private property rights serve essential economic purposes. But they are not absolute, and can be restricted in accordance with law where doing so is in the public interest.
- Circumstances exist in which the economic and social harms that result from a housing shortage should be considered sufficient to justify the compulsory acquisition of land for the construction of housing.
- The housing shortage produces significant social and economic harms, (as outlined in Chapters 3 and 6 in the current report).
- Most countries provide power for the government to acquire property for public purposes, with compensation.
- Compulsory acquisition powers can be effective without being exercised, by facilitating negotiated acquisitions. Both the public agency and the landowner usually prefer these agreements to compulsory acquisition, although they still involve coercion.
- Theoretical alternatives are available in the economic literature to overcome holdout problems. Few mechanisms ensure only efficient developments proceed and owners are fairly compensated. Where they do, the mechanisms rely on unreasonable assumptions (eg, that government can correctly predict the likelihood of developers purchasing land at given prices).
- Any proposal for compulsory acquisition of Māori land would face sensitive Treaty of Waitangi /Tiriti o Waitangi issues. Past legislation on compulsory acquisition has contained explicitly discriminatory provisions for taking Māori land (Marr, 1997). The Waitangi Tribunal has consistently argued that the compulsory acquisition of Māori land for public works is almost always a breach of the Treaty (see, for example, Wai 863). Any regime to compulsorily acquire land for housing developments needs to recognise both the associated risks and positive partnership opportunities.

The power of local authorities to acquire land for housing is unclear

Compulsory acquisition of land in New Zealand is provided for in a number of New Zealand statutes, based around the Public Works Act 1981 (PWA).

- The PWA gives the Minister of Land the "power to acquire any land, required for any Government work" (s 16 (1)).[104] Government work is "a work or an intended work that is to be constructed, undertaken,

[104] The courts have held that land was "required" if its acquisition was, viewed objectively, essential or reasonably necessary rather than, in some general sense, desired (*Seaton v Minister for Land Information* [SC 44/2012 [2013]).

established, managed, operated, or maintained by or under the control of the Crown or any Minister of the Crown for any public purpose", including any work that the Crown is authorised to undertake by any other Act. Local authorities are similarly empowered to acquire land for local works. Local work means a work constructed or intended to be constructed by or under the control of a local authority, or for the time being under the control of a local authority. Taking of land wholly for private purposes is not authorised (see *Bartrum v Manurewa Borough* [1962] NZLR 21).

- The Local Government Act 2002 (LGA) authorises local authorities to compulsorily acquire land that "is necessary or convenient for the purposes of, or in connection with, any public work that the local authority was empowered to undertake immediately before 1 July 2003" (s 189). At that time, local authorities had the explicit power to "undertake and carry out urban renewal in the district" (s 644B of the Local Government Act 1974).
- The Canterbury Earthquake Recovery Act 2011 provides the Minister with the power to acquire land, but imposes a narrower compensations regime than would be available under the PWA. These powers have been used to amalgamate sites required for the East Frame of central Christchurch. The East Frame is intended to deliver about 750 dwellings on about 13 hectares, as well as retail and recreation facilities. The Crown had to acquire 92 properties for the East Frame. Most were acquired by agreement, but 9 were compulsorily acquired (Brownlee, 2013).
- Section 5 of the Housing Act 1955 gives the Governor-General power to use the PWA to take land required for "State housing purposes"; the taking of Māori land under this provision requires the consent of the Minister of Māori Affairs. Section 2 defines State housing purposes as

  > the erection, acquisition, or holding of dwellings and ancillary commercial buildings by the Crown under this Act for disposal by way of sale, lease, or tenancy; and includes the acquisition of land by the Crown—
  >
  > (a) as sites for dwellings and ancillary commercial buildings:
  >
  > (b) for schemes of development and subdivision into sites for dwellings:
  >
  > (c) for motorways, roads, streets, access ways, service lanes, reserves, pumping stations, drainage and water works, river and flood protection works, and other works upon or for the benefit of the land so acquired or the occupiers thereof.

The application of existing compulsory acquisition powers to situations of urban development is unclear (Sustainable Urban Development Unit, 2008). Whether, and the extent to which, a local government can compulsorily acquire land for urban regeneration or housing is uncertain. The powers under the LGA appear to be seldom, if ever used; so their application is uncertain, particularly given the unusual construction of the power.

F12.6 The ability of local authorities to compulsorily acquire land for housing or urban regeneration is unclear.

Compulsory acquisition powers are a significant limit on private property rights, which should not be made available lightly. Where such powers are available, they should be exercised with restraint and subject to appropriate restraining institutional structures.

The Commission considers that locally established UDAs should have the support of compulsory acquisition powers in some circumstances, and that such powers are justifiable to overcome holdout problems in urban regeneration given the wider public interest in a liveable built environment.

The powers should be modelled around the existing provisions of the PWA, which contains a well-established process and a number of safeguards for controlling the use of acquisition powers by the Crown, local authorities, network utilities or River Boards. These safeguards include:

- statutory processes to be followed, including an obligation to first negotiate in good faith to acquire the land;

- the right to object to compulsory acquisition to the Environment Court, which enquires into whether alternatives have been considered, and decides whether the taking is "fair, sound and reasonably necessary" – these findings are binding on the Crown or local authority; and appeals from the Environment Court are available on questions of law;
- if the amount of compensation cannot be agreed, then the Land Valuation Tribunal will determine the amount of compensation; and
- the High Court has inherent powers of judicial review over a Minister or local authority's decisions to acquire land, with further appeals possible.

R12.4 A future planning system should provide compulsory acquisition powers to local urban development authorities for 'designated developments', subject to the normal processes, compensation and protections of the Public Works Act.

However, the "offer back" provisions of the PWA will need to be limited to situations where the land is no longer needed for the development. It would be impractical to take land, redevelop it significantly, and be required to offer the land back to the original owner.

R12.5 The Government should adjust the "offer back" provisions of the Public Works Act for use by urban development authorities, so that they are not obliged to offer back land that has been significantly redeveloped.

Planning and consenting processes

The Commission does not see a good case for granting local UDAs planning powers of their own, as they are wholly owned by local councils, and need to work in close collaboration with those councils. However, in the *Land for housing* inquiry, councils and developers generally considered the expedited planning processes of HASHA were very positive (NZPC 2015a).

Special Housing Areas operate with streamlined consenting and plan change timeframes, and with notification limited to immediate neighbours. This model should also apply to "designated developments" undertaken by UDAs. Councils or UDAs will have opportunities, apart from the consent process, to consult with communities about redevelopment proposals.

R12.6 The Government should provide for "designated developments" undertaken by local urban development authorities to operate under streamlined planning and consenting processes. This should include restricting public notification.

Other support for local urban development authorities

Government has a range of ways in which it can support the activity of local UDAs, including through making Crown land available (NZPC, 2015a), partnering in specific projects, and ensuring that Housing New Zealand cooperates where relevant.

R12.7 The Government should look at other opportunities to support the activity of local urban development authorities to deliver on cities' goals for urban redevelopment, including through making Crown land available, partnering in specific projects, and ensuring that Housing New Zealand cooperates where relevant.

12.3 Model 3: auctions of development rights

Auctioning development rights is another tool that councils could use to help achieve greater density close to the centres of high-growth cities. The ability to sell development rights in certain circumstances would provide councils with a means to increase density, but only up to a pre-agreed limit, and at the same time gather revenue for associated infrastructure costs or other uses. This section examines the advantages and disadvantages of councils having the power to sell development rights.

The problem

Economist and urban researcher Arthur Grimes caused a stir as a panel speaker in Auckland in July 2016 when he suggested that planning rules should allow a large number of high-rise apartments along the prestigious harbour-front road of Tamaki Drive:

> Auckland also has plenty of opportunities for intensification in areas where developers would wish to intensify and where people wish to live. For instance, Tamaki Drive is ready made for high-rise apartments where tens of thousands of people would no doubt wish to purchase apartments. Of course climate change may make development on Tamaki Drive a risk, but a few blocks back from the sea – on the ridges overlooking the harbour – would work just as well. Lift the restrictions on the heights of new developments, and I expect that we would see an utter transformation in the intensity of housing from Orakei through to Glendowie. (Grimes, 2016)

Many were shocked at the thought of a "Surfers Paradise" forest of high-rise apartment blocks along this stretch of coast. Equally prestigious Herne Bay has two multi-storey apartment buildings. They are accepted parts of the landscape and do not give rise to any significant negative spillovers on neighbouring properties. The buildings date back to an earlier, more permissive era and no more have been consented following the tightening of planning rules.

These two examples in inner Auckland illustrate the problem – on the one hand, the strong need for higher-density, more affordable apartment living; on the other hand, the many people who feel a high-rise forest is unacceptable.

Auctioning development rights as a solution

A solution to the conundrum just described would be for councils to allow a greater number of (but not too many) multi-storey apartment buildings. A general rule in the district or unitary plan permitting them would risk a "Surfers Paradise" forest. Yet on what basis could they be fairly limited? Allowing councils to only auction development rights to the optimal number of multi-storey buildings could be one solution. But who decides the optimal number?

Councils auctioning development rights as a means to regulate density within cities has a number of potential benefits because it would enable:

- increased density, but within a predetermined limit;
- efficient allocation of the rights to increase density to those who value them most highly;
- imposition of conditions on the rights that minimise risks of adverse spillover effects from the development (eg, by specifying that multi-storey buildings are sufficiently spaced from each other, surrounded by a minimum area of green space, and/or do not encroach on defined view shafts);
- reduction of risks of holdouts by existing landowners when developers are assembling land parcels (because the rights would not pertain to particular locations, the developer would have the flexibility to find contiguous owners willing to sell at market prices);
- revenue raising from the sale of rights that could be used to help cover costs that fall on councils (eg, investment in additional infrastructure) and/or to fund local amenities that improve liveability in the area; and
- a boost to overcoming the resistance of NIMBYs by limiting the quantity and controlling other characteristics of the increase in density, and through the improved local amenities that "sweeten the pill" for existing residents.

Two submitters supported councils having the power to sell development rights (Wellington City Council, sub. DR68; and LGNZ, sub. DR113). Yet the power could also have some downsides. For example, councils could be tempted to overuse the power so as to raise additional revenue (Allison Tindale, sub. DR110, p. 10) or even set standard controls more stringently so as to increase the number of development rights they can sell (New Zealand Initiative, sub. DR75, p. 8). The Property Council expressed the concern that "(t)o allow councils to auction and sell additional development rights is arguably appropriating private property rights and then selling them back to the rightful right holder" (DR118, p. 17).

Greater Christchurch Urban Development Strategy (sub. DR83, p. 19) suggested a variation on awarding rights to develop above the standard thresholds "to incentivise broader quality outcomes above what might be required through a standard consenting route (e.g. density bonuses)".

The Commission acknowledges some downside risks would exist if councils have the power to sell development rights. Yet it believes these risks can be satisfactorily managed and mitigated. For example, the power could be limited to high-growth city councils that face the need to densify inner-city areas; and the IHP process for reviewing local authority plans would limit the moral hazard of councils setting density thresholds low so as to sell more rights to exceed them.

Australian states have used the sale of development rights to help fund infrastructure development. The approach was used in Victoria in the 1990s when air rights were sold at Melbourne Central Station to contribute to the cost of building the station. This facilitated significant retail and commercial development (Infrastructure Victoria, 2016a, p. 18). Used in this way, the sale of development rights can be seen as a form of value capture (Chapter 11) where those who benefit from development contribute to its costs. This form of value capture differs from targeted rates in three ways:

- it tends to be focused on large one-off projects;
- the initial burden falls on developers rather than on targeted ratepayers; and
- the value is captured through some form of sale process, rather than by an estimate of the contribution of infrastructure to land values.

This section has used the terminology of "auctioning" development rights. A broader term would be "selling" them. Councils and their advisors would decide the best way to run a sale process – just as private sellers of houses have the choice of open auctions, open tenders, closed tenders or a fixed price. The advantage of auction and tender processes is that they are a way to reveal the value of the rights and to ensure – as far as possible – that the rights go to those who value them most highly. But these processes also have downsides.

Overall, the Commission finds that allowing councils to sell development rights would, in the right circumstances, be a useful way to regulate the density of development (eg, by restricting the number of multi-storey apartment blocks in an area) and provide revenue to fund associated infrastructure costs or additional services to "compensate" affected communities.

F12.7 Auctioning development rights to higher-than-normal density limits would enable councils to regulate development density efficiently in some cases (eg, by restricting the number of multi-storey apartment blocks in an area) and raise revenue to help fund associated infrastructure needs, and/or provide additional amenities to "compensate" affected communities.

R12.8 In a future planning system councils should have the power to sell development rights as a means to achieve greater density in growing cities. They would use the power to efficiently regulate the number of structures that significantly exceed normal planning density rules. And they would spend the revenue raised on associated infrastructure costs and/or to provide additional amenities to affected communities.

13 Statutory framework, institutions and governance

Key points

- A future planning system should:
  - enable land use to be flexible and responsive to changing needs, preferences, technology and information;
  - provide sufficient development capacity to meet demand;
  - promote mobility of residents and goods to and through the city;
  - safeguard the natural environment by defining the boundaries within which development and land-use activities must operate; and
  - recognise and actively protect Māori Treaty interests in the built and natural environments.
- Future planning legislation needs clear statutory objectives and principles for the built and natural environments, and principles that, by setting out the limits and scope of regulation, together guide regulatory decision making and review of plans.
- A Regional Spatial Strategy (RSS) should be the platform for all plan making in a region. The RSS, a Regional Policy Statement for the Natural Environment, and District Plans should be developed together as a package, and reviewed by an Independent Hearings Panel (IHP) appointed for the purpose.
- IHPs should be appointed by an independent statutory agency (ISA), evaluate submissions and have the power to amend notified Plans. There should be no appeals on merits from the decisions of an IHP; appeals on points of law should be to the Environment Court.
- The ISA should be governed by a board appointed by Ministers after consultation with stakeholders. The ISA should be independent in its appointment of IHP members. It should develop a pool of competent panel members, provide guidance to IHPs on procedures and processes and provide guidance to central government on continuing refinement of the planning system.
- Currently, the stewardship of the planning system is unclear and fragmented across a number of Ministers and departments. A future planning system should have clear and capable leadership on the built and natural environments, with regulatory stewardship obligations clearly assigned to an appropriate central government agency.
- To carry out its stewardship role, central government needs stronger capability to monitor the performance, conditions and risks of the planning system, and to provide advice on improvements and on well-informed and timely interventions in that system.
- Central and local government need to develop constructive relationships based on agreed principles that support meaningful engagement and effective dialogue. They should work together to develop information systems that provide up-to-date granular information on both the built and natural environments.
- A future planning system should provide for a National Māori Advisory Board on Planning and the Treaty of Waitangi; and introduce tikanga Māori and mātauranga Māori into methods to monitor and assess the performance of the planning system.

13.1 The main features of a high-performing urban planning system

Urban planning makes an important contribution to urban development by managing its potential negative effects on other people and the environment; making fair and efficient collective decisions about the provision of local public goods; and coordinating the provision of infrastructure (Chapter 3).

Chapters 3, 8, 9 and 10 all, in various ways, stress the complex, adaptive nature of urban systems and the natural environments in which they are situated. Urban planning has to recognise and take account of this complexity in the social, economic, physical and natural environments. In particular, planning must provide room for flexible and adaptive responses to emerging and often unpredictable changes.

Previous chapters recommend the major features of a high-performing future urban planning system:

- clear purposes for planning in the built environment, and in particular providing development capacity to meet demand and supporting the mobility of residents through their city (Chapter 8);
- clear purposes and principles to ensure that development occurs within the capacity of the natural environment and the ecosystems that support it (Chapter 9);
- strong guidance on recognising and actively protecting Māori interests in the environment (Chapter 7);
- statutory spatial plans – Regional Spatial Strategies (RSSs) – as the platform for integrated plan making and infrastructure investments in a region (Chapter 10);
- less prescription, better use of discretion, greater certainty and more speed in plan making, guided by clear statutory principles and more immediate and systematic review by Independent Hearings Panels (IHPs) (Chapter 8);
- use of land price information to drive the release of development capacity (Chapter 8);
- more tools for councils to finance, fund and provide infrastructure to meet development needs (Chapter 11); and
- more room for competition in urban land markets; and stronger support for urban development authorities (UDAs) (Chapter 12).

Taken together, these recommendations represent a substantial reform of the current system. This chapter looks at the statutory framework, institutions and governance arrangements that will support a coherent and effective future planning system. This will require new land-use planning and resource management legislation to replace the Resource Management Act 1991 (RMA). Chapter 14 describes developments in culture and capability to support a more effective future planning system.

R13.1

A future planning system should:

- enable land use to be flexible and responsive to changing needs, preferences, technology and information;
- provide sufficient development capacity to meet demand;
- promote mobility of residents and goods to and through the city;
- safeguard the natural environment by defining the boundaries within which development and land-use activities must operate; and
- recognise and actively protect Māori Treaty interests in the built and natural environments.

This chapter discusses five key aspects of the urban planning framework:

- the overarching legislative framework (section 13.2);
- the broad type and hierarchy of planning documents (section 13.3);
- plans and planning processes (section 13.4);
- processes for reviewing and appealing planning documents and consents (section 13.5); and
- stewardship of the planning system (section 13.6).

While this inquiry is focused on urban planning, the Commission does not propose a separate planning system for urban areas. Rather, its recommendations identify how a future planning system can better support effective planning in urban areas. This chapter uses the terms "urban planning system" and "planning system" interchangeably.

13.2 Overarching legislative framework

The current planning system is governed by three main statutes – the RMA, the Local Government Act 2002 (LGA), and the Land Transport Management Act 2003 (LTMA). Each of these statutes has its own purpose and objectives. The RMA primarily regulates land use and resource management, and the LGA aims to promote democratic and effective local government and the efficient provision of infrastructure and local public goods. The LTMA seeks to contribute to an effective, efficient and safe transport system. The connections between these statutes are important, because both land use regulation and infrastructure investments shape the supply of development capacity.

Clear objectives for regulation in the natural and the built environments

The built and natural environments require different regulatory approaches. The built environment requires assessments that recognise the benefits of urban development and allow change within environmentally sustainable limits (Chapter 8). The natural environment requires a clear focus on setting standards that must be met, and defining the conditions (in terms of effects on the natural environment) within which development can occur (Chapter 9).

Current statutes and practice blur the two environments, and provide inadequate security about protection of the natural environment and insufficient certainty about the ability to develop within urban areas. The difficulty can be traced back to:

- ambiguity around the purpose of the RMA;
- an expansive definition of the environment combined with a focus on avoiding, remedying or mitigating adverse effects on the broadly defined environment; and
- a lack of clarity around objectives for the built and natural environments (Chapter 5).

Early critics of the RMA charged that, in leaving so much indeterminacy in the Act's language, Parliament had abdicated its rule-making responsibilities, leaving the courts to resolve difficult issues (McLean, 1992; Harris, 1993). At the local level, as the Parliamentary Commissioner for the Environment (PCE) has observed, the RMA provides little guidance as to which environmental effects councils should focus on when considering resource consent applications; all "are to be avoided, remedied or mitigated – regardless of their importance" (2014, p. 1).

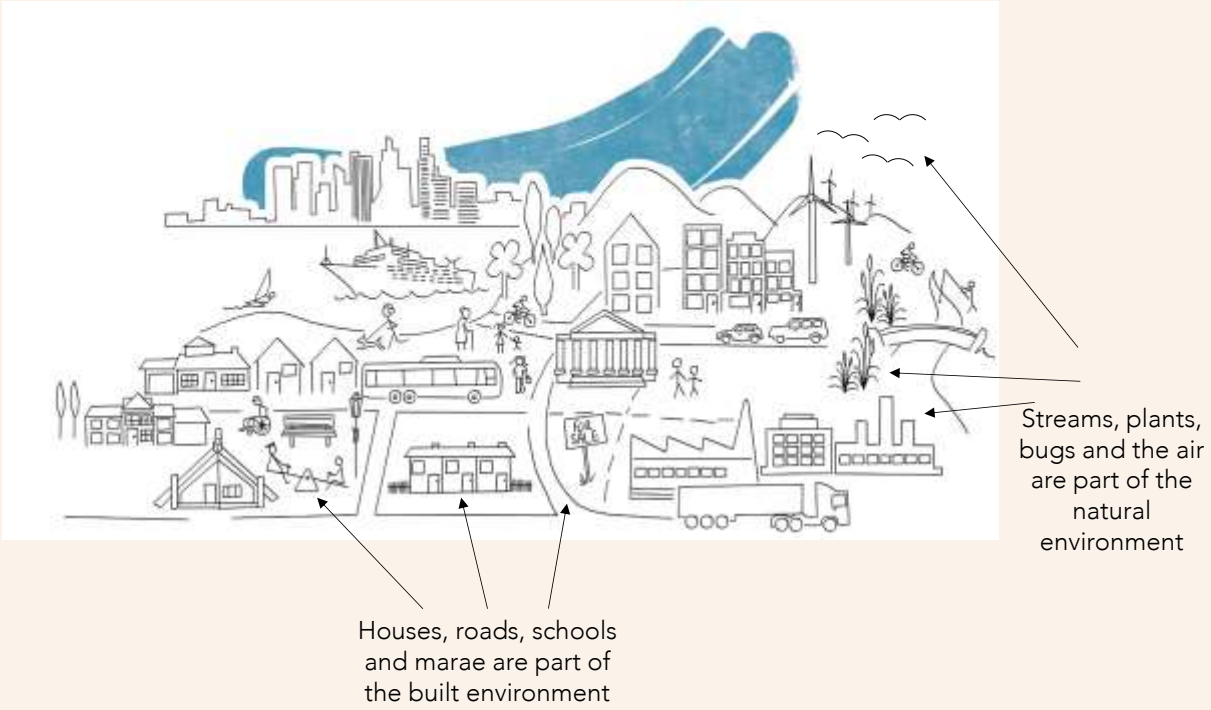
Creating clear objectives for the built and natural components of the environment should be a priority for any future planning system. Clear objectives are vital for promoting accountability, compliance, focus, legitimacy and predictability within the planning system. Chapters 8 and 9 have also highlighted the importance of having clear principles to guide decision making and review of Plans and decisions. Statutory principles will help reduce unnecessary prescription and inappropriate use of discretion. Some principles will apply specifically to each environment and some will be cross-cutting.

Definitions of the built and natural environment

Chapter 1 briefly sets out the Commission's approach to thinking about the built and natural environments and the relationship between them. To be clear, urban areas include both built and natural elements (Box 13.1).

Box 13.1 **The built and natural environments**

Urban areas include built and natural elements.



The built and natural environments have varied definitions. The Australian Bureau of Statistics provides an example developed for statistical purposes:

> The built environment is the human-made surroundings where people gather to live, work and play. It encompasses both the physical structures where people do these activities and the supporting infrastructures, such as transport, water and energy networks… The natural environment is a concept which encompasses climate, atmosphere, natural resources, water, land, ecosystems and biodiversity. (2015)

K. Palmer suggests

> the built environment is that part of the physical environment constructed by human activity … A broader definition …is that the built environment consists of the following elements: land use patterns, distribution across space of activities and buildings that house the activities, transportation systems, physical infrastructure or roads and other services systems, and urban design. (2017, p. 35)

The RMA identifies "all natural and physical resources" as part of its very broad definition of the environment. Natural resources include "land, water, air, soil, minerals, and energy, [and] all forms of plants and animals (whether native to New Zealand or introduced)" (s 2).

The expansive definition of "the environment" in the RMA reflects the complex relationships that the built and natural environments have with the broader social, cultural and economic environments (Chapter 9). The Resource Management Law Association submitted:

> The definition of the environment in the RMA is necessarily broad so as to encompass the complex interrelationships between natural and physical resources, and recognise different ways that reflect our social, cultural, and economic values and aspirations. (sub. DR115, p. 3)

Yet, the broader the definition of the environment used, the more important it is that future planning legislation provides clarity on key objectives and priorities for the built and natural environments. A clear focus is needed to achieve key outcomes such as the supply of sufficient development capacity to meet demand (and so avoid escalating land prices in fast growing cities) (Chapter 8); or the protection of natural habitats from the cumulative effects of agricultural discharges into waterways (Chapter 9). Associate Professor Ken Palmer noted of the RMA:

> The bundling together of objectives for land, air and water regulation under s 6 (matters of national importance) and s 7 (other matters) has been confusing and lacking in clarity. (2017, p. 3)

Clear statutory purposes and objectives for regulating the built and natural environments

Future planning legislation should set out a clear purpose or purposes for the built and natural environments. The purpose statement should be developed through a process of wide consultation and reflect contemporary perspectives (K. Palmer, 2017).

The purposes should reflect the positive benefits from land uses that meet the social, cultural and economic needs of New Zealanders, while safeguarding the integrity of the natural environment.

The Commission recommends that new planning and resource management legislation should provide additional guidance through the use of high-level *objectives* and *principles for both the built and natural environment*. The objectives and principles should aim to secure the desirable outcomes for both the built and natural environments set out in Chapters 8 and 9. K. Palmer advised the Commission that,

> with effective definition, cross reference and recognition of other consequential factors, separate and complementary objectives for the built and natural environments could be maintained in legislation. (2017, p. 3)

The precise wording of objectives and principles, and whether they are best placed in primary or secondary legislation, are matters that should be decided on the basis of extensive consultation and expertise in legislative drafting. Generally, objectives that are likely to change in the medium term, as a result of improving scientific knowledge or better information on environmental outcomes, are best placed in secondary legislation, such as National Policy Statements (NPSs) and National Environmental Standards (NESs). These instruments are easier to adjust and more responsive than primary legislation (NZPC, 2014b).

Objectives and principles for regulating the built environment

As proposed in Chapter 8, the key objectives for the built environment should be to:

- ensure the supply of sufficient development capacity to meet demand;
- enable residents to get to jobs and other activities;
- enable travel between businesses and their suppliers, customers and workers; and
- provide active protection of tāngata whenua Treaty interests in the built environment.

Principles specific to the built environment could include principles to guide decision makers in weighing the benefits of development against any adverse effects on other residents and businesses in the built environment. This would include guidance on avoiding, remedying or mitigating any such effects.

K. Palmer notes that "[b]roader elements of social wellbeing may be included as part of the objectives of the built environment. A number of these elements are implicit in the definition of sustainable management in s 5 of the RMA" (2017, p. 35). Chapters 3 and 5 discuss the relationship between urban planning and broad social objectives.

Objectives and principles for the built environment should be balanced by a corresponding set for the natural environment and by cross-cutting principles (those that apply to regulation in both the built and natural environments).

Objectives and principles for regulating the natural environment

Possible statutory objectives for regulating the natural environment include:

- safeguarding the integrity of the natural environment;
- maintaining biodiversity;
- protecting places of outstanding natural character; and
- recognising and actively protecting tāngata whenua kaitiakitanga interests in the natural environment.

Principles for regulating the natural environment should cover, at least, principles to assist prioritisation of regulatory effort to safeguard the integrity of the natural environment. The PCE, for instance, has proposed such principles. Large-scale, cumulative, irreversible, and increasing adverse effects on the environment deserve particular attention, particularly if they carry a risk of tipping an environmental system into another state (PCE, 2014).

R13.2 Future planning legislation should provide a clear statutory purpose covering the built and natural environments and their relationship; clear statutory objectives to guide regulation of activities impacting on each of the built and natural environments; and clear principles to guide decision makers on how to give effect to the statutory objectives.

Cross-cutting principles

Land-use planning and resource management is mostly about regulating the effects on the natural environment of development in the built environment. The guiding principles should include some principles that span the two environments. These principles might cover:

- the setting of minimum environmental standards and environmental limits within which development can occur;
- decisions on development in the built environment that is within the established minimum standards and environmental limits, but which has some adverse effects on the natural environment; and
- decisions about avoiding, remedying or mitigating adverse effects of development on the natural environment.

Future planning legislation should provide another set of cross-cutting principles to guide efficient, fair, transparent, focused and proportionate decision making and processes. Chapter 8 reviewed current planning practices and established a clear need for such principles. Statutory principles of this type should guide plan making and IHP reviews of plans – together providing an impetus to improving the quality of plans and raising the capability and culture of plan makers (Chapter 14).

Principles to guide decision making and processes could include:

- using regulation only where it can reasonably be considered the most efficient and effective means of achieving the purposes of the legislation;
- using the minimum amount of prescription necessary to achieve the purposes of the legislation;
- using discretionary powers in a way that is appropriate to the significance and nature of the decision being made;
- using timely, efficient, consistent and cost-effective processes that are proportionate to the functions or powers being performed or exercised (Resource Management Amendment Bill, 2015);
- specifying how and when, and with what protections, the public interest can override conventional private property rights;

- pursuing only those outcomes directly related to the purpose of the legislation;
- ensuring effective community engagement when preparing plans and policies;
- using collaborative processes as appropriate to resolve conflicting positions on proposals; and
- ensuring that policies and plans are clearly written and accessible to the public.

In 2013, the government proposed an amendment that would have inserted a "methods" section into the RMA. The amendment aimed to create an expectation that councils would follow best practices when performing functions under the Act. It would have required, among other provisions, councils to ensure restrictions imposed on private land use and development were reasonable in light of the purpose of the RMA (New Zealand Government, 2013). The 2013 proposals did not proceed. The Resource Legislation Amendment Bill introduced in 2015 also contained procedural principles that, for instance, would require the proportionate exercise of powers under the Act and that policy statements and plans include only matters relevant to the purpose of the Act (clause 8). These proposed provisions, like the principles proposed by the Commission, were aimed in part at reigning in regulatory overreach.

R13.3 Future planning legislation should set out principles to guide the content of plans and the conduct of planning processes and decision making, so that planning is efficient, fair, transparent, focused on clearly defined and restrained statutory objectives and proportionate to the planning matters being regulated or decided.

Separate statutes or a single planning and resource management statute?

The inquiry draft report asked participants to comment on the advantages and disadvantages of two approaches to future planning and resource management legislation. The two approaches are:

- the development of two separate Acts – one covering the built environment, the other covering the natural environment; or
- a single Act, but with clearly distinguished objectives and principles for the built and natural environments.

Factors influencing this choice include the need to:

- avoid adding complexity to the system;
- retain an integrated approach to resource management;
- manage the interface between the natural and built components of the environment effectively;
- avoid arbitrary "boundary issues" between "urban" and "non-urban" areas; and
- enable effective integration of land use with infrastructure and transport planning.

The majority of inquiry participants strongly opposed establishing two separate Acts and none gave unequivocal support to two separate Acts. Many highlighted the inherent link between the built and natural components of the environment and the need to consider these components in an integrated fashion (Box 13.2). Local Government New Zealand (LGNZ), for instance, expressed concern that two Acts would undermine integrated management of resources and subsequently lead to a diminished focus in regulation on adverse effects of development on the natural environment (sub. DR113).

Other submitters argued that two statutes would create additional complexity, and increase misalignment across regulatory objectives (eg, Resource Management Law Association, sub. DR115). This would raise costs for both developers and councils (Auckland District Law Society, sub. DR70). Some observed that treating the built and natural components of the environment separately ran counter to the principles of kaupapa Māori (Ngāti Whātua Ōrākei, sub. DR76; Auckland Council, sub. DR86; Ngā Aho & Papa Pounamu, 2016b).

Box 13.2 **Separate legislation for built and natural components of the environment? Some views from submissions**

Greater Wellington Regional Council

> Creating separate regimes is of particular concern and problematic as the boundary between the built environment and natural environment is not clear cut. We consider that the built environment is a part of the natural environment, and that a regulatory separation of the two may be both impractical and counterproductive. (sub. DR80, p. 2)

Auckland Council

> The council considers separating planning from environmental protection law within an urban planning context could simply exacerbate existing legislative misalignments and lead to further deterioration of the environment. In theory, while it may provide potential to enable simpler and faster consenting in urban areas, legislative interpretation and implementation could be challenging. (sub. DR86, p. 15)

Allison Tindale

> I believe [separation] would be contrary to integrated management of the entire environment, and could lead to effects on the natural environment from the urban environment being ignored. Urban development has considerable potential to result in declining water quality, if soil erosion and stormwater are not adequately controlled at source. (sub. DR110, p. 10)

Trustpower

> Trustpower accepts, in principle, that there may be merit in splitting the RMA into two distinct pieces of legislation… That said, it is noted that the sustainable management of the built environment and natural environment is inextricably linked and integrated management is required in order to ensure the best outcomes for natural and physical resources. (sub. DR61, p. 7)

SmartGrowth

> SmartGrowth prefers keeping a single resource management law with clearly separated built and natural environment sections. Establishing two separate laws will add to the complexity of the planning system. There are also a number of situations where the built and natural environment overlap and one affects the other. Keeping the two together in a single statute would help to ensure more streamlined processes. (sub. DR063, p. 4)

Water New Zealand

> In terms of the two options, Water NZ considers the first option may lead to a more complex piece of legislation but may be better at showing the clear inter-relationship between the built and natural environment sections. While the second option may provide a greater focus on the two areas there is the potential for a silo approach to be taken and for natural environment law to be a secondary consideration (if it is considered at all). However, as noted in the [Commission's Draft] Report, the second approach may allow better integration of land use with infrastructure and land transport planning. (sub. DR067, p. 13)

Associate Professor Ken Palmer advised against separate legislation for regulation in the natural and built environments. Though stating that such separation would be a feasible option, Palmer noted that:

- doing so would risk losing the advantages achieved by the RMA in offering a generally "one-stop shop" approach to resource consents; and
- given the different (albeit overlapping) purposes, timeframes and spatial scales of processes under local government legislation (currently the LGA), land transport legislation (the LTMA) and the RMA, the advantages in combining provisions relating to the built environment in one piece of legislation would be minimal; rather, doing so would likely add complexity (2017).

Instead, Palmer favours clearer objectives for the built and natural environments within a single planning and resource management Act, with better cross-referencing and improved alignment of processes across the three types of legislation (discussed further in section 13.4).

The Commission agrees with this analysis and with the majority of submitters. While two statutes would bring into focus specific objectives for the built and natural environment, this is likely to come at the cost of greater complexity and less integration.

The interactions between the natural and physical environments are deep and intrinsic (Chapter 9). These links favour an integrated approach to environmental regulation. If designed well, a single statute should achieve the same (or greater) level of clarity than two separate statutes while better reflecting the connections between the built and natural components of the environment. This will encourage and support better-integrated and more-efficient regulatory decisions.

R13.4 The primary statutory base for a future planning system should be a single piece of legislation covering land-use planning and resource management. The single piece of legislation should have clear and separate objectives for regulating the built and natural environments. There should continue to be separate legislation covering land transport management and the constitution and operation of local government.

A decisive shift from the Resource Management Act

The Commission proposes a revised statutory purpose and clear objectives for regulating the built and natural environments. This represents a significant and profound shift from the current provisions under the RMA.

The RMA lacks clarity in purpose and objectives, and has proved to be complex, cumbersome, inefficient and inaccessible in practice, while failing to provide a clear guide to the limits of regulation (Chapters 5 and 8). In addition, as shown by the failure of fast-growing cities to provide adequate development capacity, the RMA has provided insufficient focus on the benefits of urban development.

While a new statute would retain some of the conceptual strengths of the RMA (such as a hierarchy of planning documents, an emphasis on effective community engagement and integrated consent processes), it would introduce institutional arrangements and checks and balances aimed at improving planning outcomes at the local, regional and national level.

The Commission also stresses that legislation is only one (albeit important) component of the planning system. A deep change in culture and capability, and improved national stewardship, are also needed to achieve better planning outcomes for the built and natural environment (Chapter 14 and section 13.6).

13.3 The hierarchy of planning documents

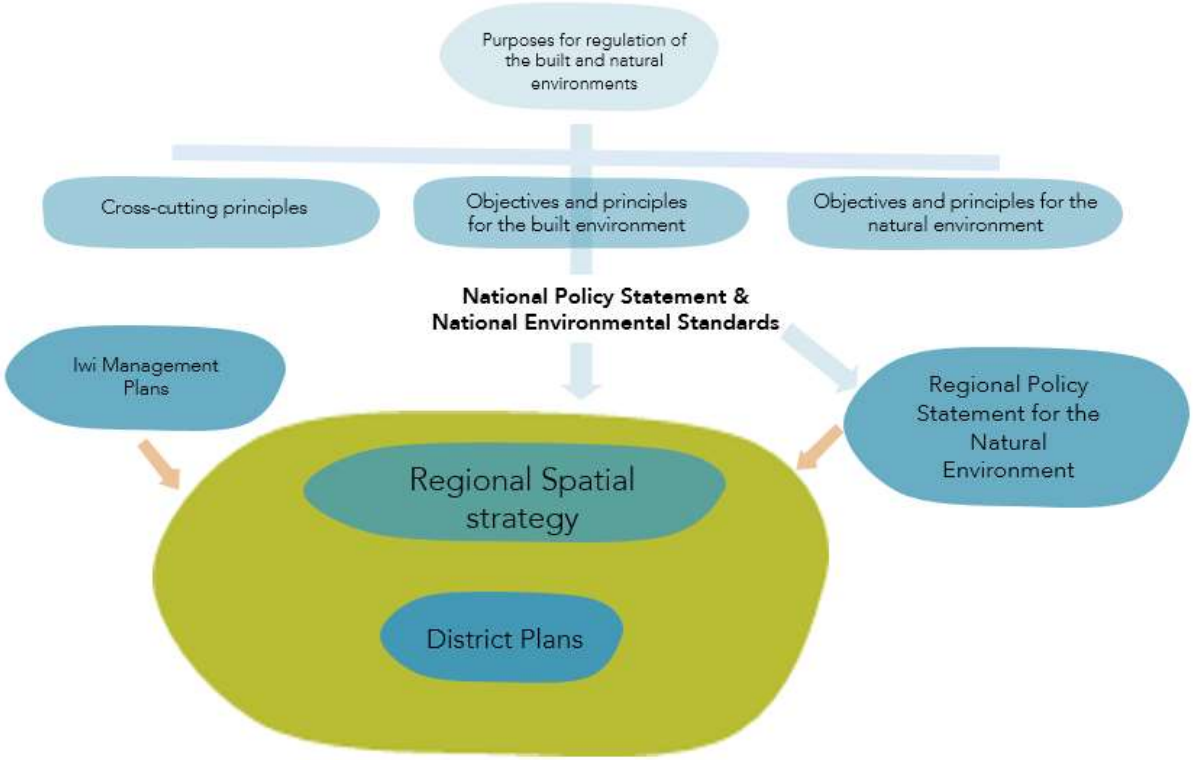
This chapter and previous chapters have set out the Commission's proposals for the main elements of legislation and planning instruments in a future planning system (section 13.1). These cover:

- purposes, objectives and principles for the built and natural environments (section 13.2);
- the Regional Spatial Strategy (RSS) (Chapter 10); and
- the Regional Policy Statement for the Natural Environment (RPS-NE) incorporating current elements of Regional Policy Statements (RPSs) and Regional Plans that regulate the natural environment (Chapter 9).

The main difference from current arrangements is the clearer distinction between spatial planning as a platform for land-use planning and infrastructure investments; and planning for protection of the natural environment. In addition, as discussed in sections 13.4 and 13.5, the Commission proposes that the RSS, the RPS-NE and district Plans be developed together as a coherent package and reviewed as a package by an IHP. Legislation will require local authorities to take into account the relevant provisions of an Iwi

Management Plan (IMP) in developing an RSS and District Plans (Chapter 7). The RSS, RPS-NE and district Plans will be required to give effect to the provisions of NPSs and NESs (Figure 13.1).

Figure 13.1 Land-use and resource-management plans in a future planning system



National guidance

One criticism of the current planning system is the failure of central government to provide sufficient guidance to assist councils to carry out their planning responsibilities (Chapters 5, 7, 8 and 9). Section 13.6 discusses the role of system stewards in proactively promoting issues of national importance and the sound operation of the planning system.

NPSs and NESs would continue to have the purpose and functions that they have currently but would likely play a stronger role in clarifying objectives and providing guidance to councils. Chapter 7, for instance, proposes an NPS on giving effect to the Crown's Treaty of Waitangi obligations in land-use planning and resource management.

Currently only the Coastal Policy Statement is mandatory in legislation. The Commission believes a future planning Act should specify a core suite of mandatory national instruments. For instance, the NPS covering the Crown's Treaty obligations in planning should be mandatory.

For the natural environment, the "core national instruments" could cover:

- air quality;
- water quality;
- biodiversity conservation; and
- coastal management.

For the built environment, the core national instruments could cover:

- heritage protection priorities;
- electricity transmission;
- telecommunications facilities; and
- urban development capacity (UDC).

The Government Policy Statement (GPS) under the LTMA will continue to provide guidance on transport-related issues.

It will be important for central government to develop clear and transparent criteria for selecting "nationally important" issues. In particular, these criteria should cover *the distributions of cost and benefits emerging from the issue*. When costs and benefits are contained locally then local, rather than national, decision makers should have responsibility for setting priorities.

Independent panels of experts, with deep knowledge of the relevant area, should advise on the development of NPSs and NESs. This is particularly important for guidance on regulation in the natural environment. Up-to-date and authoritative environmental science, knowledge of current environmental outcomes and an understanding of the interface between the built and natural environments are essential (Chapter 9).

Central government can also usefully provide informal guidance in various ways on how local authorities could best carry out their regulatory responsibilities. Providing guidance is a part of central government's role as system steward (section 13.6).

13.4 Types of plans and planning processes

This section provides more detail on the Commission's proposals for land use Plans and planning processes.

The Commission proposes three main types of statutory plans to regulate land use.

- An RSS would:
  - integrate indicative land uses with provision for future corridors for water and transport infrastructure and land for community facilities (eg, schools, hospitals and recreational spaces), and natural hazard management (Chapter 10); and
  - recognise and actively protect sites and natural features of special significance to Māori (such as whenua taonga, whenua tapu and mahinga kai); other sites with recognised heritage or ecological value, and outstanding natural features and landscapes (Chapters 7 and 10);
- An RPS-NE would establish the ecologically sustainable limits within which development in the region must occur; standards for ecosystem services; and would establish standards that reflect community preferences for protection of the natural environment (Chapter 9);
- District Plans would set out rules to regulate decisions on land use. District Plans would have functions broadly similar to current district plans.

Regional Spatial Strategy

Inquiry participants strongly supported spatial planning as a formal part of a suite of instruments for land-use planning (Chapter 10). The Commission proposes that regional councils will lead the development of spatial plans in the form of RSSs. Regional councils and the constituent territorial authorities in each region will jointly sign off on the RSS.

Local authorities and other agencies such as the New Zealand Transport Agency (NZTA), together with iwi and hapū authorities, and water, transport and social infrastructure providers, will work collaboratively to develop the RSS. Councils will also need to identify and engage with other parties (such as developers,

landowners and groups representing particular interests, and the wider community) who will be affected by the provisions set out in an RSS. The Commission proposes that local authorities have the flexibility to use the most appropriate engagement methods and processes to gauge views and resolve conflicts (Chapter 8).

The RSS would lay out the spatial bones of an urban area and make available options for using land for infrastructure. It would not specify the specific form or detail of that infrastructure. Infrastructure providers, in developing their investment plans, would be required by statute to take into account the provisions of an RSS.

For instance, regional councils would continue to lead the development of Regional Land Transport Plans (RLTPs) under the LTMA (or equivalent legislation). The RLTP reflects central government spending priorities set out in the GPS on land transport, but will also need to take into account the provisions of an RSS. Currently, the RLTP needs to consider any relevant RPS.

Likewise, the RSS will provide a platform for local authorities to coordinate their water and transport infrastructure investments with land-use planning. The RSS process will also provide an opportunity for local and central government to discuss possible collaboration (including joint funding) of large, city-shaping infrastructure with national benefits (Chapter 10).

Good processes can improve coordination of infrastructure investments with land use. Chapter 10 describes how "facilitated discussions" can be a means to iterate towards a closer-to-optimal set of interdependent investment decisions.

The RSS will need to give effect to any mandatory provisions of an NPS, NES or the RPS-NE (Chapter 9). There should also be capability, perhaps provided by central government agencies, to ensure that RSSs deal efficiently and effectively with cross-regional issues. NZTA already carries such a role in dealing with inter-regional transport issues.

The RSS will replace the spatial elements of the current RPS.

Regional Policy Statement for the Natural Environment

Regional councils will lead the development of, and sign off, the RPS-NE. Developing the RPS-NE will be a collaborative process, with similar participants to the RSS. Central government agencies with responsibility for the natural environment (currently, for instance, including the Ministry for the Environment (MfE) and the Department of Conservation) would also be involved. The RPS-NE will give effect to the high-level objectives for the natural environment and relevant national direction through NPSs and NESs.

A well-founded science base and up-to-date and granular information on natural environment outcomes in a region will be essential for an effective RPS-NE (Chapter 9). An RPS-NE should include plans for monitoring of environmental outcomes in the region, and provide for analysis and dissemination of data as it becomes available.

The RPS-NE will include the elements of current RPSs and Regional Plans that deal with regulation of the natural environment. Generally, current Regional Plans primarily deal with such regulatory matters (K. Palmer, 2017). Under the RMA, regional plans are not mandatory; but, in practice, regional councils invariably operate a number of regional plans, each covering different aspects of environmental regulation.

Under the Commission's proposals, the RSS and RPS-NE would replace the current RPSs and current Regional Plans. The Commission considers that this division of function between the RSS and the RPS-NE will lead to greater clarity in land-use planning and resource management.

Regional Coastal Policy Statements could remain separate as at present. Yet it should be possible to incorporate the elements that regulate the natural environment into the RPS-NE and those that regulate the built environment (eg, coastal structures) into the RSS or District Plans.

Environmental monitoring and enforcement in the regions

In its draft report the Commission noted that regional councils had failed to provide sufficiently robust monitoring and enforcement of environmental priorities (Chapter 6). The Commission asked whether more

environmental regulatory responsibilities should be shifted to a national organisation; or, alternatively, whether central audit and oversight of regional council performance should increase.

A majority of submitters did not favour assigning responsibility for monitoring and enforcement to a central government agency. Adding a new agency, particularly one with enforcement responsibilities, could increase the difficulty of integrating regulatory design (which would remain with regions) with measures to promote regulatory compliance (Greater Wellington Regional Council, sub. DR80; Horticulture New Zealand, sub. DR73). Instead, Greater Wellington Regional Council pointed to the benefits of an alternative collaborative approach among regional councils to improve performance in securing compliance with environmental regulation. The Council referred in particular to the work of the Regional Managers Group in developing the Strategic Compliance Framework and a new national qualification (sub. DR80).

Auckland Council and Wellington City Council both submitted that more work needed to be done to understand the causes of poor environmental outcomes, rather than simply attributing them to poor enforcement (subs. DR86 and DR77). Auckland Council argued that more effective monitoring needed to be undertaken at the regional and local level (rather than at the national level) to recognise the environmental complexities at those levels (sub. DR86).

Associate Professor Ken Palmer (2017) pointed out that the MfE, on behalf of the Minister for the Environment, is already responsible for monitoring the performance of the regulatory system. Greater Wellington Regional Council (sub. DR80), Environment Canterbury (sub. DR72) and LGNZ (sub. DR113) made a similar point. In addition, the Minister has the power to intervene in particular circumstances to ensure councils carry out their regulatory responsibilities if they are failing to do so (RMA ss 24, 24A, 25 and 25A). Whanganui District Council supported an enhanced external audit (sub. DR95, p. 22).

The Environmental Defence Society thought there could be "merit in an external regulator to depoliticise environmental enforcement" (sub. DR57, p. 6). Christchurch City Council also saw benefit in moving monitoring and enforcement of regulation to a national organisation (sub. DR90). Employers and Manufacturers Association Northern favoured "a system of audits of council performance and monitoring … with an enforcement capability of those councils that fail to report and monitor" (DR87, p. 4). Federated Farmers submitted that an agency independent of councils should make any decision that might result in criminal prosecution (sub. DR96).

On reflection, the Commission considers that regional councils should continue to have the primary responsibility for setting regional environmental standards and implementing, monitoring and enforcing regulation of the natural environment in regions.

First, integrated planning for land use and resource management is central to the Commission's proposals for a future planning system. A separate agency, focused on monitoring and enforcing regulation of the natural environment, would make integration more difficult. In any case, currently no national organisation appears to have capabilities to take over the primary responsibility for monitoring and enforcing environmental regulation in the regions (K. Palmer, 2017).

Second, under the Commission's proposals, regional councils will have a central role in leading spatial planning through the RSS and integrating other plans in the region into a coherent package. Continuing responsibility for setting, monitoring and enforcing regulatory standards for the natural environment through the RPS-NE and issuing air and water permits (for instance), is a natural fit for regional councils. Regional councils already have some expertise in the environmental sciences to support this role (McDermott, 2016).

Third, some key environmental standards are set nationally (reflecting the national benefits) and so relatively susceptible to focused and consistent monitoring and enforcement by a regional agency (whether part of a national body or a regional council). Yet most standard setting related to protecting the natural environment is necessarily highly dispersed through particular provisions in district Plans, and through the issuing of permits and consents, with or without conditions.

In addition, enforcement is only one of a range of tools to secure compliance. Two other complementary approaches, to consider together, are the design of the regulation and education (LGNZ, sub. DR113). For instance, the way Plans and consent conditions are written has an important bearing on compliance and

enforceability (Newhook, 2016). It follows that information on how environmental outcomes relate to regulatory effort should provide feedback to improving local regulatory performance over time. While a separate monitoring and enforcement agency would possibly be better at focusing on priority environmental outcomes specified in national standards, such an agency would risk attenuating the regular flow of information at the local council level.

Yet experience has shown that territorial authorities, in particular, currently lack the scientific knowledge and fit-for-purpose information systems to generate and analyse key information on environmental outcomes to improve regulatory performance (Chapter 9). Central government agencies, as system stewards, need to work collaboratively with regional and territorial authorities to develop the science base and information systems to improve monitoring and design of regulatory effort (in particular to support adaptive management) (section 13.6).

A collaborative approach should be backed up, as at present, by a central government agency (currently the MfE) with the statutory responsibility to monitor the performance of the regulatory system, and to initiate corrective action as required. The central agency could exercise the monitoring responsibility on behalf of the Minister (as at present) or be assigned it under statute (K. Palmer, 2017).

Finally, the benefits and costs of regulation of the natural environment are shared among national, regional and local communities. So, there is no clear principle to justify monitoring and enforcement by a national body alone (NZPC, 2014b). On balance, the arguments support regional councils continuing to have the primary responsibility for monitoring and enforcement of regulation for the natural environment in the regions.

R13.5 In a future planning system, regional councils should continue to have the primary responsibility for monitoring and enforcement of regulation for the natural environment in the regions.

District Plans

As at present, district Plans will be guided by national objectives and principles, NPSs and NESs. In the future , their format and some provisions will also be standardised through the use of a national planning template (Chapter 8). Plans will also need to give effect to mandatory provisions in the RSS and RPS-NEs, and otherwise take their provisions into account. As described below, all district Plans in a region will be developed together with the RSS and RPS-NE as a package; this will provide an opportunity to align objectives and provisions.

Active protection of Māori Treaty interests and recognition of Iwi Management Plans (IMPs)

Chapter 7 recommends that a future planning system should carry forward and build on current regulatory provisions to give effect to the Crown's Treaty obligations by enabling the expression and active protection of Māori interests in the environment. Currently the RMA requires councils to take into account relevant provisions of an IMP in developing RPSs and Plans. The Resource Legislation Amendment (RMLA) Bill 2015 (including proposed changes) would require councils, on the initiative of iwi and hapū, to enter into iwi participation arrangements (to be known by the dual name Mana Whakahono a Rohe/Iwi Participation Arrangement) (MWaR/IPA) (MfE, 2016j).

The Commission considers that the RSS provides a major opportunity to strengthen Māori participation in planning processes. Mana whenua will participate in developing the RSS and may, in particular, bring to the table IMPs that set out their interests in the built and natural environments. Even those mana whenua who have not yet developed an IMP will have an opportunity to set out their interests and reach agreement on how these interests should be protected through land-use planning regulation.

Ngāti Whātua Ōrākei submitted:

> NWŌ see active and meaningful engagement in spatial planning, undertaken with a true partnership approach, to be fundamental in enabling a step change in Māori participation. It is absolutely essential to emphasise that to be effective, spatial planning needs to be undertaken in a fully participatory manner - there needs to be a paradigm shift away from traditional "plan and consult" methods of engagement. This is essential if a partnership approach in line with the principles of Te Tiriti o Waitangi is to be realised. Here, we point to the approach of Sea Change – Tai Timu Tai Pari (The Hauraki Gulf Marine Spatial Plan) as an example of emerging good practice. (sub. 76 p. 2)

The Christchurch City Council likewise proposed that

> [t]he development of strategic or spatial plans should be undertaken with Māori participation on the basis of collaborative planning processes that recognise them as partners. (sub. DR90, p. 12)

Future planning legislation should convey a strong expectation that local authorities work in good faith with mana whenua to recognise and provide for active protection of Māori Treaty interests in the built and natural environments. Proposed changes to the RMLA Bill, for example, would insert a set of principles in the RMA to guide the formation of MWaR/IPA (MfE, 2016j). This type of approach would encourage good practice in engaging mana whenua in spatial planning.

Because the RSS, the RPS-NE and district Plans will be developed as a package, recognition and active protection in the RSS and the RPS-NE of Māori interests should flow through to related provisions in district Plans. This will have the added benefit of easing the consultation burden for mana whenua. Mana whenua will be able to engage in a single process to have their interests recognised in the full package of plans. Ngā Aho and Papa Pounamu identified the diversity of local authorities as a significant barrier to mana whenua engaging in planning processes (2016b). Some iwi have to engage with up to nine different councils on land use and resource management planning (Te Puni Kōkiri, 2013). Māori engagement in planning would be reinforced by a statutory requirement for the RSS, the RPS-NE and Plans to contain a chapter on measures to recognise and actively protect Māori Treaty interests in land-use and resource management planning.

Instruments for land-use planning will also be able to reflect relevant provisions arising from Treaty settlements, such as those involving co-governance arrangements (Chapter 7). As Professor Hirini Matunga notes:

> [B]etter alignment between Planning legislation and Treaty legislation remains critical…the two often cover the same or similar territory, spatial context and institutional jurisdiction – but currently function in parallel and sometimes quite divergent or conflicting ways. (pers. comm., 30 January 2017).

Professor Matunga also notes that:

- The process certainly for preparing these Chapters would need to be well defined to ensure full and equitable Māori participation;
- Māori participation in regional and local government decision making processes to hear and approve these policy statements and plans would also need to be clarified and made compulsory rather than discretionary;
- The diversity and multiplicity of Māori groupings in a region or district would also need to be acknowledged, rather than homogenised into a unitary 'Māori position' across a region or district;
- However, so called 'unitary Māori policy/planning positions' could possibly be supported through collegial processes and collective assent … and/or articulated at a high enough level to allow a diversity of iwi/Māori positions to come through. (pers. comm., 9 February 2017).

The Commission proposes (in Chapter 7) that an NPS on Planning and the Treaty of Waitangi is used to provide guidance to councils on how they should give effect to the Crown's Treaty obligations to recognise and actively protect Māori interests in the natural and built environments. The Commission also proposes that IHPs review the RSS, the RPS-NE and district Plans together. One review criterion will be consistency with the provisions of statutory guidance through NPSs and NESs.

R13.6

In a future planning system, local authorities should be required by statute to include (in the Regional Spatial Strategy (RSS), the Regional Policy Statement for the Natural Environment (RPS-NE) and in district Plans) a chapter on measures to recognise and actively protect Māori Treaty interests in land-use and resource-management planning.

Local authorities should, in preparing an RSS, an RPS-NE, or a district Plan, be required by statute to:

- engage in good faith with mana whenua;
- have regard to relevant provisions of iwi management plans (or their equivalent) in their region; and
- endeavour to reach agreement with mana whenua on how the RSS, RPS-NE or Plan can give effect to relevant provisions of iwi management plans.

A regional package of policies and plans

The Commission proposes that the RSS, the RPS-NE and district Plans are developed together as a coherent package in a region. The use of a national planning template will provide for more standard definitions and layouts across district Plans, which will make the process of developing a coherent package easier (Chapter 8; Sir Geoffrey Palmer and Dr. Roger Blakeley, sub. DR122). Palmer and Blakeley indeed proposed that each region should have only one district Plan.

Local authorities will need a process to develop provisional policy statements and plans, subject to adjustments to ensure that they are aligned. This will help overcome a past lack of alignment in some regions around key objectives such as how best to accommodate growth pressures (K. Palmer, 2017). Future legislation will need to specify processes carefully so as to provide ample opportunity to align provisions in the package of policies and plans before they are individually subject to formal review and legal challenge.

A coherent regional package of plans should deliver payoffs in greater consistency and less duplication in planning approaches; better integrated provision for future infrastructure; and greater certainty to residents, developers and infrastructure providers.

A single, coherent process in a region will also make it easier and less onerous for mana whenua groups and infrastructure providers to engage in the formation of plans (rather than having to engage separately with a diverse group of local authorities with potentially different approaches to land-use planning).

As with all planning processes, the RSS will need to bring together competing interests and views on development. The Commission proposes that an IHP reviews the RSS, the RPS-NE and all district Plans as a package before they become operative (Chapter 8). This process will provide a further opportunity to resolve any outstanding differences, including those among the constituent local authorities in a region, or between local authorities and mana whenua. There would be no appeals on merit from IHP decisions. The ultimate aim would be to align the RSS, the RPS-NE and district Plans on key objectives.

Aligning consultation and decision-making processes across planning statutes

Under current planning statutes, RPSs, Regional Plans and district Plans are used to regulate changes in land use. Long-Term Plans and Annual Plans set out local government infrastructure investment intentions (among other budgetary intentions). The GPS and RLTPS set out central government's investment plans for transport infrastructure. As a result, central government and local government make investment decisions and land-use decisions in parallel processes (with separate but overlapping governance arrangements). These parallel processes mean that across the different statutes (the RMA, LGA and LTMA):

- planning is coordinated only loosely and through iteration; and (typically)

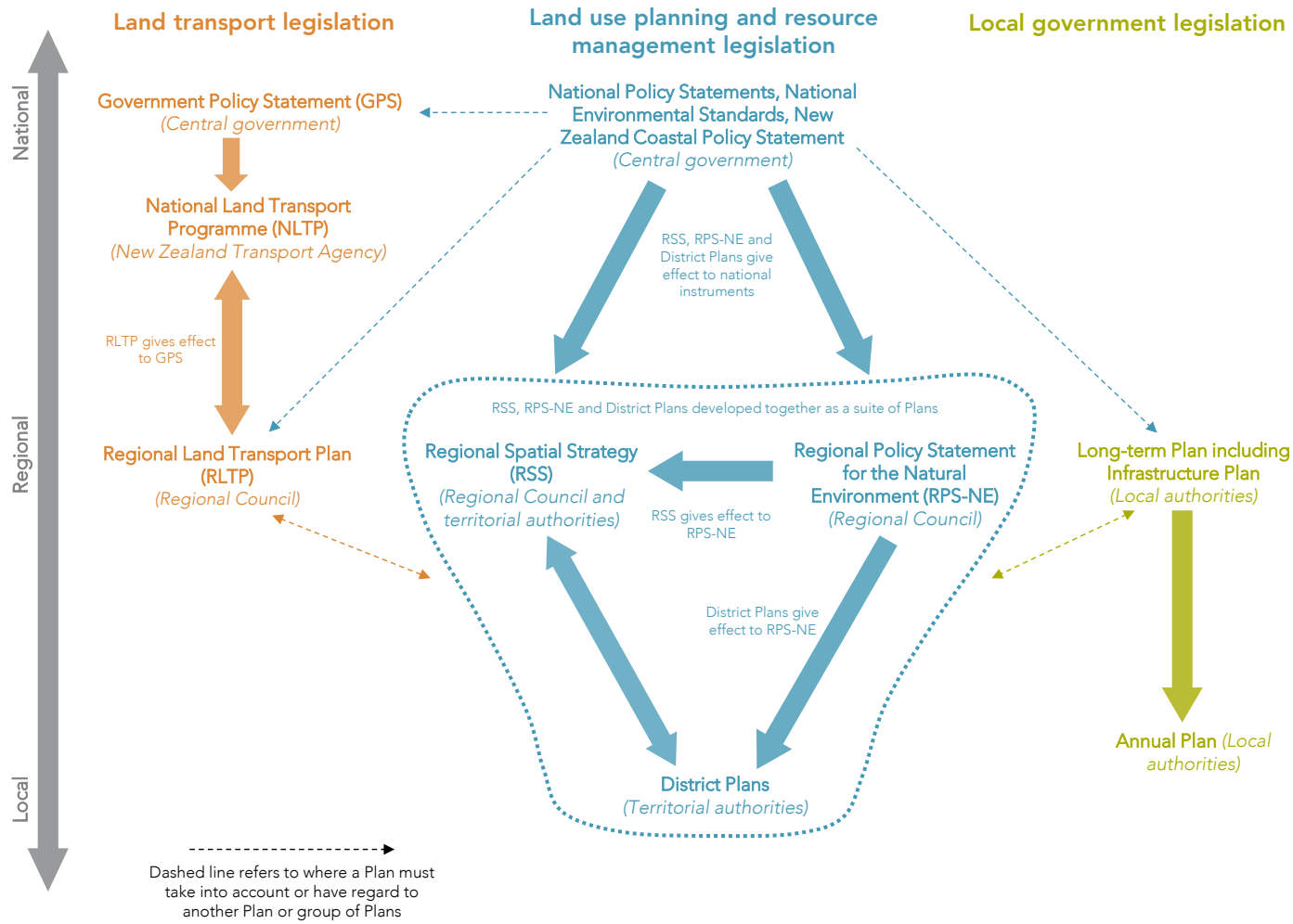
- separate consultation processes are used when developing Plans.

The Commission is proposing that land-use and resource management planning legislation remain separate from legislation that governs central government and local government infrastructure investment decisions (section 13.2). This leaves a question about how much a new planning system could provide for better coordination of plans and more efficient and effective consultation processes across the separate statutes. For example, the Commission recommends that central and local government providers of infrastructure are required to take into account the provisions of the RSS (Chapter 10).

Requirements to take into account provisions in plans under other planning statutes

Cross-references between statutes can help ensure that councils developing plans under one planning statute take into account the provisions of existing plans under the other statutes. Cross-referencing from the LTMA and the LGA to the RMA is currently adequate. Yet the RMA lacks adequate references to the other two statutes (K. Palmer, 2017). Future planning legislation should address this lack of cross-referencing (Figure 13.2).

Figure 13.2 Links across future planning legislation



Consultation and engagement requirements

Over time, legislative cross-references have strengthened links and possibilities for joint consultation processes across the RMA, LGA and LTMA. Consultation requirements for preparing RLTPs under the LTMA currently use the same principles and processes available under the LGA.

In its draft report, the Commission asked whether it would be worth moving to common consultation and decision-making processes and principles for decisions on land use rules, transport and infrastructure provision. In particular, in its *Land for housing* inquiry, the Commission considered the merits of removing the separate RMA consultation procedures for setting and changing land use controls, and relying instead

on the more flexible LGA consultation principles and processes. At the time, the Commission decided not to proceed with the idea because of concerns that this may lead to poorer-quality regulation (NZPC, 2015a).

Some submitters supported using common consultation and decision-making processes across different aspects of planning, and, in doing so, often favoured the more flexible processes provided for under the LGA (Retail New Zealand, sub. DR74; Greater Christchurch Urban Development Strategy, sub. DR83; Greater Wellington Regional Council, sub. DR80; Horticulture New Zealand, sub. DR73; Property Council New Zealand, sub. DR118).

These and other submitters also identified limits to the use of common processes. Allison Tindale pointed out that the consultation required to arrive at a broad strategy is necessarily different in scope and timing to consultation with property owners required to consider the effects of detailed planning rules on their property (sub. DR110). Similarly, Horticulture New Zealand did not think that the LGA processes would be appropriate for consulting with property owners and occupiers directly affected by a proposal (sub. DR73).

LGNZ pointed out that different legislative frameworks necessarily operate at different spatial scales, and warned against standardising consultation processes arbitrarily. LGNZ argued for "making [processes] more flexibly empowering so that alignment can be better negotiated at the local or national level" (sub. DR113, p. 4). Consistent with this, the Commission recommends greater flexibility in statutory provisions for consultation and engagement in planning (Chapter 8). Clear objectives and principles to govern decisions (section 13.2), combined with systematic independent review of plans (section 13.5), will allow greater flexibility in consultation processes, without compromising the interests either of the general public or of particular property owners affected by land use controls.

Yet, even with more flexible consultation processes, new planning and resource management legislation should pay particular attention to statutory references to the LTMA and the LGA (or their equivalents). References should enable, where practical and efficient, common consultation and engagement processes in developing land-use and infrastructure investment plans.

R13.7

A future land-use and resource-management planning statute should contain cross-references to land transport management and local government statutes that:

- enable joint consultation and engagement processes when developing plans under the different statutes, where this is practical and efficient; and
- require plans developed under one statute to take account of provisions in existing plans under the other statutes.

Future planning legislation could also better align principles and processes under different statutes that require councils to engage with Māori in planning processes. Ngā Aho and Papa Pounamu recommended greater consistency in how Māori values, rights and interests are recognised across different pieces of planning legislation (2016b). Yet the different purposes and subject matter of land use and resource management planning; local government; and land transport management legislation may legitimately require different relationships between councils and Māori. Better alignment across planning statutes of principles and processes for engaging with Māori requires careful thought and consultation with a range of Māori interests.

Consenting processes

A primary advantage of maintaining a single statute for land-use and resource-management planning that covers both the built and natural environments is that it better enables an integrated process for granting resource consents (section 13.2). The Commission does not propose big changes to current consenting processes. Yet, clearer statutory objectives and principles for the built and natural environments offer scope for greater clarity in the purposes of, and criteria for, granting consents.

Section 87 of the RMA provides for five types of consent:

- land use consents;
- subdivision consents;
- coastal permits;
- water permits; and
- discharge permits (covering discharges of contaminants into water, on land, or into the air).

K. Palmer observed:

> Within those categories there is an implied recognition of the focus and relevant matters for the consents. The land use and subdivision categories will essentially focus on implementing development of the built environment. The coastal permit may include both elements of development of the built environment through wharf structure, reclamations, and other coastal installations, but will also have a focus on protecting the ecology of the marine coastal marine area with a natural environment focus. The remaining types of consents, for a water permit and a discharge permit, focus on regulation and protection of the natural environment. (2017, p. 27)

K. Palmer proposed that new planning legislation should provide for separate purposes for the different types of consents that would relate to the separate statutory objectives for the built and natural environments (2017, pp. 57–58). This would allow for greater efficiency and better focus in consent decisions (than under the RMA), and could allow for an appropriate presumption in favour of development for some types of consents, but not others.

> Where a presumption can be appropriately added to the granting of consent, such as in respect of the built environment, it could facilitate approvals. Conversely in respect of natural environment protection, it may be inappropriate to have any presumption on matters which involve potential emission of contaminants into the air or onto land, and regarding the use of water resources. (2017, p. 37)

The Commission finds this analysis persuasive.

R13.8 To provide greater clarity and focus in decision making, future planning legislation should provide for specific purposes and criteria for granting different types of resource consents. These purposes and criteria should be based on the separate statutory objectives established for the built and natural environments.

13.5 Independent Hearings Panels

The Commission is proposing that local IHPs, appointed for the purpose, review all Plans and significant Plan changes (Chapter 8; section 13.4). The IHP review is a crucial part of the Commission's proposals for a future planning system. An IHP will:

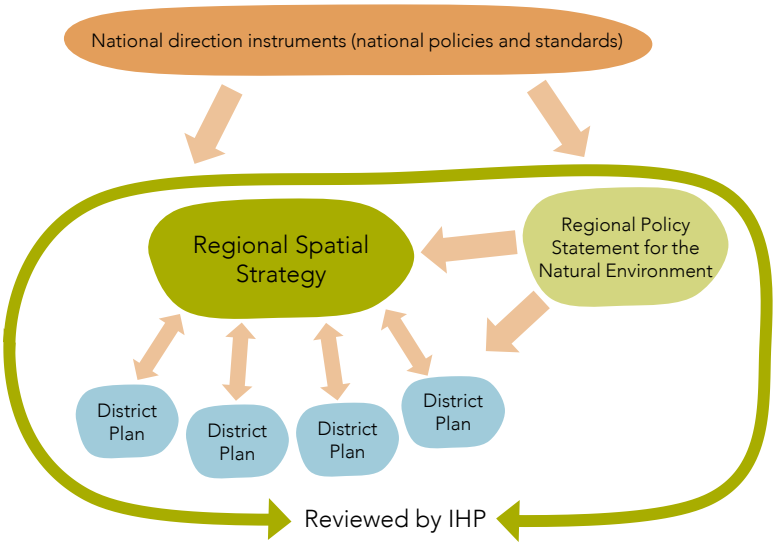
- review notified Plans or Plan changes against matters raised in submissions and against the purpose, objectives and principles set out in statute and secondary legislation (section 13.2); and
- resolve conflicting and contested provisions to produce a final version of the Plan on the merits.

Using an IHP review will remove the need for further appeals on merit, and provide a single-stage comprehensive review of the package of plans (the RSS, the RPS-NE and district Plans) in a region (Figure 13.3). Together, these review provisions will reduce the time taken for Plans to become operational, provide for greater coherence among Plans, provide greater certainty about the outcome of planning processes, and create steady pressure for improvements in the quality of Plans and planning culture over time (Chapter 14).

The output from an IHP would comprise a Plan or Plan change and reasons for any changes made to the notified version of the Plan. This Plan would be subject to appeal to the Environment Court on points of law

(Chapter 8) and judicial review in the High Court. Councils will have the power to initiate further Plan changes if they consider these are required.

Figure 13.3 Package of plans for an IHP to review



Chapter 8 provides more detail on the Commission's proposals for how IHPs will operate.

Capabilities of Independent Hearings Panels

To fulfil the role of a credible final decision maker on merits, an IHP must:

- be truly independent (and appointed by an independent statutory agency (ISA) that is at arm's length from central government);
- have the appropriate expertise to be able to consider scientific, engineering and other expert evidence;
- know and understand tikanga Māori – particularly as it applies in the local area;
- have a sound knowledge of local conditions; and
- have sufficient legal expertise available, and an understanding of fair processes that meet statutory requirements, but at the same time are accessible to non-experts without legal representation.

The availability of appeals on points of law and judicial review will provide the discipline needed for an IHP to use fair and lawful processes and apply well-founded criteria to decisions.

An independent statutory agency to appoint and support IHPs

A diverse group of participants in planning processes have an interest in seeing that Plans and Plan changes are completed and reviewed in a way that provides confidence in the fairness and competence of the planning system. Participants include the councils that prepare and notify Plans; residents and businesses affected by Plan proposals, in particular those who make submissions; infrastructure providers; and central government agencies that secure the national interests in local planning outcomes.

The Commission considers that, to secure the perceived and actual independence of IHPs, a future planning system should provide for an ISA to appoint IHP members and support the operation of IHPs. In particular, central and local government should not be directly involved in appointments to local panels (Chapter 8).

The ISA should also be responsible for oversight of, and the design and content of, training and certification for IHP members; and for issuing guidance to IHPs on processes and procedures. Through its operations to support IHPs, the ISA will receive ongoing feedback about how IHPs are functioning. The ISA could supplement this information with more formal reviews of IHP processes and outcomes, including examining

the basis for any successful appeals on points of law. This would inform the content and focus for training panel members, and of guidance to IHPs.

It would likely be efficient for the ISA to assume oversight of training and qualifications for council and independent hearings Commissioners – a process currently overseen by the MfE. This includes the "Making Good Decisions" courses that also provide training for consent hearing Commissioners (MfE, 2016j).

The ISA should have governance arrangements that, while maintaining its independence from particular decision makers, reflect the broad interests impacted by its role. For instance, the ISA could be governed by a board whose members are appointed by Ministers after consultation with:

- local government;
- infrastructure providers;
- mana whenua and other Māori communities; and
- the legal community with an interest in planning and resource management law.

Central government agencies, as stewards of the planning system, would also advise Ministers on appointments.

Statutory provision for the ISA could be made in planning legislation, or in local government legislation. The LGA, for instance, currently provides for the establishment of the Local Government Commission. The ISA would ultimately be accountable administratively (through its governing board) to Ministers. Even so, Ministers would have no power to direct the ISA on how IHPs and their members are appointed or how IHPs operate.

IHPs will vary greatly in the scope of the matters they consider. The most important hearings will be around a full package of notified plans in a region, including the RSS, the RPS-NE and district Plans. Regions vary greatly in size and the extent to which they contain fast-growing urban areas that pose particular issues for accommodating growth (Chapter 8; section 13.4). The IHPs will review both new Plans and also significant Plan changes. The ISA will need the flexibility and skill to appoint IHPs and design IHP processes and procedures to match the scale and complexity of the matters under review.

R13.9

A future planning system should provide for an Independent Statutory Agency to:

- appoint and provide administrative support to Independent Hearings Panels (IHPs);
- provide guidance to IHPs on the processes and procedures required to fulfil their mandate;
- develop a pool of capable panel members with the required range of skills; and
- provide advice to government on measures to improve the efficiency and effectiveness of the planning system in achieving statutory objectives.

Chapter 8 sets out the Commission's proposals for IHP reviews of Plans and Policy Statements, the processes under which they will operate, and the role of the Environment Court in hearing appeals on points of law.

13.6 Stewardship of the urban planning system

The planning regulatory system includes the institutions, principles and processes through which regulations are made, implemented, enforced and reviewed. It involves all three arms of government – the Executive, Parliament and the Judiciary. For the system to work well, a level of oversight, supervision, coordination, capability building and a process of continual improvement is needed. This is regulatory management. In its

previous inquiry into *Regulatory institutions and practices* (NZPC, 2014b), the Commission found weaknesses in the institutions responsible for oversight and management of New Zealand's regulatory system.

> The designers and implementers of regulation face escalating expectations, complexity and challenge. In many areas, the capability and performance of the regulatory system in designing and regularly upgrading regulatory regimes falls well short of what it should and can be. There has been some progress through recent initiatives to improve the management of regulation, but these are fragmented and follow-through has been inadequate in some cases. (p. 411)

A recent development to improve the management of the regulatory system is the regulatory stewardship expectations on departmental chief executives responsible for regulation (Box 13.3). These set out the high-level expectations for how departments should be designing and implementing regulatory regimes. Ayto noted that

> [t]he introduction of the stewardship responsibility sends a signal that departments can no longer just be passive, working only on those matters that their minister has deemed to be of interest or a priority. They have a duty to systematically and proactively monitor, review, and advise the minister what can or should be done by the government to ensure New Zealanders obtain the best long-term benefit from the resources or assets for which they are steward. (2014, p. 27).

The stewardship obligation on departmental chief executives is formally provided for in section 32 of the State Sector Act 1988. The Treasury monitors these expectations through its regulatory monitoring process.

Box 13.3 **Initial expectations for regulatory stewardship**

Cabinet expects that departments, in exercising their stewardship role over government regulation, will:

- monitor, and thoroughly assess at appropriate intervals, the performance and condition of their regulatory regimes to ensure they are, and will remain, fit for purpose;
- be able to clearly articulate what those regimes are trying to achieve, what types of costs and other impacts they may impose, and what factors pose the greatest risks to good regulatory performance;
- have processes to use this information to identify and evaluate, and where appropriate report or act on, problems, vulnerabilities and opportunities for improving the design and operation of those regimes;
- for the above purposes, maintain an up-to-date database of the legislative instruments for which they have policy responsibility, with oversight roles clearly assigned within the department;
- not propose regulatory change without:
  - clearly identifying the policy or operational problem it needs to address, and undertaking impact analysis to provide assurance that the case for the proposed change is robust; and
  - careful implementation planning, including ensuring that implementation needs to inform policy, and providing for appropriate review arrangements;
- maintain a transparent, risk-based compliance and enforcement strategy, including providing accessible, timely information and support to help regulated entities understand and meet their regulatory requirements; and
- ensure that where regulatory functions are undertaken outside departments, appropriate monitoring and accountability arrangements are maintained, which reflect the above expectations.

Source: Offices of the Minister of Finance and Minister for Regulatory Reform, 2013.

Currently, the stewardship of the urban planning system is unclear and fragmented across a number of Ministers and departments, with no clear leader or contact point within central government. The Ministry of Transport administers the LTMA. The MfE administers the RMA. The Ministry for Business, Innovation and Employment administers the Housing Accords and Special Housing Areas Act 2013, and has a broader interest in affordable housing and the planning system as it affects business. The Department of Internal Affairs administers the LGA and the Local Government (Rating) Act 2002.

In some Acts, different Ministers are responsible for different components of the Act. For example, under the RMA, the Minister for the Environment is broadly responsible for monitoring the implementation of the Act (s 24). Even so, the Minister of Conservation is responsible for preparing the New Zealand Coastal Policy Statement and monitoring the effective implementation of the Statement (s 29).

In addition to government departments, a number of independent bodies play a role in monitoring aspects of the planning system. For example, in the context of the natural environment, the Environment Act 1986 provides that the PCE can undertake reviews of

> the system of agencies and processes established by the Government to manage the allocation, use, and preservation of natural and physical resources, and to report the results of any such review to the House of Representatives and to such other bodies or persons as the Commissioner considers appropriate. (s 16)

Where considered necessary, the PCO is also mandated to "investigate the effectiveness of environmental planning and environmental management carried out by public authorities, and advise them on any remedial action the Commissioner considers desirable".

More generally, the Office of the Auditor-General is mandated to audit the performance of all public entities, including central government departments and local authorities. The product of a performance audit is a report to Parliament that identifies good practices, raises any issues or concerns, and (where necessary) recommends improvements to the public entity's performance.

A future planning system would see the variety of central government agencies with an interest in planning and the environment organised much more effectively to exercise regulatory stewardship. Clear and capable leadership over the built and natural environment (and their interactions) is needed.

F13.1 Departments, as regulatory stewards, have a duty to systematically and proactively monitor, review, and advise how to improve and get the best value out of the regulatory systems for which they are responsible. Responsibility for stewardship of the urban planning system is unclear and fragmented across a variety of agencies with an interest in planning and the environment, with no clear leader.

R13.10 A future planning system should have clear and capable leadership on the built and natural environments and their interactions, with regulatory stewardship obligations clearly assigned to an appropriate central government agency.

Exercising regulatory stewardship will be most effective when:

- urban planning capability and systems within central government are well developed;
- the relationship and interaction between central and local government is strong;
- Māori input into national stewardship of the planning system is effective; and
- information to understand and manage the urban planning system is adequate.

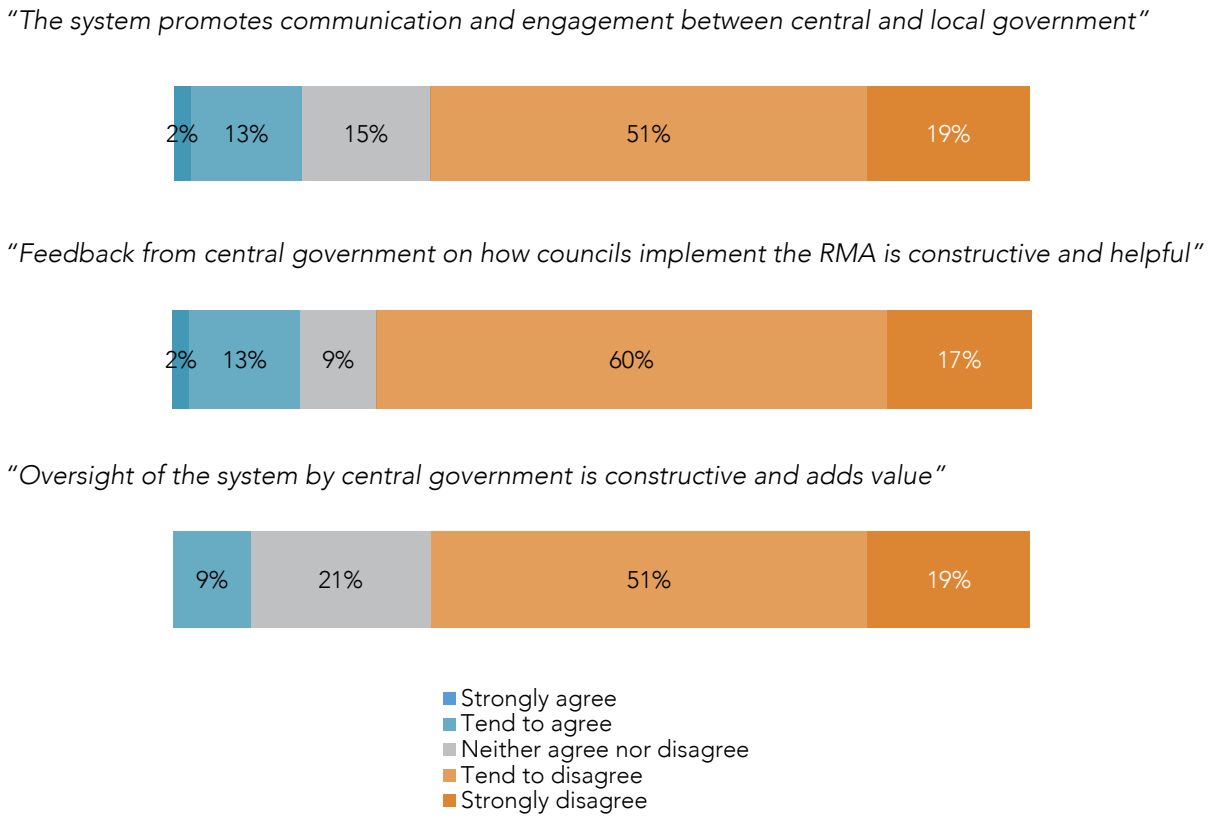
Central government urban planning capability and systems

Central government currently lacks the capability and systems needed to effectively undertake its regulatory stewardship responsibilities, including monitoring the performance, condition and risks of the urban planning system, providing advice on improvements to the system and, if necessary, to support well-informed and timely intervention in that system. Evidence shows poor engagement with local authorities on planning issues (Chapter 14).

- Central government's monitoring systems over the planning system vary in their depth and detail. For example, until recently, land price trends across territorial authorities were not regularly monitored. The NPS–UDC now requires local authorities to monitor land prices, and help identify where the urban planning system is under stress (Chapter 8).
- Central government has no clear leader or contact point on planning issues. This means that local authorities can find it difficult to obtain a coherent central government view. Central government agencies have coordinated in preparing submissions to the Proposed Auckland Unitary Plan and Christchurch Replacement District Plan, but these were ad hoc initiatives rather than a regular and established process.
- Unlike higher-level governments in other jurisdictions, central government in New Zealand lacks a significant planning capability. This limits central government's ability to understand local planning provisions and their impacts, assess performance of the planning system, engage meaningfully with councils over the impact and suitability of their proposed land use rules and policies, and identify improvements in design and operation of the planning system. It also limits central government's ability to contribute to better local planning practice.

Given these limitations, it is unsurprising that local authority respondents to a Commission survey were very critical of central government's role in the planning system (Figure 13.4).

Figure 13.4 Local authority responses to the statements...



Source: Colmar Brunton, 2016.

Notes: Because of rounding, totals may not sum to 100%.

F13.2

Central government currently lacks sufficient capability and the systems needed to effectively undertake its regulatory stewardship responsibilities, including:

- monitoring the performance, condition and risks of the urban planning system;
- providing advice on improvements to the system; and
- supporting, if necessary, well-informed and timely intervention in that system.

Evidence also suggests that central government engagement with local authorities on planning issues is poor.

Interaction between central and local government

A recurring theme of the Commission's local regulation inquiry was "the poor state of the relationship and interface between central and local government, across all aspects of the regulatory system" (NZPC, 2013, p. 6). In that inquiry, the Commission concluded that central government's involvement in regulatory regimes that are managed locally needed to improve, particularly in the following areas:

- the interface between central and local government needs to be improved with local authorities recognised as 'co-producers' of regulatory outcomes;
- central government agencies need to enhance their knowledge of the local government sector and increase their capability to undertake robust implementation analysis; and
- meaningful engagement and effective dialogue with local government needs to occur early in the policy process.

These recommendations apply equally to the urban planning system. The Commission heard from inquiry participants that, despite some examples of successful collaboration (such as the Auckland Transport Alignment Project described in Chapter 10), the interaction between central and local government on urban planning matters was poor. Further, as above, the 2016 Colmar Brunton survey of councils indicates that:

- communication between central and local government is poor;
- oversight of the urban planning system by central government is unconstructive and unhelpful;
- the design of planning legislation is disconnected from its implementation on the ground; and
- central government does not adopt a "whole-of-system" approach to urban planning (see pp. 21–22).

Central government agencies are currently not fulfilling at least some of their regulatory stewardship responsibilities (Box 13.3). A more productive relationship and interface between central and local government on land use regulation is possible, and desirable, in helping to fulfil these obligations. A future planning system should therefore encourage:

- both central and local government to provide input (formally or informally) into each other's policy-making processes, and that this be governed by an agreed set of principles;
- meaningful engagement and effective dialogue with local government occurring early in the policy process;
- cooperative approaches to addressing potential issues with implementing new legislation or planning standards and environmental standards;
- the creation of formal and informal feedback loops to identify problems in the urban planning system when they first appear; and
- the spread of information through the system and the sharing of expertise and knowledge.

To make progress, both central and local government need to foster a more open and productive relationship. To this end, the Commission sees significant value, and has previously recommended, that central and local government work together to develop a "Partners in Regulation" protocol (NZPC, 2013). The protocol would articulate an agreed set of behaviours and expectations when developing and implementing local regulation and, more generally, would promote a constructive interface between central and local government (Box 13.4).

Box 13.4 **'Partners in Regulation Protocol'**

The protocol would aim to promote a constructive interface between central and local government by:

- developing a common understanding of, and respect for, the roles, duties and accountabilities of both spheres of government; and
- articulating an agreed set of principles to govern the development of regulations, with implications for the local government sector.

The protocol would be a jointly created document signed by the Government and representatives from the local government sector. To signal strong commitment, the Prime Minister and the Minister of Local Government could sign it. This would increase the protocol's status as a "whole-of-government" document. It is equally important that local government illustrates ownership and commitment to the protocol. For this to occur, the sector must see the signatories to the protocol as legitimate representatives with the authority to "speak for councils".

The Commission does not envisage that the protocol would be a legally binding document. However, the requirements of the protocol should be added to the Cabinet Office Manual, along with a directive that the principles are to be complied with when formulating local regulation in all but exceptional circumstances. At the same time, the performance assessments of relevant central government agencies should include progress towards implementing the protocol. Likewise, the protocol should include a provision that local authorities include a "statement of intent to comply" in their annual reports.

Source: NZPC, 2013.

The central government regulatory stewards could provide less formal guidance and advice on improving and supporting the urban planning system. They could do so by:

- Ministers or central government agencies making submissions to local planning processes where there is a national interest;
- publishing guidance material on key urban planning issues;
- supporting the development of information systems aimed at providing up-to-date feedback on planning and regulatory outcomes;
- providing technical support to councils dealing with issues that call for specialised analytical techniques (eg, the use of real-options analysis, economic instruments); and
- delivering presentations and seminars to local authorities on central government policy initiatives.

R13.11 A future planning system should be based on a constructive relationship and interface between central and local government through:

- both central and local government providing input (formally or informally) into each other's policymaking processes, under an agreed set of principles or protocol;
- meaningful engagement and effective dialogue with local government occurring early in the policy process;
- cooperative approaches to addressing potential issues with implementing new legislation, or urban planning and environmental standards;
- the creation of formal and informal feedback loops to identify problems in the urban planning system when they first appear; and
- the spread of information through the system and the sharing of expertise and knowledge.

Information to understand and manage the urban planning system

At the heart of the regulatory stewardship role of departments is a better understanding of the urban planning system and how well it is performing.

- Is it fit for purpose and achieving its goals?
- Where are possible improvements in design and operation?

Central government will be involved in the planning system in timely and constructive ways when local opportunities and threats have national impacts. It will monitor closely what is working and what is not, foster innovation and disseminate guidance on best practice. This will require more and better information, along with skilled evaluation.

Up-to-date information on the relevant outcomes of the urban planning system is needed at a detailed enough level to inform adaptive responses. This includes analytic capability and scientific knowledge that enables a better understanding of the link between regulatory design and sought-after outcomes from the urban planning system.

This will require regulatory stewards working closely with regional councils and territorial authorities to develop information systems that provide up-to-date granular information on both the built and natural environments. This will inform both national and local decision making, and allow the planning system to be much more responsive. Examples for the urban environment and for the natural environment are noted below.

- For the urban environment, price information indicates whether councils are creating sufficient capacity for more dwellings within their cities. With this information, city growth can respond better to demand, leading to more stable prices.
- For the natural environment, a scientific base and analytic capability would support adaptive management of the cumulative effects of development on the natural environment.

R13.12 In a future planning system, regulatory stewards need to work closely with regional councils and territorial authorities to develop information systems that provide up-to-date, granular information on outcomes in both the built and natural environments.

Effective Māori input into national stewardship of the planning system

Chapter 7 recommends that a future planning system should carry forward and build on current regulatory provisions to give effect to the Crown's Treaty of Waitangi obligations by enabling the expression and active protection of Māori interests in the built and natural environments. Inquiry participants argued that, particularly in view of the Commission's recommendations for greater involvement of central government in stewardship of the planning system, there was a need to strengthen Māori influence at the national level (Auckland District Law Society, sub. DR70; Environment Canterbury, sub. DR72; Auckland Council, sub. DR86, p. 12; Ngā Aho & Papa Pounamu, 2016b).

The Commission proposes that, in a future planning system, a statutory National Māori Advisory Board on Planning and the Treaty of Waitangi joins and assists central government agencies in their system stewardship role. The Board would monitor how the planning system gives effect to the principles of the Treaty of Waitangi, and advise central government on how best to give effect to those principles. The Board would also carry out a Treaty of Waitangi audit of the planning system every five years, taking as a starting point the methodology used by the Independent Māori Statutory Board to audit the Auckland Council (Chapter 8).

R13.13 A future planning system should provide for a National Māori Advisory Board on Planning and the Treaty of Waitangi. The Board should be established under statute and:

- monitor how the planning system gives effect to the principles of the Treaty of Waitangi;
- advise central government agencies (with stewardship responsibilities for the planning system) on policies, regulations, processes and methods that will best give effect to the principles of the Treaty of Waitangi; and
- carry out a Treaty of Waitangi audit of the planning system every five years.

Inquiry participants also argued that a future planning system should give greater recognition to tikanga Māori and mātauranga Māori in designing and implementing environmental regulation; and, in particular in monitoring environmental outcomes and the performance of the planning system more generally (Auckland Council, sub. DR86; Ngā Aho & Papa Pounamu, 2016b).

R13.14 Stewards of a future planning system should collaborate with the proposed National Māori Advisory Board on Planning and the Treaty of Waitangi, and with Māori more generally, to develop ways to introduce tikanga Māori and mātauranga Māori into methods to monitor and assess the performance of the planning system at the national, regional and local levels.

13.7 Conclusion

The Commission's proposals in this chapter for statutory, governance and institutional arrangements for a future planning system collectively represent a large change from current arrangements. In particular, the proposals recommend:

- clear statutory objectives and principles for regulation of the built and natural environments;
- strong statutory principles to constrain regulatory provisions and processes so that they are fair, make appropriate use of regulatory discretion, are proportionate to the scale and nature of the issues addressed, and focused on statutory purposes and objectives;
- a central place for spatial planning in bringing together a suite of Plans in a region;

- timely and systematic review of plans against statutory objectives and principles and the views of stakeholders and the public; and
- central government exercising stronger stewardship of the planning system so that it learns and adapts to emerging environmental outcomes and social, economic and technological trends.

These proposals, in themselves, should provide strong incentives for councils to develop the required capabilities. Over time, a more restrained planning culture should emerge – a culture that is both more modest about what planning can achieve and yet looks to a wider range of tools and disciplines to encourage successful urban development. Chapter 14 discusses in more detail the needed changes in culture and capability.

14 Culture and capability

Key points

- Successful reform of the institutional, statutory, governance and regulatory framework for urban planning in New Zealand requires corresponding changes in planning culture and capability. Lack of alignment of culture and capabilities with the direction of reform impeded the successful introduction of the RMA, and is an ongoing constraint.
- From the start of planning in New Zealand, traditions, beliefs, legislation and planning personnel from overseas have heavily influenced planning culture and capability. Professional bodies and associations also had a substantial influence as a conduit for planning values, beliefs and assumptions.
- The role and scope of an emboldened planning culture expanded as planners attempted to solve a wide range of social and policy problems. Yet such issues were largely outside the control of local government and beyond the ambit of land-use regulation. Moreover planners lacked the necessary knowledge, capability and skills to solve them.
- The planning profession in New Zealand has struggled to carve out a distinctive professional identity, and lacks some of the key elements of a "professionalised" regulatory workforce. In the absence of a strong professional identity founded on disciplinary knowledge, planners tend to fall back on legislation to define their role in the planning system. Tensions between subgroups within the planning profession also hinder the development of a clear professional identity.
- A future planning system requires more focus on rigorous analysis of policy options and planning proposals. This would require councils to build their technical skills in areas such as environmental science, economic analysis, policy analysis and evaluation. It will also require a stronger understanding of Māori worldviews and more effective engagement with Māori.
- Councils will require "access" to a wide range of skills and knowledge, covering multiple disciplines and processes. This will require strong capabilities in evaluation and policy analysis, mediation skills, a capacity to listen to and understand the knowledge, analysis and opinions of experts, and to articulate trade-offs among issues raised. A greater emphasis on critical thinking is needed among those involved in planning, requiring a deeper understanding of notions of substantiality, subsidiarity and negotiability.
- In a future planning system, central government should substantially improve its understanding and knowledge of, and engagement with, the local government sector who are important implementers of much legislation. A greater capability to engage on urban planning issues will help promote more productive interactions between central and local government and achievement of mutual goals. It will also allow central government to better fulfil its regulatory stewardship obligations.
- The question of who will lead the reforms proposed in this report is vexed. The academic and planning organisations are likely to be resistant, largely wedded to the status quo and incremental change. Fundamental reform of the current urban planning system will be hampered unless entrenched views, natural conservatism and resistance to change are understood and addressed.
- Yet the statutory, institutional and governance settings proposed in this report will provide strong incentives for councils to, over time, develop and employ the necessary capability and skills. Those carrying out the planning task and councils operating in the proposed new environment will more likely be successful if their cultural attributes, capability and skills are aligned with the new settings.

The Terms of Reference ask the Commission to investigate the behaviour and actions of councils, planners and central government. This chapter will explore behaviour through a lens of organisational and

professional culture (referred to generally as "planning culture"). In this context, "culture" covers a wide range of factors that influence behaviour, including the competencies passed to new staff without being formally articulated; mental models that guide how planning tasks are to be approached; and ideological principles that differentiate acceptable and unacceptable outcomes and behaviours (Schein, 2010).

Because of their influence on the planning system, this chapter will focus on the culture and capability of the planning profession, local authorities, central government, and others involved in planning. It will identify the key influences on planning culture and attributes that are necessary to support good planning outcomes and a future planning system.

It will investigate the planning skills and the workforce capabilities necessary to support the planning framework proposed in this report. This chapter uses the terms "skills" to describe the abilities, knowledge, and expertise required of planning staff in effectively carrying out their roles. As discussed in Chapter 3, the role of urban planning is threefold:

- regulating negative spillovers arising from different uses of land;
- providing a fair and efficient level of local public goods; and
- coordinating investment in relevant infrastructure.

14.1 What is culture?

The "culture" of an organisation or profession describes the norms, values and beliefs shared by staff working in the organisation or within the profession. These include norms of behaviour and accepted wisdom around the factors that are important for organisational/professional success and how success is best achieved.

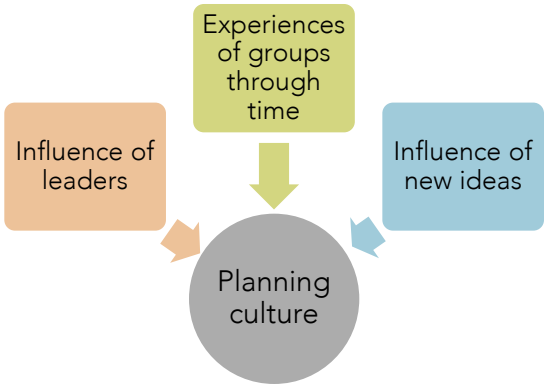
Culture can be conceptualised as the shared, tacit assumptions that a group has come to take for granted and that determine the daily behaviour of group members (Schein, 2013). In this way, culture can be likened to a "psychological contract" that lays out the unwritten rules that govern how people within an organisation or profession are expected to act, think and feel (Brewis & Willmott, 2012; NZPC, 2014b).

Organisational and professional culture emerges from three primary sources.

- *The actions of leaders*. Professional and organisational leaders have a profound impact on the beliefs, values, assumptions and behaviours that evolve within the planning profession. They do this by drawing on their own experiences, convictions and assumptions to propose answers to the questions about the scope and goal of planning and how best to undertake the planning task. In this way, leaders provide a source of ideas and cognitive frameworks for those involved in planning. Importantly, cultural messages are sent through the actions of leaders, and what leaders *don't* acknowledge as being important is as significant as what they *do* acknowledge (Victorian Public Sector Commission, 2013).
- *Shared experiences of planners as their understanding of what it takes to be "successful" evolves.* Planning cultures evolve through time in response to the experience of organisations and individuals. As planners and planning organisations become more experienced, the approaches of leaders are applied and tested, and with them the values and assumptions that underpin these approaches. If the approaches are repeatedly successful, they become embedded in the beliefs and values of the organisation and the profession. Unsuccessful approaches are (through time) re-examined and new assumptions emerge to take their place (or existing assumptions are modified). In this way, the collective experiences of planners and planning organisations combine to shape planning culture. Importantly, what constitutes "success" may change through time (eg, in response to changes in the legislative environment, social attitudes and technology).
- *Different beliefs, values and assumptions brought in by new planners and leaders.* When new staff arrive at an organisation they bring with them their own experiences, beliefs and traditions. Staff who come to planning from other disciplines also bring the culture of their previous discipline. The injection of new ideas, values and ways of doing things can influence planning culture, particularly when changes are

made to key personnel such as the chief executive, chief planning officer, university professors or leaders of professional institutes.

Figure 14.1 Sources of professional and organisational culture

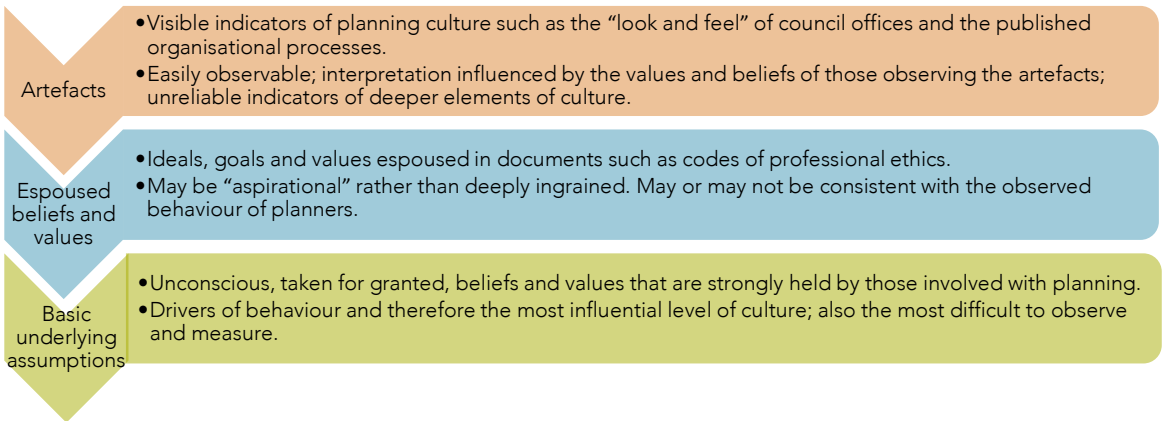


Assessing planning culture is a difficult task. At the most basic level, culture can be examined by looking at visible attributes or "artefacts" of culture (Figure 14.2). These visible artefacts include, for example, the design and style of planning publications, the language used by planners, and observations of how planners interact with other professions. While such artefacts can be readily observed, they can be difficult to decipher.

At a deeper level, culture can be examined by looking at the espoused values and beliefs of planners and planning organisations. Documents such as professional codes of ethics, vision statements and declarations of organisational values are common sources of adopted values. For some planning organisations, espoused values and beliefs may have emerged through time as a set of "tried and tested rules". However, for others they may be "aspirational" rather than deeply ingrained and may therefore have little influence on the behaviour of planners, or at least on their skillsets.

The deepest level of cultural analysis involves examining the basic underlying assumptions that guide the behaviour of planners and planning organisations. These are "unconscious and taken for granted ways of seeing the world and are the source of the values and artefacts" (Brewis & Willmott, 2012, p. 378). It is the underlying values and assumptions of planners that ultimately steer behaviour, but these are the hardest elements of culture to observe and examine. Ultimately, they may best be revealed by prevailing behaviours among "members of a culture", especially as they manifest across organisations and/or in the codes of professional associations.

Figure 14.2 Levels of planning culture



Source: Schein, 2010.

14.2 Culture and the reach of the planning role

This section examines the role and scope of planning.

Urban planning is founded on a belief of "doing good"

Urban planning in New Zealand has its genesis in the English "town planning" paradigms that emerged in response to the Industrial Revolution. During this period, rapid urbanisation increased population density in English cities, and water and sewerage infrastructure struggled to keep pace with the influx of people. This – along with a rapid decline in air quality – resulted in widespread disease and illness. Concerns about the exploitation of labour and the squalid living conditions of the urban poor led to the emergence of social reformers seeking a healthier, more equitable society (Scobie & Jardine, 1987).

Against this backdrop, town planning emerged as a logical solution to urban problems. Separation of conflicting land uses – particularly industry and housing – became the key instrument for achieving higher living standards and better health conditions (particularly for the urban poor). Planning facilitated the all-important supply of sanitation and water services to housing areas and reduced the negative impacts of congestion and pollution associated with living close to workshops and factories. Separation of conflicting land uses also facilitated planning for urban expansion and the provision of transport and energy infrastructure to households and businesses.

In this way, the planning profession can be said to be founded on a moral precept of "doing good" for society. Early English reformers and founders of the new planning profession saw town planning as bringing "order" and "certainty" in a period of chaotic growth and widespread disease. They also saw the opportunity to plan for a better future in which cities were more liveable and residents were happier and healthier. All that was required to realise this vision, they believed, were small constraints on individual property rights in the interest of the community as a whole. In this way, town planning operated as a mediator ensuring that the greater good was achieved and that the surrender of private property rights was enforced. This basic trade-off between private property rights and the wider community good is a founding principle of the planning profession.

For decades this trade-off worked because town planning, it was quickly realised, also delivered the property owner a basic certainty and a bundle of exploitable rights. The certainty that town planning provided ensured each landowner was clear about what they could use their land for and, most importantly, what their neighbour could use their land for. Town planning could also offer new or enhanced property rights and development opportunities that increased the value of land.

During the early 1900s New Zealand experienced widespread public debate about town planning. Various planning schemes were mooted and proposed, drawing to varying degrees on the US, UK and Australian planning systems. The increased public and political momentum to manage the built environment was motivated by the desire to raise amenity, remove unsightly areas and control social problems such as "larrikinism" (Perkins et al., 1993, p. 18). Conditions in some inner-city residential districts were reported as "slum-like". A 1903 survey of 300 inner-city Wellington houses found more than half were in an unsatisfactory state – "damp, dilapidated … [and] infested with vermin" and one-fifth were overcrowded (Schrader, 2012).

The English "Garden City" movement had a deep influence on planning philosophies in New Zealand. The movement arose in Britain in the 1890s in response to the squalid conditions in industrial cities, and promoted "environmentalism" – the idea that the physical environment shaped human behaviour. As Schrader (2012) explains:

> The [Garden City] movement feared […] cities were creating a degenerate working population and would cause national decline. The solution was to remove people from metropolitan areas and resettle them in suburban-like garden cities. In such settlements land uses would be zoned and populations restricted to 30,000. The nuclear family would be the main social unit and local community centres would facilitate public life. Not only would former inner-city dwellers' health improve in garden cities, they might also adopt middle-class values. (p. 2)

The wellbeing of people and the desire to avoid the social ills experienced in England became an early tenet of town planning in New Zealand. Scobie and Jardine (1987) provide an apt illustration.

> In a speech to the First New Zealand Town and Country Planning Conference in 1919, the Minister of Customs, the Hon. Myers, stresses the "effects of systematic town and country planning increasing national prosperity and the evolution of a healthier and efficient race". He cited figures for the gross death rates in planned English communities, and compared these to the (higher) rates in New Zealand without town and country planning. Similar "evidence" was also presented for the heights and weights of children in planned industrial estates compared with those in the unplanned cities. While hardly constituting a rigorous test of the hypothesis, his statement is symptomatic of an early conviction that town and country planning was 'good', and that society would be less healthy and have lower real incomes in its absence. (p. 5)

The British House and Town Planning Act and formation of the British Town Planning Institute early in the 20th century institutionalised these founding views of planning. In New Zealand these ideas influenced the Town Planning Act 1926 (TPA), which introduced a modest planning system for urban areas with more than 2 000 residents. The production of town plans was slow due to a lack of town planning practitioners and the unwillingness of local authorities to take on a potentially expensive responsibility (for which there was little local demand).

The TPA was followed by more comprehensive legislation in 1954 – the Town and Country Planning Act (TCPA). The TCPA codified and institutionalised Garden City planning philosophies. That Act required councils to prepare land use plans based on zoning regulations. The introduction of the TCPA coincided with large-scale infrastructure projects in New Zealand. Responsibility for town planning transferred from the Department of Internal Affairs to the (then very powerful) Ministry of Works. This led to the creation of the Town and Country Planning Directorate within the Ministry of Works.

During this time, planning became a major arm of government and asserted greater control over the urban fabric. A steady stream of British planners also came to New Zealand. These planners brought more authoritarian planning backgrounds and professional cultures.

The 1977 revision of the TCPA recognised an increasing diversity in circumstances among regions and amplified the focus on economic development. The revisions recognised that a standardised prescription of zones ignored local circumstance. As such, the revisions gave local councils responsibilities for preparing plans. One result was an extension of planning into many facets of urban life, prescribing the activities that could be undertaken in increasing detail.

The shift to greater prescription was influenced by the emergence of the Rational Comprehensive Model of planning (Taylor, 1998). Under this model, planning was conceptualised as a simple process of defining a problem, establishing planning criteria, creating alternatives, implementing alternatives, and monitoring progress of the alternatives. The Rational Comprehensive Model provided an important operational framework for planners during the early years of the planning profession.

McLoughlin (1969) conceptualised cities as complex systems that planners could model and steer through plans. McLoughlin saw planners as technical experts, whose job was to help set social goals (including modelling the evolution of cities) and monitor progress towards those goals by taking corrective action when the city deviated from them. While conceptually powerful, the interpretation of cities as complex systems was information intensive and appears to have played little part in urban planning in New Zealand.

The 1960s and 1970s saw growing concern over urban sprawl due to the apparent destruction of productive agricultural land. These concerns reflected the importance of farming to New Zealand's economy, and more significantly, to the country's national identity and consciousness. The 1953 and 1977 TCPAs institutionalised this unique "kiwi" twist on planning by including the preservation of land with "high actual and potential value for the production of food" as one of the Matters of National Importance (MNI) to be "recognised and provided for" in plans. Other MNI were avoiding urban sprawl, preserving amenities and heritage sites, recognising the relationship of Māori with land and preserving the natural character of and access to the coast, lakes and rivers (Chapter 11).

New Urbanism is a relatively recent planning paradigm that emerged from the United States in the early 1980s. This approach is based on the belief that the design of urban areas is central to achieving "more sustainable neighbourhoods, buildings and regions" (Robbins, 2013, p. 313). This approach to planning has gained wide appeal in New Zealand – largely due to its promise to prevent sprawl, protect agricultural land and create more harmonious neighbourhoods. Miller (2016) notes:

> New Zealand seems to have adopted these ideas quite uncritically and begun to include them in district plan residential zones in particular. Given the RMA largely ignored the urban world there was a void in New Zealand planning waiting to be filled. (p. 35)

Robbins notes that "the CNU [Charter of New Urbanism] has a fundamental and almost evangelical belief in the role of design not only in informing a better city but also in shaping a better society" (p. 316) (see Box 14.1).

Box 14.1 **The Charter of the Congress for the New Urbanism**

"The Congress for the New Urbanism views disinvestment in central cities, the spread of placeless sprawl, increasing separation by race and income, environmental deterioration, loss of agricultural lands and wilderness, and the erosion of society's built heritage as one interrelated community-building challenge.

We stand for the restoration of existing urban centers and towns within coherent metropolitan regions, the reconfiguration of sprawling suburbs into communities of real neighborhoods and diverse districts, the conservation of natural environments, and the preservation of our built legacy.

We advocate the restructuring of public policy and development practices to support the following principles: neighborhoods should be diverse in use and population; communities should be designed for the pedestrian and transit as well as the car; cities and towns should be shaped by physically defined and universally accessible public spaces and community institutions; urban places should be framed by architecture and landscape design that celebrate local history, climate, ecology, and building practice.

We recognize that physical solutions by themselves will not solve social and economic problems, but neither can economic vitality, community stability, and environmental health be sustained without a coherent and supportive physical framework.

We represent a broad-based citizenry, composed of public and private sector leaders, community activists, and multidisciplinary professionals. We are committed to reestablishing the relationship between the art of building and the making of community, through citizen-based participatory planning and design.

We dedicate ourselves to reclaiming our homes, blocks, streets, parks, neighborhoods, districts, towns, cities, regions, and environment."

Source: Congress for the New Urbanism: www.cnu.org/who-we-are/charter-new-urbanism

The Ministry for the Environment (MfE) has facilitated and supported the socialisation of New Urbanism in New Zealand – principally through the New Zealand Urban Design Protocol (Gunder, 2011).

Yet while New Urbanism has gained wide appeal, support for the paradigm is far from universal – indeed numerous planners are critical of its core values and assumptions (Gunder, 2011). Some planners argue that urban design is best suited to the public realm and that putting urban design controls into District Plans takes the concept of urban design too far (Miller, 2016). Larice and Macdonald (2007) note:

> New Urbanism is criticized, especially in academic circles, on numerous grounds; that its traditionally inspired forms are antimodern and nostalgic; that its recommendations are too prescriptive and formulaic; that its emphasis on form smacks of physical determinism; that its projects are elitist because

> they are not particularly affordable; and that it is contributing to urban sprawl because many projects built on greenfield sites are of relatively low density. (p. 308)

Several planning academics have questioned the evidence base of New Urbanism (Talen, 1999; Cuthbert, 2007; Gunder, 2011). For example, Sternberg (2000) notes that New Urbanism tends "to operate in a theoretical vacuum . . . and to invite dogmatic adherence" (p. 265). Similarly, Cuthbert (2007) describes New Urbanism as "a methodologically based practice with some rather dubious assumptions about the growth of cities and the generation of urban form" (p. 209).[105]

Also criticised are the New Urbanism planning prescriptions and advocacy for curbing urban sprawl and the wellbeing and sustainability benefits of compact city forms. Troy (2013), for example, notes:

> There was a romantic notion that increasing urban density would lead to greater participation in urban life in the whole range of social and cultural pursuits in a city. The evidence is, however, that there is a higher level of disputation between occupants of strata title developments. Easthope (2012) suggests that the argument that increasing density increases community engagement is flawed. (p. 8)

Troy goes on to say: "The notion that … cities would be made more efficient, lively places if they were massively increased in their density has become one of those dominant paradigms untested by research or rigorous discussion with the public" (p. 10). Neuman (2005) reviews the empirical data on whether compact cities are sustainable and concludes: "The planning profession and academy take as axiomatic that the compact city is more sustainable than sprawl…the evidence is equivocal and does not necessarily support that claim." (p. 12)

F14.1

A number of historical influences have shaped the planning culture in New Zealand:

- the moral precept of doing good for society by bringing "order" and "certainty" (dating from the Industrial Revolution which caused chaotic growth and widespread disease);
- the traditions of the English Garden City movement and a belief that planning, and the shape of the physical environment, is vital for the health and wellbeing of the community;
- the legislative frameworks, planning models and traditions imported from Britain, along with a workforce of influential British planners;
- a belief that urban areas need to be contained to protect agricultural soils, and that this was important for New Zealand's national identity; and
- the New Urbanism model of planning, that emerged from the United States in the early 1980s, and its belief in the role of design in achieving better cities and also shaping a better society.

Professional bodies reinforce a process-driven approach to planning

Higher-order goals and expectations expressed by bodies representing professional planners provide a useful insight into the role that planners see themselves playing in the system. How planners see their role is important because it illustrates the "space" in which planners see themselves working. This in turn helps to inform the worldview of the profession and the norms that underpin planning practice.

The Commission has looked at how planning professional bodies in six countries, including New Zealand, view the role of planning and planners. The views from Australia, South Africa, the United Kingdom, the United States and Canada are set out in Table 14.1.

[105] Gunder (2011) provides a good summary of the literature on New Urbanism.

Table 14.1 The role of planning – views of the planning profession

Professional body	Role of planning
Planning Institute of Australia	Planning is specifically concerned with shaping cities, towns and regions by managing development, infrastructure and services. Planners are described as specialists "in developing strategies and designing the communities in which we live, work and play. Balancing the built and natural environment, community needs, cultural significance, and economic sustainability, planners aim to improve our quality of life and create vibrant communities".
The South African Planning Association	Planning is concerned with enhancing the "art and science of sustainable local, regional and national human and physical development planning, and the theory and practise relating thereto".
The Royal Town Planning Institute (RTPI)	Planning is a place-focused set of practices that seek to enhance the places where people live and work in, through spatial planning, through mobilising the relevant interests, and resolving differences in expectations of land-use activities among them. Planning involves twin activities – the management of the competing uses for space, and the making of places that are valued and have identity. Spatial planning is concerned with the location and quality of social, economic and environmental change
The American Planning Association (APA)	Planning is presented as a benign, professional, community-focused discipline based on advising decision makers how to make decisions that contribute collectively to a wide range of socially beneficial outcomes.
The Canadian Institute of Planning	Planning is focused on physical resource and land-use planning but also covers other aspects of development activity generally, managing them to the benefit of urban and rural communities.

As for New Zealand, the New Zealand Planning Institute (NZPI) website notes that "planning is a complex profession requiring the input of a variety of different disciplines" and that planners "work in cities, suburbs, and towns, and can specialise in, for example, transportation, urban design, or rural environments". As NZPI (2011) highlights:

> Planning is a diverse discipline which deals with the processes and mechanisms through which natural and built environments are managed and transformed in the interests of the economic, social, cultural and environmental aspirations of communities. As a discipline, planning is shaped by and responds to environmental and cultural values, economic circumstances, technological, political and social imperatives, institutional arrangements, and society's ongoing evaluation of resources and the environment. (p. 5)

NZPI's submission to this inquiry notes:

> Planning is about process as well as outcomes. For example: Land use planning creates the prerequisites required to achieve a type of land use, which is sustainable, socially and environmentally compatible, socially desirable and economically sound. It sets in motion social processes of decision-making and consensus building concerning the use and protection of private, communal and public areas. This approach is reflected in the … RTPI quote about the work of planners as: "mediation of space – making of place" (sub. 27, p. 4).

These (and other) NZPI documents suggest an interpretation of planning as a process in which planners manage and transform built environments, protect property rights, provide for externalities, and act in the interests of communities. Planning institutes in other countries have similar interpretations, albeit with different emphases and nuances.

Yet, material from the various planning institutes confirms that a concrete description of the role of planners is elusive (Table 14.1). Descriptions tends to focus either on *process* (ie, the activities that planners undertake) or *outcomes* (what planners are trying to achieve). At the core of the plethora of definitions of planning is the relatively simple concept that planners are trying to make places easier and more fulfilling to

live in – summarised today as making places more "liveable". This is consistent with the early philosophies of planning as being vital for the wellbeing of society.

Hall (2014) argues that planning theory has two distinct streams – *theory in planning* and *theory of planning*. Theory *in* planning examines the practical techniques and methodologies that planners require to perform planning-related tasks and duties. Theory *of* planning involves academics and practising planners trying to understand the nature of planning, including the reasons to use planning rather than other policy levers.

The Commission's review suggests that a "procedural" view of planning dominates the professional identity of the planning profession – in New Zealand and overseas (ie, a substantial focus is on "theory *in* planning"). This perspective of planning emphasises how planners can make planning processes work more effectively – rather than a critical assessment of whether planning is the best tool for achieving a desired social outcome. This contrasts to the early days of planning when land use regulation was an obvious solution to public health problems.

While submissions by academics (DR79 and DR117) point to the teaching of planning thematics as well as process, the definitions offered by the professional bodies and the focus of reforms to the Resource Management Act 1991 (RMA) tend to deal with the processes required to achieve wide-ranging objectives rather than the validity of those objectives and the method through which they aim to achieve them.

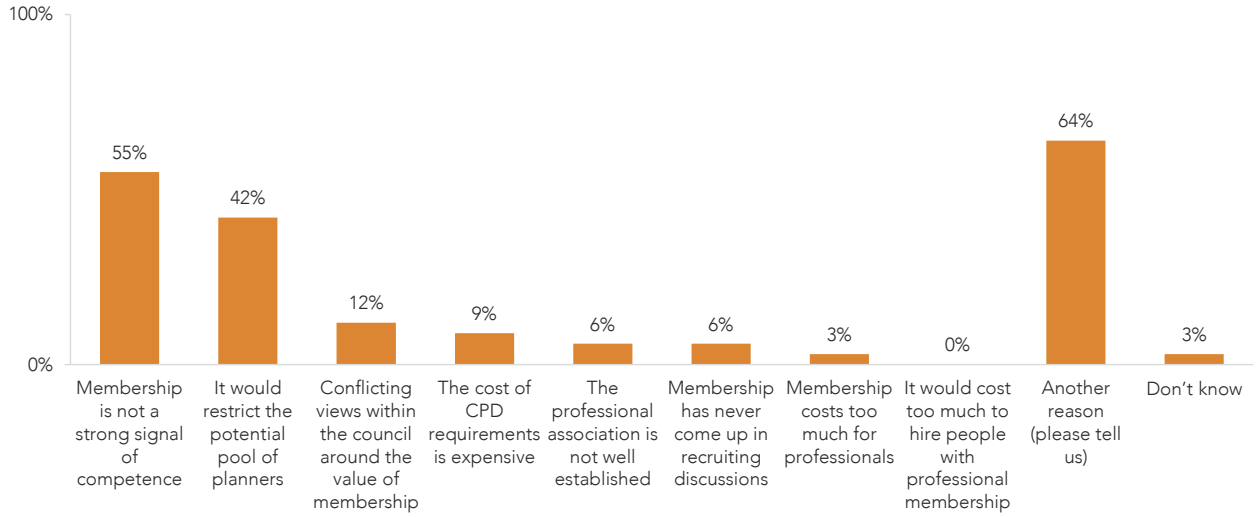
F14.2 A "procedural" view of planning dominates the professional identity of the planning profession in New Zealand and overseas. This planning perspective emphasises how planners can make planning processes work more effectively, rather than examining whether planning is the best tool for achieving desired social outcomes.

Planning has struggled to establish a unique professional identity

Professional groups typically have a distinctive body of knowledge that they can lay claim to. This creates intellectual legitimacy - a key element of a profession's identity. Yet the planning profession (in New Zealand and overseas) has struggled to identify a unique body of knowledge, or a specific professional space that it exclusively occupies (Miller, 2016). Indeed, planning was not viewed as a distinct profession until after the Second World War, with most practitioners being architects, surveyors or engineers. Consequently, planning emerged in New Zealand as an additional role practised within the culture of a person's primary profession.

Even today some planners hold no undergraduate qualifications in planning. For instance, a survey of NZPI members conducted in 2014 found that 23% of respondents held no planning qualification. Similarly, a survey of councils undertaken for this inquiry found that only 30% of councils require their planning staff to be a member of a professional planning association. Figure 14.3 provides answers from those councils as to why they did not require planners to hold professional membership.

Figure 14.3 Reasons for professional membership not being required



Notes:

1. Respondents were permitted to select all more than one reason.
2. Other reasons centre around two main themes: a) membership is voluntary and encouraged but not required, and b) becoming a member of NZPI is too narrow, not relevant for all staff, or too difficult to obtain.

It is also notable that while five universities in New Zealand offer NZPI accredited planning degrees, only a small proportion of university teaching staff trained as planners, and even fewer have practical planning experience. Miller (2016) notes that most university programmes only just meet NZPI's requirement that a proportion of teaching staff must be eligible for NZPI membership (or members of an equivalent overseas institute). Other staff will generally have advanced degrees in geography, social policy, environmental management or ecology.

The difficulty that the planning profession has had in demonstrating a unique knowledge base has seen it fall back on legislation to define (and justify) its role in the planning system (and actions as planners). The submission from Planz Consultants elaborates: "Planning and the profession of planning is only legitimised through the real or implied powers under the RMA – this is not the case with many other professions such as medicine, engineering or architecture for instance. This is a unique and significant point of difference with other professions" (sub. DR60, p.4). Likewise, Miller (2016) puts it this way: "The lack of a strong professional profile founded on disciplinary knowledge and historical achievements leads planners to constantly fall back on legislation to define who they are as planners and what they do" (p. 8)

Professional subgroups and cultures

Tension between subgroups within the planning profession also hinders the development of a clear professional identity. Distinctive groups include:

- *policy* planners (who write council plans and policies) and *consent* planners (who implement and enforce council plans and policies); and
- urban *designers* and "traditional" urban *planners*.

The separation of consent and policy planners emerged from the management reforms of the 1990s as a means of improving transparency and accountability within local government. But the Commission has heard that this separation has been problematic and has created an element of professional conflict between these planning specialities. The two groups are commonly separated into different departments, with little interaction between them. Miller notes that the separation has been

> a disaster for planning as it cut off the good feedback loops that are at the heart of good planning processes. Now 25 years later the planners who write plans have often had no experience of implementing the plans they write and resource consent planners seem to be regarded as second class planners. (sub. 50, p. 8)

This suggests some divergence within the planning culture, potentially an intergenerational one that can be attributed initially to the career path. Therefore, new graduates are often assigned to implementing plans and administering consents, with only a few graduates shifting to the policy path. One result is consent planners complaining that policy planners write provisions that are difficult to administer or that are open to interpretation.

As the "public face" of council planning, consent planners often bear the brunt of public criticism. Constant criticism, combined with high workloads and a lack of professional "status", has resulted in many councils experiencing a high turnover in consent staff. As Miller (2016) notes:

> Graduate planners often start with a consents' job as that is the only work available. It is available because that is where the greatest churn of staff occurs. Despite the best efforts of planning educators who stress the importance of consents work, they often consider it to be a temporary position. Usually they develop career aspirations to become a policy planner. This often creates an ever-changing group of consents' staff. (p. 13)

One result is that the competence of consents planning is compromised either because many practitioners are relatively inexperienced or because many practitioners have failed to progress their careers.

The distinction between urban planners and urban designers is more subtle and perhaps more contentious. Reid Ewing (a professor of city and metropolitan planning at the University of Utah) describes the difference:

> Urban design differs from planning in scale, orientation, and treatment of space. Its scale is primarily that of the street, park, or transit stop, as opposed to the larger region, community, or activity center, which are foremost in planning. Its orientation is both aesthetic and functional, putting it somewhere between art, whose object is beauty, and planning, whose object is utility. The treatment of space in urban design is three-dimensional, with vertical elements as important as horizontal ones. Urban planning, on the other hand, is customarily a two-dimensional activity, with most plans visually represented in plan view, not model, section, or elevation. (Ewing, 2012)

In New Zealand urban design has strong links to the architectural profession and to the American New Urbanist movement. Miller (2016) notes the "very real friction" between urban planners and urban designers. Similarly, McDermott (2016) observes that the relationship between urban planners and urban designers is, at times, strained and competitive:

> Often the relationship goes beyond a complementary one to elements of competition. Hence urban designers promulgate urban form which may or may not be in accord with the prognostications of planners. One result has been an increasing overlap between the urban design and planning although the core knowledge between them differs significantly. In some respects, it might be argued, this shift removes planning further from the economic and fiscal disciplines that should underlie urban planning. (p. 49)

Innes and Booher (2015) note the impact that division within the planning profession is having on planning students:

> Today planning theory seems to have become a set of dividing discourses. People talk past one another. Blame, criticism, and incivility often crowd out scholarly dialogue and inquiry (e.g. Bengs, 2005). Theorists belong to discourse communities which employ different languages and methods toward different ends. Students are often confused and frustrated, craving a way to make sense of the differences. While the brouhaha may have started as a war over turf and over which views will be dominant, the result today is that we, as theorists, have little ability to learn from our differences. The situation is conducive neither to constructive conversation nor to building richer and more robust theory. (p. 196)

Professionalisation of planning

The Commission's previous investigation into New Zealand's regulatory workforce found that improving capability requires an increasingly professionalised regulatory workforce, especially where regulatory regimes and the regulatory environment are becoming increasingly sophisticated. Box 14.2 sets out what is meant by a professionalised regulatory workforce. Critical features of a professionalised workforce are that the professional group possess a core set of theoretical, practical and contextual knowledge. Also that the professional group share a worldview about the role and purpose of their profession. As has been discussed above, the planning profession is weak on these two features.

Box 14.2 **Key features of a professionalised regulatory workforce**

Professionalisation involves creating a workforce where members:

- possess a core set of theoretical, practical and contextual knowledge;
- are recognised and respected by others in the profession and by the broader community for the knowledge they hold;
- have opportunities to meet, network with and learn from others undertaking similar tasks;
- are continually challenged to stay up to date with the latest developments in their field;
- share a worldview about the role and purpose of their profession and are guided by a common code of professional conduct; and
- share a "professional language" and culture that instils a sense of "belonging to the regulatory profession"

Source: NZPC, 2014.

F14.3 The planning profession in New Zealand has struggled to carve out a unique professional identity, and lacks some key elements of a professionalised regulatory workforce. In the absence of a strong professional identity founded on disciplinary knowledge, planners tend to fall back on legislation to define their role in the planning system. Friction and tension between subgroups within the planning profession also hinders the development of a clear professional identity.

Has the role of planning overreached?

While planning academics undertake "periodic soul-searching for disciplinary identity" (Davoudi & Pendlebury, 2010, p. 613), many planners seem reluctant to be involved in such discussions. They believe instead that the need for, and value of, planning is self-evident. Miller (2016) notes:

> It is this critical theory that planners still find the most difficult to engage with. As a planning professional and educator I have spent many frustrating hours trying to provoke students and fellow practitioners, often by playing devil's advocate role, to engage in critiquing the role of plans and planners. Some are uncomfortable or unwilling to engage in this type of discussion. Some retreat to presenting planning as a product of statute and a process (ie, they undertake planning because the RMA and its predecessors provided for it). In essence, they are like the original town planners in that they appear to believe that the need for, and value of, planning is self-evident. (p. 6)

The various planning professional bodies assert that planning has a positive role to play in society. Yet "shaping places", "managing growth", and "enhancing economies and communities" are ambiguous concepts – particularly when applied to urban areas where defining concrete outcomes (and measuring progress towards them) is difficult.

The history of planning has emboldened a professional culture that is confident that planning can solve a range of social problems and improve society's health and wellbeing. As a result, the profession has developed a "cultural licence" to assert specialist knowledge in a wide range of policy and social issues. Yet, in practice, planners have struggled to convince others that they possess unique knowledge to achieve such outcomes. McDermott puts it this way, "planning risks being an introverted and even defensive discipline, authoritarian in practice even if benign in intent" (2016, p. 8).

As concluded in chapter 3, the three legitimate roles for the planning system are to manage externalities, coordinate the provision of relevant infrastructure and providing local public goods to support the needs of

urban areas. Managing externalities was clearly an objective of the RMA's founders. In his Third Reading speech on the Resource Management Bill in 1991, the then Minister for the Environment, the Hon Simon Upton said that the goal of the new legislation was to concentrate on spillovers and limit unnecessary constraints on land use (New Zealand Parliament, 1991, pp. 3019–20).

However, the practice of planning has diverged markedly from the fundamental role that was envisaged for it. A review of District Plans undertaken as part of the Commission's *Using land for housing inquiry* (2015) reveals that they contain land-use rules and regulations on a wide range of issues. Some of these rules and regulations do not provide a net benefit and increase the cost of housing unnecessarily, and some serve to protect the wealth of incumbents at the cost of non-homeowners. Others apply controls that appear to have little to do with managing negative impacts on others, such as 'design guidelines' which seek to regulate the placement or design of buildings so as to:

- maintain "the rhythm of buildings along the street edge in areas of consistent character" (Wellington City Council, 2015, Volume 2, Residential Design Guide, p. 7); or
- ensure that "development on corner sites enhances the structure and legibility of the City and incorporates distinctive design treatments" (Christchurch City Council, 2015, Vol. 2, Section 11, Policy 11.5.2 (b)).

Other significant planning documents, such as the Auckland Plan, have a range of objectives that sit well outside the traditional frame of managing land-use externalities and coordinating infrastructure and arguably outside the control of local government, such as raising vaccination rates, reducing life expectancy disparities, lifting participation in "culturally appropriate early childhood learning services" and increasing foreign language fluency (Auckland Council, 2012a).

This expansion in rules and objectives reflects the expansion in the perceived role, scope and impact of planning, and the inability of the system to assess the full costs and benefits of its actions. This scope-creep is consistent with planning evolving an emboldened professional culture, confident that it can solve a range of social problems and improve society's health and wellbeing.

F14.4

An emboldened planning culture has seen its perceived role and scope expanded in an attempt to solve a range of social and policy problems, despite:

- such issues being outside the control of local government, and beyond the scope of urban-planning and land-use regulation; and
- a lack of the necessary knowledge, capability and skills.

14.3 Influences on culture and capability

This section explores some of the influences on planning culture and capability in New Zealand

The influence of universities

Those involved in planning first encounter the ideas and cognitive frameworks needed to succeed at university. NZPI has a significant influence on planning education through its accreditation of university planning courses. Together, NZPI and universities play a crucial role in setting the body of knowledge, values, goals and assumptions for planning students.

NZPI's (2011) Education Policy and Accreditation Procedures state that universities offering planning programmes must be able to demonstrate that their course content addresses a range of issues related to (for example) the context of planning, the methods of planning, planning practice and planning law. Importantly, NZPI also requires that planning programmes address "Planning Thematics" (which largely relate to the theory *of* planning noted above). Planning thematics covers issues such as the nature and purpose of planning and contemporary debates in planning theory (Box 14.3).

Box 14.3 **Content of university planning programmes in New Zealand**

The content of NZPI-accredited planning programmes cover the following.

a) **Planning Thematics:** Study in thematics includes philosophy, policy, history, ethics, theory, and critical reflection on planning to provide an overview of the nature and purpose of planning; planning history; contemporary debates and trends; planning theory; and planning at different spatial scales.

b) **Planning Context:** Study about context includes knowledge of natural, physical, policy, economic and social processes affecting the natural and built environments. Understanding of the social, cultural, environmental and economic consequences of management and change in the natural and built environments. Understanding the complexities of interactions between people and their environments and the economic drivers of development processes.

c) **Planning Methods:** Study of methods including learning how to manage the natural and built environment through techniques and tools for environmental evaluation and impact assessment; policy development and analysis; planning and monitoring systems; managing space, amenities and heritage; principles of sustainability; and social, multi-cultural, multi-ethnic and equity planning.

d) **Planning Practice:** Practical experience that covers processes and practice, including application of the principles of plan making; policy development and implementation, review and evaluation; goal setting; strategic planning; and planning tools and instruments.

e) **Planning Law:** Study of legislation, including an understanding of government organisational and institutional structures; planning; resource and environmental legislation; related legislation and case law and associated areas.

f) **Cultural and Social Aspects of Planning:** Study of aspects that recognise New Zealand's bicultural mandate and multi-cultural context for planning and planning practice; resource and environmental law and treaties; plan development; and management of resources.

g) **Specialisations:** Opportunities for planning graduates to develop a specialist field of expertise.

Source: NZPI, 2011.

While "planning thematics" is one of seven broad areas of planning mentioned in the Education Policy and Accreditation Procedures, knowledge in this area is not listed as a "core competency" for graduate planners. This reinforces the procedural focus of the profession.[106]

Most New Zealand planning programmes have their origins in the social science departments, particularly geography. This reflects planning's traditional grounding in spatial analysis. Today, planning programmes cover a much wider range of topics and disciplines, including law, ecology, sociology, economics, statistics and geography. The breadth of disciplines covered in planning courses reflects a movement away from spatial analysis and land use regulation to a more general approach.

In some cases, the non-planning content of degrees offers little more than an introduction to other disciplines (McDermott, 2016). For example, while economics and urban economics are part of most university programmes, core papers generally only cover basic concepts. This is surprising given the important role that planning plays in allocating scarce resources and correcting market failures (chapter 3).

[106] Until the mid-1990s applicants for full membership of NZPI had to produce an essay on the origins and role of planning. Applicants discussed their essay at an interview with NZPI leaders as part of the application processes. The NZPI abandoned the essay requirement because the essay was unpopular with applicants and it feared that component would act as a barrier to planners taking up full membership (Miller, 2016).

The risk with this "broad" rather than "deep" approach to planning education is that planners leave university with only a cursory understanding of the disciplines on which they draw. This can lead to policy prescriptions that lack a strong theoretical or empirical evidence base, or which may be strongly contested among experts. Two possible exceptions are the bachelor's programmes offered by Massey University and University of Waikato where, in addition to compulsory planning papers, students are required to complete a "minor" in a non-planning discipline (such as ecology, economics, geography, management or Māori studies). This approach provides an opportunity for students to develop a deeper understanding of a related discipline. In addition, it might be expected that entrants to a planning programme at master's level (which is the only level offered at the University of Otago) will bring some wider or expert knowledge with them.

Universities structure and manage their programmes differently according to the academic colleges or departments in which they are located giving rise to a tendency towards planning specialisation based on where a student attends. In New Zealand, geography remains the host discipline for planning degrees at Massey, Waikato, and Otago universities, implying a social sciences orientation (although Massey and Waikato students may elect a major within the natural sciences). At the University of Auckland, the School of Architecture and the Department of Planning merged in 2006 to become the School of Architecture and Planning (within the Creative Arts and Industries faculty). This alignment of the planning programme with architecture emphasises the urban design elements of the programme.

Generally speaking, a planning degree from Lincoln University places more emphasis on the natural environment and tends towards the physical sciences in its complementary papers.

Table 14.2 Planning schools in New Zealand

University	Faculty	Bachelor's Degree in:	Master's Degree in:
University of Auckland	National Institute of Creative Acts and Industries	Urban Planning	Planning Urban Planning
Lincoln University	Faculty of Environment, Society and Design	Environmental Policy and Planning Environmental Management and Planning	Planning
Massey University	School of Humanities, Department of Geography	Resource and Environmental Planning	Resource and Environmental Planning
University of Otago	Division of Humanities, Department of Geography		Planning
Waikato University	Faculty of Acts and Social Sciences, Department of Geography, Tourism and Environmental Planning	Environmental Planning	

Source: New Zealand Planning Institute website: https://www.planning.org.nz/

It is notable that, in the 1990s, planning courses were modified to reflect the sustainable management objective of the RMA. New papers in physical sciences were added to the planning curriculum - typically at an introductory level and often by way of electives outside the core compulsory planning papers. At the same time, core planning papers introducing physical sciences were re-framed in terms of environmental management and sustainability. Some universities also changed the name of their degrees to reflect the reorientation of the RMA legislation.

The influence of professional bodies

Professional bodies or associations are arguably the strongest driver of planning culture as they act as a powerful conduit for values, beliefs and assumptions. NZPI is the gatekeeper of foundation knowledge for New Zealand planning, which it articulates, codifies, reinforces, and promulgates through its programme prescriptions for the universities, and its professional development programmes. In these ways, professional

bodies institutionalises the values and beliefs of their planning profession and also play a role in validating the role of the profession to the wider community.

In addition to monitoring and accreditation of university courses, NZPI reinforces professional culture through rewarding planners that demonstrate behaviour consistent with the adopted values and standards of the profession. Awards help embed professional culture in two key ways.

- Awards are an important source of feedback – both to the planner receiving the awards and to the broader planning community. Awards provide public examples of the type of behaviour, values and frameworks needed to be successful within the profession. For example, awards for integrated planning help to reinforce integration as a key element of planning.
- Awards are often used to reinforce the values exhibited by founding leaders of the profession. Commonly, reinforcement is achieved by naming an award after a founding member of the profession or someone who, over a long time, has consistently demonstrated behaviours that others should aspire to. One example is the John Mawson Award of Merit (John Mawson was the creator of the first town planning institute in New Zealand). The naming of awards after prominent members of the profession contributes also to a sense of professional identity. This will be strongest when current planners see a link between the behaviours expected of them and those exhibited by founding leaders.

The behaviour that organisational and profession leaders tolerate also sends important cultural messages. Responsibility for correcting poor workplace practice generally lies with councils. However, professional bodies can also play a role through formulating and enforcing a professional code of ethics. For example, over the past five years, NZPI's Professional Standards Committee has considered 10 potential breaches that either others have brought to NZPI's attention through informal channels or have been the subject of an official complaint (NZPI, 2015). In practice, NZPI has little control of professional standards in the workplace as NZPI membership is voluntary.

Other avenues through which professional bodies transmit cultural messages to its members include participation in national policy debates, submissions to government, hosting conferences, organising professional development periodic workshops and coordinating mentoring programmes for new planners.

F14.5 Professional bodies provide an important source of cultural leadership for the planning profession. Cultural messages are transmitted through the accreditation of university courses, the direct provision of professional development opportunities, and by rewarding good practice.

The culture of councils also influences planning practices

The organisational culture within which planners work can influence planning practices. In New Zealand, many planners work in local authorities. The culture of councils is therefore important to how planning is undertaken. For example, the Commission has heard that the culture of a council plays a large role in determining the quality of the relationship between planners and local iwi/Māori (Chapter 7). A recent positive initiative is the Memorandum of Understanding signed between Local Government New Zealand and the Freshwater Iwi Leaders Group that is intended to 'make local and central government more accountable to Māori', exemplifying the changing attitudes in local government towards collaborating with Māori communities (Ngā Aho & Papa Pounamu, 2016, p.47).

The organisational culture of councils can also influence:

- the extent to which decision makers listen to, and act on, the advice of planners as opposed to the advice from those in other professions;
- the openness of decision-makers to new and innovative approaches to planning tasks;
- the extent to which planners feel comfortable challenging other planners about poor planning practices;

- the extent to which planners feel comfortable offering "free and frank" advice to councillors; and
- the relative importance that decision-makers (implicitly or explicitly) place on different aspects of the planning task (ie, regulation, the provision of local public goods, and the provision of infrastructure).

Councils tolerance for risk can also influence planning culture and practices. Planning occurs in a highly contested and political environment in which decisions are often made under the public microscope. While external scrutiny is an important component of democratic institutions, councils that are particularly sensitive to external criticism can result in conservative planning practices. This can contribute to:

- more complex and prescriptive plans and policies as councils reduce the prospect of legal challenge;
- consultation processes that are disproportionate to the value of the information obtained (and are beyond statutory requirements); and
- resistance to new or innovative planning approaches.

Importantly, organisational cultures are not static. They evolve through time in response to the demands and expectations of the system. As McDermott (2016) notes:

> Over their history, local councils, for example, have moved from a predominantly developmental role through engineering, through financial, to managerial, and more recently to broadly-based planning cultures as demands and expectations on them have changed (often by way of statutory innovation and amendment). (p. 40)

F14.6 Planning practice is influenced by the organisational culture of councils, particularly in areas such as the relationship between planners and Māori, the level of organisational risk adopted, the influence of planners in council decision-making, and the general openness of councils to new and innovative approaches to planning tasks.

The RMA challenged the existing planning culture

Effective regulatory regimes require cultures that value operational flexibility and the ability to adapt to changes in the environment, and strong capability across all levels of the regulator (NZPC, 2014b). Cultural and capability issues impeded the successful introduction of the RMA, and are ongoing constraints.

When the RMA emerged in 1991 it represented revolutionary rather than evolutionary change. Previous reforms to planning statutes had built on land use planning theory developed over the previous 100 years. The RMA was intended to be a statute that would support land use management practices that are enabling and innovative. The failure of the Act to deliver on these goals has been attributed to councils and other planning institutions holding to traditional methods, beliefs and attitudes. Day et al. (2003) investigated the roll-out of RMA Plans in six territorial authorities, and found that low capacity inhibited the "use of policies and techniques that promote innovation":

> In general, policies in plans provided for a far greater range of techniques than were applied in everyday practice, for although plans scored very well for implementing each of their policies at least once, only a small range of the policies and techniques are implemented in the majority of consents. Conventional techniques predominate in consents, even when new approaches, such as low impact stormwater management methods, are identified in plans. This adhesion to tradition appears to leave little room for innovative practices, especially when factors related to cost, time pressure, and administration constraints reduce the ability of consent planners to adopt new practices. (p. 45)

Others have highlighted the carrying over of practices and traditions from the previous Town and Country Planning Act. Palmer (1995, 2015a) highlighted the hostility of the Planning Tribunal to the RMA as a key contributor to problems bedding in the new regime. In Palmer's view, the Tribunal took an overly narrow view of the law, and was a "hangover from the old prescriptive town and country planning approach" (1995, p. 170). Gow (2014) pointed to the decision to roll over plans from the previous Town and Country Planning Act into the new regime as contributing to over-complicated, burdensome, incoherent and poorly justified

RMA plans. Spiller (2003) noted that "planners and the planning process in New Zealand have more or less carried on as they would have had the old Town and Country Planning Act remained in force". Spiller concluded that "a case can be made that the RMA was too far ahead of its time, too far ahead of New Zealand's institutional capabilities and too far ahead of the skill sets of practising planners" (pp. 100 –101). Likewise, Frieder (1997) notes that

> the programmes, politics and personalities that existed before the RMA did not go away when the law came into effect. It is no surprise that some local government personnel see little new in the RMA. They have made it their job to salvage whatever could be saved from the former system. (p. 87)

F14.7 The Resource Management Act (RMA) challenged existing planning culture and practice which led to resistance by planning practitioners and the carrying over of traditions, values and beliefs of the previous regime. The failure of the RMA to deliver on its goals highlights the importance of aligning and building culture and capability for successful reform.

The legislative setting and culture

Planning culture and practice in New Zealand is strongly influenced by the legislative setting. The legal profession, the courts and case law are a dominant features of the New Zealand system under the framework provided by the RMA. This has led to a planning environment that is more litigious than in the past and consequently a planning culture and practice that is described as cautious and risk averse (Miller, 2016; Planz Consultants, sub. DR60).

> The practice of planning has also become more litigious. Former Chief Planning Judge Arnold Turner told me in an interview (Miller, 2011) that few lawyers during the 1950s and 1960s were doing planning work. Most combined that specific work with general local authority work. While the number of planning lawyers increased in the 1970s and 1980s, they did not exist in the numbers that they do today when every major law firm has a resource management law department. We also have the Resource Management Law Association, which mainly represents and advocates for legal interpretations of the RMA. (Miller, 2016, p. 21)
>
> The Environment Court appeal process, which was ultimately controlled by lawyers, is a major contributor to the risk averse culture that many planners demonstrate… Procedural matters under the RMA exercise such a strong influence over planning practice, that there is a real fear of 'getting it wrong' on matters such as notification – with subsequent consequences in the form of criticism by members of the public, senior managers, and the Environment Court. [....]
>
> In-house legal advice is regularly sought by planners in larger councils, and is always very cautious and conservative. Once sought and offered, this legal advice becomes a redoubt where planners take sanctuary." (Planz Consultants, sub. DR60, p. 6)

The legislative setting can therefore have a profound effect on planning culture and practice, and this can change over time in response to statutory reform, as shown with the RMA. The Commission has previously investigated the allocation of risk under the Building Act 2004 and found strong incentives for Building Consent Authorities to be risk averse, and that this can add to building costs (NZPC, 2012; NZPC, 2013). One view of the impact of the RMA is of a planning culture founded on avoiding culpability rather than promoting good outcomes.

14.4 Desirable cultural attributes for planning

In its regulatory institutions and practices report (NZPC, 2014b), the Commission identified organisation cultures that lead to good regulatory outcomes. Good planning outcomes are most likely when planning cultures follow the following practices.

- *Are based on robust, evidence-based, decision making* – The success of any planning regime depends on the quality of decisions. Robust analysis and reliable evidence not only improves the quality of decision-making but also promotes public trust in councils and the wider planning system. Embedding this attribute begins at university and is reinforced through the organisational culture of councils.

- *Place a high value on continuous learning and feedback (ie, learning cultures)* – Learning cultures embrace experimentation and seek to gain insights from failure (rather than punish those who failure). Learning cultures will typically encourage "systems thinking" that goes beyond immediate role of planning and emphasise the sharing of insights and experiences throughout the organisation.
- *Empower those involved in planning to "speak-up" and challenge existing practice* – Related to above point is those involved in planning should continuously challenge their own methods and ways of operating. This requires a working environment in which employees involved in planning feel safe to "speak-up".
- *Place importance on being open, transparent and accountable* – Trust in the planning system will be strongest when the community is confident that rigorous and fair decision-making processes are followed. This means a planning culture that has a high regard on transparency, openness and accountability.
- *Value operational flexibility and adaptation to changing socio-economic or environmental conditions* – Planning does not operate in a static setting. New technologies, changes in business practices, movements in market conditions and changing social preferences mean the context in which planning operate is constantly changing.
- *Respects the significance of the civic responsibility that comes with using the coercive powers of the state* – Councils are vested with legal powers over citizens and businesses to promote the wellbeing of the community. This authority must be used judiciously and in a manner that respects the rights of citizens.
- *Favour collaboration and communication* – Collectively, the submissions highlighted the central ground that local councils hold between the communities for which they are responsible and the government with its role in setting a broadly based agenda for the environment and urban development. This saw calls to increasingly engage and partner with central government in urban planning matters while protecting local democracy. This in turn points to a planning culture of collaboration and less authoritative approaches to planning on the part of central and local government.

F14.8

Good planning outcomes are more likely to be achieved when planning cultures:

- insist on robust, evidence-based, outcome-focused decisionmaking;
- value continuous learning and feedback (ie, learning cultures);
- empower staff to "speak up" and challenge existing practice;
- stress the importance of being open, transparent and accountable;
- value operational flexibility and adaptation to changing socio-economic or environmental conditions;
- recognise the significance of the civic responsibility that comes with using the coercive powers of the state; and
- favour collaboration and communication

Culture change is necessary to upgrade the skills brought to planning and its practice generally. Ultimately this is a matter of leadership, both in those organisations where planners practise and in those that influence and instil the necessary skills and behaviours. Submissions to this inquiry suggest that there will be considerable resistance to, or indifference about, the types of cultural and institutional change that will be needed to make the urban planning reforms (proposed in this report) a success. It will take strong leadership to achieve the changes necessary and to ensure that planning is relevant to and influential in urban development.

14.5 Planning skills and capabilities

So why does capability and skill matter to the planning role and achieving planning goals? It is easiest to explain this by considering what happens when a council lacks the appropriate mix of skills or level of skill (box 14.4).

Box 14.4 **The consequences of capability and skill deficits**

- Deficiencies in regulatory capability and skill can:
- create integrity and reputation risks for regulators, both individually and collectively;
- mean activities are not always performed to an acceptable standard, resulting in poor compliance outcomes / regulatory failure;
- create inefficiencies through poor use of resources, as work is not performed neither efficiently nor effectively;
- add to the cost of compliance, because of the high cost of system failures compared with effective performance;
- contribute to harm, including serious harm to people, the environment and the economy;
- indicate missed opportunities to share innovative ideas and best practice solutions; and
- lead to inconsistent approaches to carrying out regulatory compliance functions that create public confusion about the purpose of regulatory compliance and the role of regulation.

Source: NZPC, 2014

Capability gaps – Local government

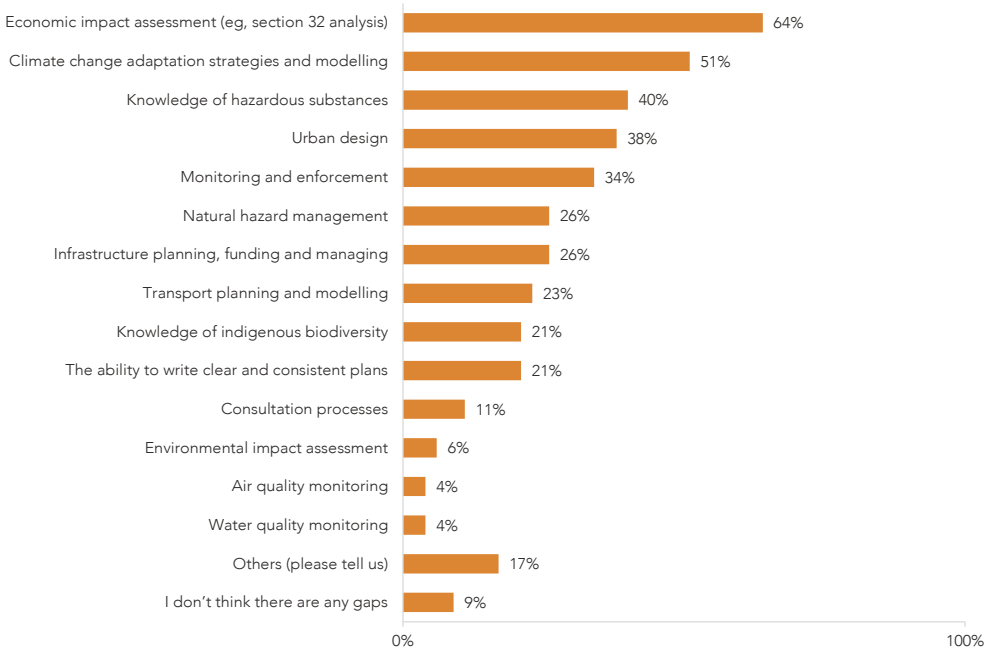
The Commission's 2016 council survey asked for respondents' views on significant capability gaps within the planning system. The results show that the main areas of perceived capability gaps are in economic impact assessment (64% of respondents identified this as a significant capability gap), climate change adaptation strategies and modelling (51%), and urban design (38%) (Figure 14.4). Notably, 76% of councils that identified "economic impact assessment" as a capability gap had urban planning responsibilities. Likewise, 48% of councils that identified "urban design" as a capability gap had urban planning responsibilities.

The submissions to the inquiry showed general acceptance that an upgrade in skills was needed in economic analysis and environmental matters (eg, Auckland Council, sub.DR47; Christchurch City Council, sub. DR90; NZPI, sub. 27). Submitters also identified the capability to engage with the community as needing enhancement. There was also a general acceptance of the need for more rigorous policy analysis, suggesting evaluation skills are currently insufficient.

The survey also found that only 38% of councils agree they receive the training and information required to implement new releases of National Policy Statements and National Environmental Standards – the lowest rating of all statements. Although, more broadly, 87% of councils indicated that "staff involved in planning receive ongoing training which enable them to do their job better", and "have real opportunities to improve their skills through education and training programmes" (85%). Further, 72% of participants indicated they do not believe that elected councillors have sufficient planning knowledge.

These results are consistent with the Commission's previous findings around the low standard of section 32 analysis (Chapter 5) and the difficulty that councils have in planning for the effects of climate change (Chapter 9). Both of these areas require a deep technical knowledge.

Figure 14.4 Areas of significant capability gaps



Inquiry participants noted that some councils lack the capability to engage with Māori groups (eg, IMSB pers. comm., 20 April 2016; Ngā Aho & Papa Pounamu, 2016). The Commission's 2016 council survey found that more than a third of councils identified a lack of staff with a knowledge and understanding of Māori perspectives as a barrier to engagement. An overwhelming 83% of council survey participants identified limited resources available to iwi/Māori groups to participate in the planning process as a barrier to engagement. Chapter 7 sets out the importance of effective engagement between councils and Māori for recognising and actively protecting Māori Treaty interests in urban planning.

F14.9

Inquiry participants widely accept the need for increased technical capabilities in planning, particularly in environmental sciences, economic analysis, and policy analysis more generally. Capability gaps in these areas hinder the ability of councils to undertake rigorous policy analysis and evaluation when carrying out their planning functions and, importantly, exercising their coercive planning powers. Participants also identified Council engagement with the community as needing enhancement, particularly through more effective engagement with Māori.

R14.1

A future planning system should place greater emphasis on rigorous analysis of policy options and planning proposals. This will require councils to build their technical capability and skill in areas such as environmental science, economic analysis, policy analysis and evaluation. It would also require strengthening their understanding of Māori worldviews and more effective community engagement including with Māori.

Capability gaps - Central government

The capability of central government officials is crucial to the efficient operation of the planning system. Not only does central government (through Parliament) establish the legislative framework in which planning occurs, it also:

- sets national policies and standards;
- plans, provides and funds key elements of New Zealand's transport infrastructure;

- monitors system outcomes; and
- provides information, advice and guidance to support the implementation of legislation.

Shortcomings in central government's capability in urban planning can have a rippling effect throughout the system with impacts manifesting in different ways at the local level. For instances, the Commission has previously noted that the ability of central government to achieve its policy objectives is strongly linked to the ability of local government to implement the functions devolved to it in legislation. In this sense, both spheres of government have a mutual dependency on the success of the legislation. Yet, central government has a poor understanding and knowledge of the local government sector (Cabinet Policy Committee, 2004; DIA, 2006; PricewaterhouseCoopers, 2009; NZPC, 2013). Further, engagement with local government during the design of new regulations is generally poor (NZPC, 2013; SSC et al., 2012; SOLGM, sub. DR107).

Submissions to this inquiry and engagement meetings with inquiry participants identified substantial deficiencies in the capability and knowledge within central government of urban planning and local government (eg, Environment Canterbury, sub. DR72; Christchurch City Council, sub. DR90; Planz Consultants, sub. DR62; SOLGM, sub. DR107; Auckland Council, sub. 47). There was also criticism of central government for poor engagement with the local government sector in relation to urban planning matters: "In our experience those departments that have stewardship of planning legislation tend not to engage with us" (SOLGM, sub. DR107, p. 14). That said, some central government agencies that participated in urban planning were credited with carrying out engagement with local government particularly well: "In recent years, the quality of engagement undertaken by the Ministry of Transport has also been cited as consistently high standard" (SOLGM, sub. DR107, p. 15)

While general training on what constitutes good policy analysis is readily available to government agencies, there seems to be little appetite to develop the specific knowledge needed to analyse issues involving the local government sector, let alone urban planning (NZPC, 2013). This is at odds with regulatory stewardship expectations on central government departments discussed in Chapter 13. The Commission envisages a strengthened regulatory management and oversight role for central government departments responsible for urban planning. This will demand greater knowledge of, and skill and capability in, urban planning matters. Regulatory stewards responsible for the urban planning system would be expected to monitor the condition and performance of the urban planning system and identify problems and opportunities to improve its design and operation. There would also be expectations on central agencies stewards to ensure that the urban planning system has sufficient capability to achieve stated goals.

Central government could improve their capability in urban planning through:

- additional training aimed at raising awareness and understanding of urban planning and the local government sector more generally;
- seconding staff from local government with specific expertise in urban planning; and
- promoting the joint working groups and advisory groups (these groups would consist of central government officials and staff from relevant local authorities).

F14.10

How capable and skilled central government officials are in urban planning is crucial to a well-functioning planning system and achieving urban planning goals. However, evidence shows that capability and knowledge of local government and urban planning is poor within central government. Likewise, engagement with local government on policy design and implementation generally, and urban planning specifically, is also poor. This impedes the ability of central government to successfully carry out its regulatory stewardship role in regard to the urban planning system.

R14.2 In a future planning system, central government should substantially improve its understanding and knowledge of, and engagement with, the local government sector, who are important implementers of much legislation. A greater capability to engage on urban planning issues will help promote more productive interactions between central and local government and achievement of mutual goals.

14.6 Skills and capability required for a future planning system

Chapter 3 describes three core functions of planning – regulation of spillovers, the provision of local public goods, and infrastructure supply and coordination. In effectively undertaking these functions, councils and central government agencies require access to a wide range of skills and knowledge. Table 14.3 summarises some of the skills required when undertaking core planning tasks. The table is not intended to be comprehensive; rather, it aims to highlight the spectrum of knowledge needed. The skills outlined are extensive and cover a wide range of disciplines and processes.

Table 14.3 Knowledge and skills needed for core planning functions

Core role	Examples of knowledge and skills needed
Regulating negative spillovers arising from different uses of land.	**Consent approval:** Understanding of legislative processes and timelines. Skills in applying legislative requirements to the potential impacts of land uses. Skills in dispute resolution, including listening, mediating, and negotiating compliance. Education and communication skills to facilitate public understanding of legal requirements and options for achieving compliance. Strong administrative and project-management skills. **Monitoring and enforcement:** Sound knowledge of the relevant legislation and the ability to apply legal requirements to real-world situations. Ability to inquire into alleged regulatory breaches, gather information to make a case, conduct interviews, produce reports, and present evidence in court. Skills in identifying and assessing the risk posed by individual land-use activities and to prioritise monitoring according to the risks posed. Strong conflict management and resolution skills. **Policy/rule-making:** Knowledge of the range of policy tools available for achieving social goals (eg, regulation, market-based mechanisms, and persuasive measures). Ability to critically evaluate policy options through techniques such as cost–benefit analysis, adaptive management and real-options analysis. Understanding of policy implementation processes. Skills in designing and implementing effective public consultation processes. Knowledge of tools for assessing public preferences (eg, surveys and statistical analysis). **Specific scientific knowledge** will be needed when regulating natural systems. This includes a technical understanding of the interactions and relationships between the different components of natural ecosystems and how land-use activities affect these components. Knowledge of technical options for reducing damage to the natural environment (eg, investment in green infrastructure, and changing land uses). Skills in modelling natural ecosystems. Understanding of the resilience of natural systems to different types of spillovers and of ecosystem dynamics.
Providing a fair and efficient level of local public goods.	**Design skills:** Ability to design public spaces that provide the public with a functional and aesthetic space. Ability to design local public goods that reflect the preferences of local communities. The ability to demonstrate the connection between public preferences and design. **Engineering skills:** Skills in areas such as the design, construction, operation and management of different types of local public goods. Knowledge of geography and spatial issues affecting the provision of local public goods. **Financial/economic skill:** Ability to analyse the costs and benefits of alternative configurations of public spaces. Ability to understand future demand for local public goods and alternative mechanisms for funding the future supply of goods. **Communication and facilitation:** Ability to design and implement effective public consultation processes. Ability to assess public preferences for different types of local public goods.

Core role	Examples of knowledge and skills needed
Coordinating investment in relevant infrastructure.	**Engineering skills and knowledge:** Skills and knowledge in areas such as the design, operation, construction and management of different types of infrastructure. Knowledge of geography and spatial issues affecting the infrastructure provision. **Scientific knowledge of the natural environment:** Understanding the potential impacts of infrastructure construction and operation on ecosystems. Ability to develop management strategies to avoid, remedy or mitigate adverse impacts on the natural environment (eg, habitat disturbance, loss of biodiversity, and increased water run-off). **Financial/economic skills:** Capacity to undertake rigorous and transparent evaluations of alternative infrastructure proposals. Understanding of key tools such as cost–benefit analysis, financial modelling, demand forecasting, access pricing and real-options analysis. **Legal skills:** Skills such as knowledge of relevant legislation, the formulation of contracts, design of partnership models (such as Public Private Partnerships), mediation of legal disputes, and ability to interpret legislative requirements on government bodies. **Communication and facilitation:** Skills such as those noted above (including dispute resolution). **Project management skills:** Skills such as procurement skills, and the ability to manage multiple interdependent workstreams, manage budgets, and marshal and synthesise input from technical specialists.
General skills and knowledge	
Understanding of how civil society works, how it operates, and the respective roles of central and local government. A strong understanding of Māori worldview and its application to urban planning and tikanga Māori. An understanding of the institutional structures within which planning operates, particularly the implications of operating within a politically driven system.	

To carry out effectively the core function of planning, planners require "access" to a wide range of skills and knowledge, covering numerous professional disciplines and processes. This requires evaluation and mediation skills, a capacity to listen to and understand the knowledge, analysis and opinions of experts, and to articulate trade-offs among issues raised. Councils should therefore put a premium on well-developed policy analysis skills.

It may also mean mediating between the preferences of diverse interests with conflicting views about resource use, urban development and environmental management. This is consistent with the idea that a key role of planning is to reconcile competing claims, information, and advice to reach a decision by "weighing and balancing" (PLANZ Consultants, sub. 62).

Importantly, a future planning system should put greater emphasis on critical thinking by those carrying out the planning task. This requires a sound understanding of the following.

- *Substantiality* - Does the issue require attention. Does it even require some sort of regulatory resolution at all?;
- *Subsidiarity* – Where is the issue best addressed, and by whom. Should planners even be involved?; and
- *Negotiability* – Does the science or the relevant national policy statement enable choices to be made and, if so, how constrained are the choices?

F14.11 In a future urban planning system, those carrying out the planning task will require access to a wide range of skills and knowledge, covering multiple disciplines and processes. This requires strong capabilities in critical thinking, evaluation and policy analysis skills, mediation skills, a capacity to listen to and understand the knowledge, analysis and opinions of experts, and to articulate trade-offs among issues raised.

R14.3 In a future urban planning system, councils should have access to a wide range of skills and knowledge, covering multiple disciplines and processes. This will require councils to build strong capabilities in critical thinking; evaluation and policy analysis; mediation; and articulating trade-offs among issues.

So where will the pressure come for the change in culture and the mix of skills needed by councils in a future planning system? It is expected that the statutory, institutional and governance settings proposed in this report will provide strong incentives for councils to develop and employ the necessary capability and skills. For example:

- The systematic review of Plans through the Independent Hearing Panel process, guided by the right statutory principles, will help shape the mix of skills that councils employ;
- The legal system, law profession and courts will also likely have less prominence in a future planning system as planning and decision-making becomes less of a legal process;
- The prominent role of the Regional Spatial Strategy in a future planning architecture is likely to put a premium on collaboration and mediation skills in order to be successful; and
- The regulatory stewardship expectations on central agencies will require central agency stewards to better understand and engage with local government on urban planning matters.

14.7 Conclusion

Changes in the statutory, institutional and governance framework for urban planning in New Zealand, along the lines proposed in this report, provide a basis for assessing the changes in planning culture and capability that might be called for. Culture and capability issues hampered the successful introduction of the RMA, and are an ongoing constraint. This underlines the importance of aligning and building culture and capability for successful reform.

A future planning system would place greater emphasis on rigorous analysis of policy options and planning proposals. This will require councils to build their technical capability in areas such as environmental science, economic analysis, policy analysis and evaluation. It would also require strengthened understanding of the world views of mana whenua and other Māori communities and more effective engagement with these communities. A greater emphasis on critical thinking is needed among those involved in planning, requiring a deeper understanding of notions of substantiality, subsidiarity and negotiability.

To carry out effectively the core function of planning, practitioners require "access" to a wide range of skills and knowledge, covering numerous professional disciplines and processes. This requires evaluation and mediation skills, a capacity to listen to and understand the knowledge, analysis and opinions of experts, and to articulate trade-offs among issues raised. This will put a premium on well-developed policy analysis skills. A key role of planning is to reconcile competing claims, information, and advice in order to reach a decision by "weighing and balancing".

Central government will also need to substantially improve its understanding of urban planning and knowledge of, and engagement with, the local government sector. There will be a strong obligation to exercise effective regulatory stewardship of the planning system.

The question of who will lead the reforms proposed in this report is vexed. The academic and planning organisations are likely to be resistant, largely wedded to the status quo and incremental change. Fundamental reform of the current urban planning system will be hampered unless entrenched views, natural conservatism and resistance to change are understood and addressed.

Yet the statutory, institutional and governance setting proposed in this report will provide strong incentives for councils to, over time, develop and employ the necessary capability and skills. Those carrying out the planning task and councils operating in the proposed new environment will more likely be successful if their cultural attributes, capability and skills are aligned with the new settings.

15 A future planning system: key recommendations and benefits

The terms of reference for this inquiry invite the Commission to "review New Zealand's urban planning system and to identify, from first principles, the most appropriate system for allocating land use through this system to support desirable social, economic, environmental and cultural outcomes". In doing so, the Commission was asked to consider the "background, objectives, outcomes and learnings from the current urban planning system in New Zealand".

The previous chapters of this report have assessed the performance of the current planning system in a number of areas – such as the built environment, the natural environment, infrastructure provision, the Treaty of Waitangi – and identified the changes required to make a future planning system work better. In this concluding short chapter, the Commission indicates what it considers are the most important of its recommendations – the ones that it believes will decisively improve New Zealand's system of land use and resource management. The chapter also describes the large gains that the Commission believes its proposed future planning system would deliver for New Zealanders.

15.1 What changes in a future planning system are most important?

The four most important changes that a future planning system should contain are:

- clear statutory objectives and principles for the built and natural environments;
- a revamped set of regulatory plans for each region – plans that are built on the platform of a spatial strategy and clear environmental limits;
- timely, independent and systematic review of plans against the statutory objectives and principles; and
- new mechanisms and models to free up the supply of infrastructure-serviced land for development – particularly in high-growth cities.

Clearer statutory objectives and principles for the built and natural environments

The natural and built environments require different and distinctive regulatory approaches. The natural environment needs a clear focus on setting standards that must be met, while the built environment requires assessments that recognise the benefits of urban development and allow change. Current statutes and practice blur the two environments, and provide inadequate security about environmental protection and insufficient certainty about the ability to develop within urban areas. Rather than attempting to regulate these different issues through a single set of objectives and principles, a future planning system should clearly distinguish between the natural and built environments, and clearly outline how to manage the interrelationship between the two. To support an integrated approach, these sets of principles should sit within a single planning and resource-management Act.

The distinction between the built and natural environment will enable a future system to be clearer about its priorities, especially at a national level and in regard to land use and infrastructure. Clearer language in a new Act, and better use by central government of National Policy Statements (NPSs) and National Environmental Standards (NESs) will greatly reduce the indeterminacy that has troubled the current system and left the courts to resolve difficult issues. As discussed in Chapters 5 and 8, this problem reflects unresolved tensions within the Resource Management Act 1991 (RMA) around the balancing of environmental and socio-economic interests.

Clear principles in future planning legislation should guide decision makers on how to give effect to the statutory objectives in the content of plans, the conduct of planning processes and in decision making.

Processes should be efficient, fair, and transparent. Decisions should reflect the clearly defined and restrained statutory objectives and be proportionate to the matters being regulated or decided.

A revamped and cohesive set of regulatory plans for each region

Land-use plans and planning processes under the RMA have frequently demonstrated deficiencies that cause inadequate responses to growth pressures. In a future planning system, the Commission recommends substantially revamping plans, plan making, plan review and rights of appeal.

Regional councils should lead the production of regional spatial strategies (RSSs) that set out strategic land-use parameters stretching 30 to 50 years ahead in the case of high-growth regions. RSSs will define corridors that provide options for future infrastructure, future public open spaces, and areas of cultural significance and outstanding conservation value. Remaining land will be available for development. Territorial authorities, central government, iwi, developers and infrastructure providers will all participate in the RSS process.

RSSs will have a formal status. District and unitary plans, transport and other infrastructure plans will be obliged to pay serious attention to them.

In the future system, each region will have a set of regulatory plans for the built and natural environments. Those plans will be subject to the overall statute and to national policies and standards. The RSS will be the platform for the suite of District Plans within a region as well as for transport and other infrastructure investment planning under the Land Transport Management Act 2003 (LTMA) and the Local Government Act 2002 (LGA).

Alongside RSSs, regional councils will also take the lead in developing Regional Policy Statements for the Natural Environment (RPS-NEs). The RPS-NE will set the protective limits for the natural environment in a region. It will have to give effect to any relevant NPSs and NESs and the new Act. But it could set more stringent limits than called for in these documents according to regional needs and preferences.

Councils in a region will prepare and notify their plans, with inputs from local communities, experts, iwi, central government and other parties. They will jointly "own" the RSS and jointly have oversight of how well each District Plan fits with the RSS and with neighbouring District Plans.

All RSSs, RPS-NEs, and District Plans should include a chapter that recognises and provides for the active protection of Māori interests in land use and resource management.

Timely and systematic review of plans by Independent Hearings Panels

The Commission recommends that local Independent Hearings Panels (IHPs) are appointed, and that they review all plans and significant plan changes (Chapters 8 and 13). The IHP review is a crucial part of the Commission's proposals for a future planning system. An IHP will:

- review notified plans or plan changes against matters raised in submissions and against the purpose, objectives and principles set out in statute and secondary regulation; and
- resolve conflicting and contested provisions to produce a final version of the plan on the merits.

Using an IHP review will remove the need for further appeals on merit, and provide a single-stage comprehensive review of the package of plans (the RSS, the RPS-NE and District Plans) in each region. Together, these review provisions will reduce the time taken for plans to become operational, provide for greater coherence among plans, provide greater certainty about the outcome of planning processes, and create steady pressure for improvements in the quality of plans and planning culture over time.

The output from an IHP would comprise a plan or plan change and reasons for any changes made to the notified version of the plan. This plan would be subject to appeal to the Environment Court on points of law and judicial review in the High Court. Councils will still have the power to initiate further plan changes if they consider such changes are required.

To fulfil the role of a credible body to make the final decision on merits of plans, IHPs will need to:

- be truly independent (appointed by an independent statutory agency that is at arm's length from central government);
- have the appropriate expertise to be able to consider scientific, engineering and other expert evidence;
- know and understand tikanga Māori – particularly as it applies in the local area;
- have a sound knowledge of local conditions; and
- have sufficient legal expertise available, and an understanding of fair processes that meet statutory requirements, but at the same time are accessible to a non-expert without legal representation.

New mechanisms and models to free up supply of infrastructure-serviced land for development

A clearer statute and clearer direction and expectations from central government will push councils in high-growth cities to do more to meet the demand for development capacity. The recently published National Policy Statement on Urban Development Capacity is a step in the right direction. But these councils will need more help to meet the challenge of their rapidly growing populations. That help should start with:

- clear legislative purposes and objectives for the natural and built environments;
- principles to guide plan making, planning processes and decision making; and
- systematic, independent and timely reviews of plans.

In line with these objectives, principles and the reviews, plans should:

- have clearer and broader "development envelopes" within which low-risk and mixed development is either permitted or is only subject to minimal controls;
- only apply rules that offer a clear net benefit, where the link to externalities is clear, and where alternative approaches are not feasible;
- put greater reliance on pricing and market-based tools rather than rules;
- constrain attempts to force the creation of economic, social or environmental benefits through restrictive rules (eg, planning policies that attempt to promote density in the expectation that this will necessarily lead to higher productivity);
- recognise inherent limits exist to what land-use planning can achieve, and give greater room and respect to the decisions of individuals and firms;
- have broader zones that allow more uses;
- make less use of subjective and vague aesthetic rules and policies; and
- depend more on local evidence to support land use rules, instead of relying on heuristics generated from overseas studies (eg, assumptions that higher-density urban areas necessarily result in their residents behaving more sustainably).

To complement these improvements, a future planning system should:

- employ price-trigger mechanisms that credibly guarantee that councils will permit enough development capacity to meet demand at reasonable prices;
- deploy, where appropriate, urban development authorities to assemble and develop inner-city land at a scale sufficient to meet business, residential and mobility needs;
- enable councils to auction development rights as a way to achieve increased, but not excessive, inner-city density; and

- create competitive urban land markets that open opportunities for the private sector to invest in out-of-sequence community developments. These can sidestep land bankers' stranglehold on land supply and avoid additional burdens on councils for infrastructure.

The Commission has found that shortfalls in infrastructure provision are a binding constraint on the supply of development capacity, and on councils' ability to respond to growth pressures. It therefore recommends the following additional changes.

- Councils should have greater ability and willingness to impose user and congestion charges, so as to encourage efficient use, help recover costs, and manage pressures on existing assets.
- A more extensive taxation toolkit is needed for councils to better recover the cost of growth infrastructure without burdening current residents. As well as existing tools (user charges, general and targeted rates), councils should have the power to capture a portion of the value created by development – via targeted rates on the *increase* in the land values of property owners.
- Earlier recognition of national spillover benefits of major city infrastructure proposals and engagement between central and local governments is needed to explore constructive joint approaches (including cost sharing).
- A solution to Auckland's problem of a debt constraint and the threat of a credit downgrade is needed. Options include raising more revenue, putting additional debt on the balance sheets of others, and negotiating higher limits with credit rating agencies in exchange for assurances of creditworthiness and fiscal prudence.

The areas of change highlighted above are designed to be mutually reinforcing. Councils who write plans will have the guidance of clear legislative purposes, objectives and principles. Reinforcing this will be the discipline of review of the plans by IHPs. RSSs and RPS-NEs mirror the twin sets of statutory objectives and principles for the built and natural environments respectively. High-quality, enabling plans would be of little benefit without councils having the means to fund and finance adequate infrastructure to service the additional land needed to develop high-growth cities.

15.2 What benefits will a future planning system deliver?

The changes to the planning system that the Commission is recommending are substantive and far-reaching. Their impact would exceed the likely collective impact of the constant stream of piecemeal amendments to the RMA and the LGA that have occurred over the last 25 years. Yet, people who know the current system would recognise much in the future planning system (in its broad outline and philosophical intent) that the Commission is recommending.

The terms of reference specifically asked the Commission to take a "first principles" look at the planning system, and did not ask it to look at any transition from the present to a future system. Even so, one important question is whether the benefits would be worth the costs of making large legislative, organisational and operational changes? To help make that assessment, this section outlines the main benefits that the Commission believes a reformed planning system would deliver. Many of these benefits flow from the priority changes outlined above. But some flow from other recommendations of the Commission.

Development will be easier, less costly and the damaging land and house price escalation will end

Development capacity will steadily increase over time to match demand in high-growth cities. As it does, and probably beforehand in anticipation, land and house prices in those cities and across the country will stabilise (part of the correction could be a price drop). The increased capacity will provide a choice of housing types at different price points and densities to cater for a range of income levels and individual preferences. This is of critical importance to the effective functioning of the housing market, the economy and New Zealanders.

Demand-side factors such as net migration and the rules governing foreign buyers will also influence the correction in housing and land markets. The speed in realising these benefits will therefore depend on complementary measures in these areas and in the ability of the construction industry to grow its capacity. Following correction, speculation in houses and land will no longer be a significant factor driving demand. This in turn will help to "normalise" investment behaviour, saving behaviour, and monetary policy.

Yet evidence is strong (particularly based on cross-city research in the United States) that supply-side restrictions are pivotal to explaining rapid land and house price rises well in excess of construction costs. These big price rises just do not happen in locations where planning rules enable an adequate supply response to rising demand (Glaeser, Gyourko & Saks, 2005).

Cities will develop and function to their full potential

New Zealand cities will develop and function significantly better under the proposed future planning system. When cities function well, they provide greater access to and choices of housing, and better protection of the natural environment and cultural values. They also provide greater choices of employment and higher wages, a wider pool of labour for firms, and more opportunities for specialisation, innovation and easier transfer of ideas – the engine of economic prosperity. Work and commerce aside, well-functioning cities are attractive spaces where people consume goods and services, play, and are creative. Such cities have atmosphere and amenity. They also acknowledge the special relationship of Māori with the land on which cities are built.

New Zealand cities will develop in less predictable and more interesting ways that will be a function of evolving preferences, technologies, and social, economic and cultural opportunities as well as other emergent factors.

Quality infrastructure

A future planning system will better support the supply of quality infrastructure at the right time in the right place. This will apply particularly for the infrastructure normally supplied by councils – land transport and drinking, waste and storm water. Supply will be more responsive to demand and it will be better coordinated with land-use planning and regulation. This will stop the lack of infrastructure holding up construction and supply of thousands of desperately needed new dwellings. Better transport infrastructure will improve mobility, the decisions of firms and workers about where to locate, and job matching between firms and workers. Better pricing of infrastructure services will mean less congestion, more efficient decisions by developers about where to locate, and less wasteful use of scarce resources. It will also help councils avoid unnecessary investment and debt costs.

A clearer process for central and local government to identify, assess and agree on large-scale "city-shaping" infrastructure works will help projects with wider spillover benefits come to fruition. More scope will exist for local authorities to use innovative procurement models, such as Public-Private Partnerships (Chapters 10 and 11).

Better protection of the natural environment

High-value parts of the natural environment will be better protected through clearer principles, objectives and priorities, the use of a variety of instruments, and better monitoring of outcomes and enforcement of consents. The legislation will make clear that urban development needs to fit within these specified limits.

The clearer principles will help decision makers prioritise environmental issues when faced with scarce resources or conflicting objectives. For example, regulatory principles suggest that many policy levers to successfully *adapt* to climate change involve land use and are best tackled at district and regional levels (with national support and guidance), while effective policy levers to *mitigate* greenhouse gas emissions are likely to sit at the national level.

Better monitoring of the state of the environment, better central-government oversight of how well regional councils are discharging their regulatory responsibilities for the natural environment, as well as the greater use of science, economic instruments, and adaptive-management and real-options approaches will protect the parts of the natural environment most at risk from cumulative effects or other pressures. In contrast, the

existing "predict and control" approach struggles to cope with the complexity and uncertainty of natural systems. The greater emphasis on adaptive management will yield clear benefits for the natural environment.

More efficient and effective plan making

Clearer statutory objectives and principles will guide councils to make better plans. The new approach with IHPs conducting a single-stage review of regulatory plans in a region *as a package* will produce better plans faster. Councils will also face the discipline of knowing that the IHP will test the joint coherence of their plans and the quality of each plan. The formal status of the RSS in the planning hierarchy, and the effect of the IHP review as a quality and consistency check across a whole suite of plans in a region, has the potential to reduce duplication, enhance certainty and cut costs across many dimensions and for many players.

The general public will continue to be able to participate in creating and reviewing land-use plans, but the ability to appeal the substance of those plans will be limited. Only appeals to the Environment Court on points of law will be permitted. The benefit of this change is to concentrate the review of plans to a single stage in the hands of a competent IHP. The IHP will make skilful use of experts and run collaborative processes to resolve conflicts.

Yet residents of regions and districts will benefit from improved opportunities to participate in plan making. Councils will be obliged to conduct more balanced and representative consultation on plans and understand the perspectives and interests of the full range of the community.

Mutual benefits to Māori and Pākehā from promoting Treaty principles in planning

In some areas of the country, councils and mana whenua work in constructive partnership on matters of the natural and built environments – in line with Treaty principles of partnership and respect between settlers and tangata whenua. It has produced some innovative and mutually beneficial arrangements such as the Waikato River Authority, albeit this emerged from a series of Treaty settlements with iwi associated with the river.

The changes recommended for a future planning system (a new Treaty NPS and a Māori Advisory Board), as well as improved capabilities in councils and iwi, will lead to more benefits of this kind. Māori will feel more understood and respected, and gain opportunities to influence features in the built and natural environments that they value. Pākehā gain from the greater cultural and physical diversity in their environment and from growth in the strengths and achievements of their Treaty partners.

Greater planning capability and skills, and effective regulatory stewardship

Learning from the mistakes of the introduction of the RMA, the implementers of a future planning system will take those involved in planning with them by providing training in:

- the principles of the new Act;
- the hierarchy of plans, including spatial planning, and
- the new processes for plan making, consultation, and partnership.

Planning practitioners will better understand the role of planning, how it can productively orchestrate the variety of other disciplines, business interests and community interests that go into the planning mix. Their skill in knowing which instruments work best in different situations and for different objectives will deliver outcomes closer to those desired and intended.

The better understanding of the planning workforce of how their decisions on urban planning can make a difference to important problems (such as housing affordability and attracting skilled labour) will help to meet those challenges. In the Commission's survey of councils on the planning system, only about 20% of respondents felt that planning could positively influence either of these objectives.

Benefits will come from having the variety of central government agencies with an interest in planning and the environment organised much more effectively to exercise regulatory stewardship. Clear and capable leadership on the built and natural environments and their interactions will emerge. Stewardship will involve greater data collection, monitoring of outcomes and how well councils are performing their regulation duties over the built and natural environments. Central government will participate in planning in timely and constructive ways when local opportunities and threats have national impacts. It will keep an eye on what is working and what is not, foster innovation and disseminate guidance on best practice.

15.3 Will the recommended changes be worthwhile?

The inquiry's substantial and far-reaching recommendations for a future land-use planning and resource-management system might appear daunting. Yet the Commission believes that the potential gains far outweigh the costs of not confronting the current weaknesses. The potential gains are very large. Few of the many participants in the inquiry were happy with the current system. Many were strongly critical, believing the RMA had not worked out as intended, or needed a substantial overhaul. Regulation of the built and natural environments touches all our lives. It affects the places we live and work, the recreational spaces we love to play in, and the special parts of New Zealand's natural environment we wish to protect. Getting a planning and resource management system that is fit for purpose has the potential to deliver affordable housing and well-paying jobs, in vibrant, dynamic and liveable cities, and in a country where the natural environment is cherished and protected.

As Harvard economist Ed Glaeser says in his book *Triumph of the cities* (2011): "[C]ities are humanity's greatest invention, they make us richer, smarter, greener, healthier, and happier". To realise the potential of our greatest invention requires the best planning framework that we can devise. This report sets out the Commission's proposals on what such a framework would look like.

Findings and recommendations

Chapter 2 - High-performing cities

Findings

F2.1 The benefits of agglomeration result from innumerable decisions of people and firms to locate in cities. Planners do not have the information on personal preferences, capabilities, production technologies and business relationships that would enable them to engineer agglomeration benefits. Policy and planning that facilitate people and firms making location choices based on their own information and judgement are likely to produce the greatest benefits.

F2.2 City form evolves largely as the result of complex interactions of individual choices about where and how to live and conduct business. Over the longer run, the outcome of these choices, in terms of where and how a city will grow, is unpredictable.

F2.3 Well-performing cities provide an effective coordinated transport infrastructure that enables residents to get to work at a wide range of locations, at reasonable cost and in a reasonable time.

F2.4 As cities grow bigger, spatial inequalities (the segregation of people across space by income) emerge. Well-performing cities can ameliorate this tendency and its effects, through good planning and infrastructure provision that limit land price increases. Higher land prices force low-income people to live in suburbs with long travel times to available jobs and desirable amenities.

F2.5 A well-performing city uses formal and informal institutions at a sub-metropolitan level that build trust and enable residents to engage constructively in working through contested development plans and policies.

F2.6 Well-performing cities provide benefits to residents and to the wider economy through the delivery of an adequate supply of development capacity for housing. Reasonably priced housing makes it easier for workers to move to locations and jobs where they can best use their skills; and to access other amenities that make cities attractive.

Chapter 3 – A rationale for planning

Findings

F3.1 The three main and well-founded rationales for urban planning are to:

- regulate negative spillovers when people build structures, work and live near each other;
- make decisions about the provision and funding of local public goods to best enhance the wellbeing of residents; and
- invest in and run local and regional infrastructure to provide essential services for local residents and businesses; and to coordinate different infrastructure investments with land development.

F3.2

Land-use plans and planning systems vary on dimensions such as:

- whether plans focus more on outcomes than on prescriptive, detailed rules;
- whether land-use regulations use directive, place-specific rules; or rules that simply prohibit types of effects on other property owners;
- the distribution of responsibilities and powers between the central government and local communities;
- the balance struck between local and national interests; and
- the extent that plans are integrated (vertically and horizontally).

F3.3

Cities present a challenge for urban planning, given that it is not possible to predict or control in a fine-grained manner their development paths. An overly directive approach to regulating land use in cities risks suppressing the diversity, creativity and entrepreneurship that successful cities display.

One response to the complex, adaptive nature of cities, is for planners to use a relatively few, simple rules that prohibit certain types of harmful spillover effects. Planners would otherwise leave households and businesses free to develop private land as they wish.

Another logical response is a collaborative, participative approach to city development in which local communities, within envelopes set by higher levels of government, work out their own provisional and adaptive solutions to emergent opportunities and threats that arise as cities develop.

Hybrids of these approaches are possible and may be optimal.

Chapter 4 – Urban trends

Findings

F4.1

The extent of New Zealand's urbanisation depends very much on the definition used. The commonly cited figure that 86% of New Zealanders live in urban areas is based on a New Zealand-specific definition. Other definitions indicate lower levels of urbanisation.

F4.2

Low-growth cities have older populations and tend to experience a greater decline in the share of their young adult population compared with faster-growing cities. As this age group makes up a large proportion of a city's working age population, population decline is likely to have a negative impact on average income growth.

F4.3

The populations of Auckland and Wellington have become significantly denser over the last fifteen years. Both cities are among the densest in Australasia, although they are not very dense by international standards.

F4.4

New Zealand cities tend to grow out rather than up. Except in Wellington, recent urban growth has largely occurred in outer suburbs.

F4.5 Spatial inequalities in levels of income and education exist in New Zealand's largest cities. Residents who earn more and are more educated tend to cluster in the inner suburbs and in suburbs with desirable natural attributes. By contrast, residents who earn less and are less educated tend to cluster in the outer suburbs.

F4.6 Many New Zealand councils have policies aimed at creating a compact urban form for their cities. Yet most have struggled to achieve this goal, particularly in densifying their inner-city suburbs.

Chapter 5 – The urban planning system in New Zealand

Findings

F5.1 There has been considerable debate about the purpose of the Resource Management Act 1991, and the practical implications of "sustainable management" for council plans and rules. Confusion about the purpose of the RMA in its early years made it harder for councils to develop and implement land use plans.

F5.2 The planning system lacks clear statutory limits. This has led the system to respond to a growing variety of social and other issues, without considering whether land-use planning is the most effective and efficient mechanism for their resolution.

F5.3 The Resource Management Act provides no clear indication of how the development of urban areas should be handled, and tends to focus on negative impacts only rather than on weighing up the potential benefits of development against those impacts.

F5.4 The differing purposes of the three planning Acts create internal tensions, duplication, complexity and costs.

F5.5 The founders of the Resource Management Act (RMA) envisaged it as an enabling statute that would restrain the activities of landowners "only for clear reasons and through tightly targeted controls that have minimum side effects." The RMA has failed to deliver on this goal. Critics charge the RMA with creating excess costs, complexity and poor regulation, while many councils have struggled to make "effects-based" plans work.

F5.6 Although local authorities are required to ensure that their plans, policies and regulations are necessary, efficient and effective, their use of these checks and balances has been disappointing.

F5.7 Apart from land transport, central government has, until very recently, played a relatively weak role in leading and managing the planning system.

F5.8 Central government lacks the capability and systems needed to support timely and well-informed intervention on issues and wider impacts of local land-use regulation, or effective engagement with local authorities on planning issues.

F5.9 After decades of greater devolution of planning powers to local government, recent developments have seen a trend towards central control.

- Amendments to the Local Government Act have narrowed the purpose of local government, introduced more planning requirements, imposed standardised reporting obligations on councils, and given central government more powers to intervene.
- Amendments to the Resource Management Act have increased Ministerial powers to direct changes to plans, removed some decisions from councils, and increased the expectations for regulatory analysis.

F5.10 A notable recent trend has been legislative exceptions to the main planning system to meet the governance needs or challenges of particular areas (Auckland, Waikato and Canterbury), as central government has promoted national goals over local interests.

F5.11 Continual reform of the planning statutes has increased their complexity, reduced the coherence of the legislative frameworks, and made it harder for councils to implement the planning system and for the general public to participate in it.

Chapter 6 – Outcomes from the current system

Findings

F6.1 Air quality generally complies with national standards, is good by international levels, and has improved against some measures. Although air quality problems remain in some smaller New Zealand cities and towns.

F6.2 The proportion of New Zealanders serviced by safe drinking water is high and has marginally increased over time, reflecting tighter regulation, support from central government and increased investment from local authorities in water treatment. Compliance with drinking water standards is higher in more populous areas.

F6.3 Freshwater quality is generally lower in waterways that flow through predominantly urban areas. The sources of pollution in urban waterways typically include sewage leaks and stormwater run-off.

F6.4 Net and total greenhouse gas emissions increased from 1990 to 2014 by 54% and 23% respectively. Most of the increases were due to road transport activities, agriculture and reduced carbon dioxide absorption from forests.

F6.5 Housing affordability, expressed as the portion of the community paying more than 30% of disposable income on housing, has deteriorated significantly over the past 25 years. People on lower incomes feel the burdens of this deterioration most heavily.

F6.6 Congestion levels in major New Zealand cities have been broadly steady for the past 10 years, and traffic-related accident and fatality rates have been falling since the 1970s. Despite recent improvements, New Zealand still has relatively high rates of traffic deaths by the standards of other developed countries.

F6.7 Urban New Zealanders currently have good access to green space.

F6.8 New Zealand has low levels of public transport use by developed world standards, and rates of public transport use have been broadly stable since the early 2000s.

F6.9 A slightly higher proportion of New Zealanders live in dwellings connected to sewage treatment systems than OECD averages. Available comparative information suggests that New Zealand sewerage systems compare unfavourably against a number of international performance benchmarks.

F6.10 The absence of national standards in combination with local and political resistance has limited the planning system's ability to manage pollution of fresh water or cumulative pollution.

Chapter 7 – Urban Planning and the Treaty of Waitangi

Findings

F7.1 Māori have a broad range of interests in urban development arising from connections with ancestral lands, a desire to live in spaces identifiably Māori, their individual and collective ownership and development of urban land, and their desire for prosperity and wellbeing. Some of these interests require policies that go beyond urban land-use planning.

F7.2 Treaty settlements have often given iwi and hapū a significant role in the governance and management of environmental features and resources. At the same time, the settlement process has strengthened iwi and hapū capabilities and provided resources that enable stronger participation in environmental planning under the Resource Management Act.

F7.3 Māori engagement in urban land-use planning is growing as a result of improving capability in local authorities and Māori groups, experience from successful practice (often stimulated by Treaty settlements) and strengthening relationships. Yet the system's performance has proven uneven, due to factors such as:

- constraints on the capability of some councils and some iwi to engage with each other;
- lack of clarity about how to implement legislative requirements for Māori participation in planning; and
- varying expectations about the nature of council–Māori relationships.

F7.4 Strengthening the current broad framework for recognition and active protection of Māori interests in land-use planning has broad support and aligns with the Crown's Treaty of Waitangi obligations.

Recommendations

R7.1

In a future planning system, the government should (through the proposed National Policy Statement on Planning and the Treaty of Waitangi) provide guidance to local authorities on planning provisions for papakāinga and other kaupapa Māori residential and non-residential developments, whether situated on Māori land or elsewhere.

Because there are differences in local tikanga and preferences, guidance should encourage local authorities to reach agreement with mana whenua and other local Māori communities in their district on planning for kaupapa Māori developments.

R7.2

In a future planning system, the government should provide clear guidance (through the proposed National Policy Statement on Planning and the Treaty of Waitangi) to local authorities on how to work with mana whenua to identify and protect sites and environmental features of significance to mana whenua.

Guidance should cover processes to reach agreement with mana whenua on the threshold for, the conduct of, and fee setting for cultural impact assessments for proposed developments that may impact on such sites and features.

R7.3

A future planning system should carry forward and build on current regulatory provisions to give effect to the Crown's Treaty of Waitangi obligations by enabling the expression and active protection of Māori interests in the built and natural environments.

R7.4

In a future planning system, the government should, with the advice of the proposed National Māori Advisory Board on Planning and the Treaty of Waitangi, and after consulting collaboratively with Māori communities more generally, provide clear guidance to local authorities through a mandatory National Policy Statement (NPS) on Planning and the Treaty of Waitangi. The NPS should set out the Crown's expectations on recognising and actively protecting Māori Treaty interests in the natural and built environments.

That NPS should respect and provide scope for local differences in tikanga, environmental and planning issues and community preferences.

R7.5

In a future planning system, central agencies with stewardship responsibilities for the system should, with the advice of the proposed National Māori Advisory Board on Planning and the Treaty of Waitangi, establish policies and methods to help mana whenua develop the capability to participate effectively in planning processes.

Policies and methods should include training; secondments of staff between mana whenua, central government and local government agencies; assistance with technical issues; and grants.

The Government should provide clear guidance (through the proposed National Policy Statement on Planning and the Treaty of Waitangi) to local authorities on their responsibilities to help mana whenua develop the capability to participate effectively in planning processes. The National Māori Advisory Board should review local authority initiatives to develop mana whenua capability as part of its triennial Treaty of Waitangi audit.

R7.6 In a future planning system, the government should provide clear guidance (through the proposed National Policy Statement on Planning and the Treaty of Waitangi) to local authorities on identifying opportunities for, and putting into place agreements with, mana whenua for the co-governance and joint management of sites and environmental features of significance to mana whenua.

The guidance should set out the circumstances that favour such agreements; and the practices that make them successful.

Chapter 8 – Regulating land use in the built environment

Findings

F8.1 The planning system suffers from risk aversion and bias towards the status quo, reflecting:

- the incentives on property owners to oppose changes they perceive may put the value of their assets or character of their neighbourhood at risk, and the avenues open to them to pursue their interests;
- inadequate representation of the interests of new and prospective residents and businesses in planning decisions;
- the pressure placed on councils not to set rules and policies that enable development; and
- an overemphasis in the implementation of the Resource Management Act on managing or avoiding adverse effects on existing elements in the built environment, and insufficient attention to the positive effects of development, which does not sit well with the dynamic nature of urban environments.

F8.2 Councils overuse land-use rules in part because:

- they lack some alternative tools (such as road congestion charges); and
- political barriers hinder the full use of existing alternative tools.

F8.3 The planning system has struggled to provide adequate supplies of development capacity for residential and non-residential uses. A number of councils have tried to protect industrial-zoned land supplies, while the prices of residential and commercial land have increased at much faster rates.

F8.4 Councils face procedural barriers in responding to changing circumstances and preferences through the planning system. The current processes for changing land-use controls through the Resource Management Act can take considerable time to complete.

F8.5 The current planning system has too often been blind to price signals, leading to poor responsiveness, and undersupply of development capacity, and misdirected effort.

F8.6 The planning system shows considerable evidence of unnecessary, excessive (and poorly targeted) land use regulations.

F8.7 The planning system has too many plans within regions, with too much unnecessary variation across plans in content, layout and presentation.

F8.8 Many local authorities in New Zealand discourage or prevent the development of commercial activity outside designated centres. Local and international experience with such policies suggests that they often fail to achieve their objectives and can act as barriers to competition and productivity growth.

F8.9 In trying to protect existing city and town centres, some New Zealand urban local authorities have sought to shield retail and commercial enterprises in the centres from potential competitors in other locations.

F8.10 A number of councils apply very detailed controls on the types and sizes of businesses that can operate in particular zones. These controls are unlikely to be efficient, not least because such rules can take a long time to change and inevitably lag developments on the ground.

F8.11 Council requirements on some developments to undergo urban design assessments sometimes lead to poor exercises of regulatory discretion. Urban design criteria can lack clarity and precision, and design advice to resource consent applicants can lack perspective, consistency, or a sense of their cost or economic implications. Judgements and practice on urban design vary considerably across councils.

F8.12 Urban design assessments can be a valuable tool for enhancing the amenity of public spaces if they:

- involve developers and designers in a collaborative process to find the best solution;
- are proportionate in scope to the public amenity being considered;
- take proper account of costs and benefits of alternative design proposals; and
- produce realistic and practical outcomes.

F8.13 Appeal rights in New Zealand are broader than in other comparable jurisdictions. The ability to appeal provisions of Plans is particularly unusual.

F8.14 Current institutional arrangements do not provide enough scrutiny over land-use regulation. While the Environment Court plays an important role as a check on local authority regulation, it only has the opportunity to review appealed rules or appealed provisions. As a result, only a limited proportion of a District Plan's rules are subject to thorough scrutiny.

F8.15 Limiting notification of plan changes affecting a particular site to those directly affected, and limiting appeal rights to people directly affected by proposed plan provisions or rules, is likely to be difficult to implement in practice because:

- councils will find it hard to determine with any certainty all those who are "directly affected"; and
- litigation will shift from substantive issues to questions of whether appellants have standing.

A timely and systematic single-stage merit review of plans and plan changes by an Independent Hearings Panel is a better way to avoid the costs and delays involved in hearing appeals to the Environment Court on plans and plan changes.

F8.16 Consultation requirements under the RMA are both too prescriptive and too narrow. They require councils to seek two sets of submissions no matter the size and complexity of the issue under consideration, and require submissions to be made in a prescribed, written form. Yet the requirements place no onus on councils to ensure that the interests of all potentially affected parties are considered. Typically, significant population groups, such as women; young people; and Māori, Pacific and Asian peoples are underrepresented in planning processes.

F8.17 Compared to current statutory provisions, further restricting notification of consent applications is likely to

- increase the difficulty for councils of identifying who is directly affected; and
- increase the focus on whether or not a potential appellant has standing and therefore should have been notified.

Recommendations

R8.1 A future urban planning system should make specific provision for responding to growth pressures, providing land-use flexibility, and supporting the ability of residents to easily move through their city.

R8.2 Information about land prices should be a central policy and monitoring tool in any future planning system, and should drive decisions on the release, servicing and rezoning of development capacity.

R8.3 In a future planning system, central government should establish thresholds (specific to particular urban areas) for the price difference beyond developable and non-developable land. A future planning system should provide a process involving the relevant council to bring forward the release of additional greenfield land where relative land prices exceed the threshold set.

R8.4 A future planning system should provide a process for ensuring that greenfield land brought forward for development as a result of the price threshold being exceeded is serviced with necessary bulk infrastructure, to allow land to be developed. Local authorities should continue to bear their usual responsibilities for supplying bulk infrastructure.

R8.5 In a future planning system, the government should use a national planning template to reduce unnecessary variation across plans in content, layout and presentation.

R8.6

In a future planning system, local Independent Hearings Panels (IHPs) should be established (when required) to consider and review new Plans, significant Plan variations and private Plan changes across the country, with the features listed below.

- An independent statutory agency should be responsible for appointing IHP members, developing a pool of qualified members across the country, and supporting the operation of local IHPs through guidance on processes and through administrative services.
- IHP members should reflect a range of skills and knowledge (including technical and legal expertise, familiarity with local circumstances, and with tikanga Māori).
- The number and composition of panel members and the hearings processes should reflect the scale and significance of the Plan, Plan variations and Plan changes being reviewed in each case.
- An IHP should be empowered to review together one or more Plans and other statutory land-use planning instruments applying to a region.
- An IHP should make final decisions on merits for Plans, Plan variations and private Plan changes, with appeal rights limited to points of law.
- Appeals on points of law should be to the Environment Court.
- Councils and central government should share the costs of operating the IHP.

R8.7

Consultation and engagement requirements in a future planning system should:

- give councils flexibility to select the most appropriate tool for the issue at hand;
- encourage and enable participation by people affected, or likely to be affected, by a decision; and
- encourage the use of tools that ensure the full spectrum of interests is understood in council decision-making processes, and that allow the public to understand the trade-offs involved in decisions.

R8.8

In a future planning system, councils should engage with communities in areas facing significant land-use changes, to agree ways to offset any amenity losses. This could include providing targeted infrastructure or services investment (eg, the expansion of green spaces or upgrades to existing community facilities) for areas facing significant change.

Chapter 9 – Urban planning and the national environment

Findings

F9.1 An important purpose of environmental regulation is to manage the impact of the built environment on the natural environment. The challenge for environmental regulation is that the built environment and the natural environment display the characteristics of complex, adaptive systems.

F9.2 The characteristics of complex, adaptive systems mean that regulators can find it hard to accurately predict the impact of the built environment on the natural environment and take action to mitigate the impact.

F9.3 Environmental law is part of the complex system of human behaviour with respect to the natural environment. Regulators are only one influence and may have only partial oversight or control over regulated parties.

F9.4 "Sustainability" and "sustainable development" are core concepts in the Resource Management Act. Yet ambiguity over the meaning of these concepts has led to difficulties in managing the impact of the built environment on the natural environment.

F9.5 The planning system has struggled to adequately manage cumulative effects on the natural environment. The system does not generate the level of information and analysis required for adaptive decision making, and oversight of environmental outcomes is insufficient.

F9.6 The rationale for giving local government primary responsibility for setting climate change mitigation policies and standards is limited. Should central government decide a role for planning in climate change mitigation is needed, this role is best articulated through the use of a National Policy Statement and/or a National Environmental Standard.

F9.7 Achieving greenhouse-house (GHG) reductions through policies that change urban form takes a long time. Other policy measures are likely to be more effective and less costly in reducing emissions to meet New Zealand's emissions reduction targets. It will be important for government to consider the relative effectiveness and the distributional (equity) impacts of alternative ways to reduce GHG emissions in New Zealand.

Recommendations

R9.1 The overarching purpose of planning legislation should reflect the positive benefits from the built environment that meet the social, cultural and economic needs of New Zealanders, while safeguarding the natural environment.

R9.2 Future planning regulation should set clear limits and standards within which development can occur, to ensure the integrity of natural systems (ecosystem sustainability), maintain standards of environmental quality (ecosystem services), and recognise community preferences (including Māori interests).

If developments breach community standards for the natural environment, then decision makers should balance the benefits of development against the impacts on the natural environment.

Where these limits and standards are not breached, and within the rules for the built environment, developments should be able to proceed with minimal oversight.

Legislation should provide clear objectives and principles to guide how limits and standards are determined.

R9.3 Central government should work with local government to determine what key environmental outcomes are measured and work with regional regulators to set up information systems that provide timely information about outcomes.

R9.4 A future planning system would include a well-articulated and stable approach for deciding when to set environmental standards and policies nationally and when to leave standard setting to local decision makers.

R9.5 A future planning system should retain the use of national instruments such as National Policy Statements and National Environmental Standards.

R9.6 In a future planning system, regional councils should prepare a Regional Policy Statement for the Natural Environment. That policy statement would:

- describe the ecologically sustainable limits that must not be breached;
- replace existing regional policy statements and regional plans to the extent that they deal with standards and limits for the natural environment;
- give appropriate recognition to, and provide for, mana whenua kaitiaki relationships with the natural environment; and
- give effect to national policy instruments and allow regional councils to set limits and standards above national levels in line with regional preferences.

R9.7 When regulating urban spillovers affecting the natural environment, a future planning system should ensure regulators have access to the full range of instruments (including market-based tools).

R9.8 A future planning system should encourage the use of adaptive management for dealing with cumulative or uncertain effects, where information can be collected and outcomes monitored, and where limits or standards can be adjusted.

R9.9 To support the use of adaptive management, central government should produce comprehensive guidance on when and how the approach should be used, and provide councils with technical support to help build capacity within the planning system.

Chapter 10 – Urban planning and infrastructure

Findings

F10.1

Infrastructure assets:

- are expensive and long-lived;
- are lumpy;
- are highly place specific and inflexible;
- are irreversible;
- are typically part of a network;
- often need to be coordinated; and
- may require public funding.

Providers of infrastructure are exposed to risks, including that demand may be less than expected. This leads to underuse and possible stranding of their assets. This puts a premium on effective planning, procurement, funding, managing and monitoring of infrastructure assets.

F10.2

The current infrastructure planning and provision systems are insufficiently responsive to demand pressures, do not always align infrastructure supply and land-use rules, and lack tools for the provision of city-shaping assets that underpin the mobility of people and freight.

F10.3

Current legislative provisions do not encourage integrated land-use and infrastructure planning. Barriers include different timescales, consultation requirements and decision-making processes. While some links and common processes exist across the Resource Management Act, the Local Government Act and the Land Transport Management Act, improving on these in a future planning system is possible.

F10.4

Local government political pressures, legal restrictions on supply arrangements, and fragmented and monopoly provision of "three waters" infrastructure act against responsive supply.

F10.5

Real-options analysis is a useful tool for planners making decisions about infrastructure and land use because it builds in flexibility to cope with the uncertain evolution of urban spaces over time. It can help planners reduce the risk of worse-than-expected outcomes and take advantage of upside opportunities as they emerge.

F10.6

In New Zealand the case for merging networks, and running a competitive model of urban water supply with a network regulator, is weak. This is due to the fragmented and small-scale water networks, the high cost of transporting water, the uncertain net benefits of mergers, and the high costs of setting up alternative institutions.

F10.7

Facilitated discussions involving central government, local government and private sector organisations can be effective in developing a shared understanding of land-use demand and associated infrastructure needs, and in prompting desirable investments.

F10.8 The Auckland Transport Alignment Project was an effective institutional innovation to enable the council of a major city and central government to work together and consider a central funding contribution for a major programme of urban infrastructure with national spillover benefits.

Recommendations

R10.1 Fast-growing cities should plan realistically for the large land areas required to accommodate future growth. They should decide and signal its location two to four decades in advance, and secure infrastructure corridors, public open spaces and conservation areas.

R10.2 Spatial plans or strategies should be a standard and mandatory part of the planning hierarchy in a future system. They should:

- be region-wide, led by regional councils yet owned by all councils in a region;
- be high-level and directional, yet open and flexible about the details of future development;
- focus on issues closely related to land use, in particular the corridors for water and transport infrastructure, land for community facilities (eg, schools, hospitals, recreational spaces, and conservation areas), protection of high-value ecological and cultural sites, and natural hazard management;
- enable all key stakeholders to participate and share information, including iwi, central agencies, developers and infrastructure providers and operators; and
- be the platform for a suite of plans in a region covering both land use regulation (district and unitary plans) and operational and budgeting plans (eg, council long-term, annual and infrastructure plans).

R10.3 As part of the transition to a future planning system, central government should establish a centre of excellence or resource that councils could draw on for advice and training to conduct appropriate real-options analyses and cost benefit analysis in infrastructure and land-use planning.

R10.4 While the Commission sees little merit in a large-scale structural reform for urban water services, the Government and councils should seek improved performance in the delivery of water services. Initiatives to achieve this include:

- improving the clarity of the statutory and legal frameworks for water supply, wastewater and stormwater;
- acting to ensure that the council controlled organisation (CCO) model is fit for purpose;
- investing in common national standards for quality, data collection and analysis;
- greater transparency and benchmarking; and
- encouraging councils to collaborate through joint CCOs to achieve scale and specialist capability where doing so is cost effective

R10.5 In a future planning system central governments and city councils should work together through the regional spatial-strategy process and subsequently, to assess and agree on the design, benefits and funding of major programmes of urban infrastructure investment with national spillover benefits.

Chapter 11 – Infrastructure, financing and procurement

Findings

F11.1 In providing infrastructure, councils should aim for efficient pricing and efficient investment. Efficient pricing may include congestion charging, multi-part tariffs, development contributions and connection charges. In some instances, rates revenue may supplement these sources of revenue so as to cover the full costs of infrastructure

F11.2 As a council faces a population decline in the area it serves, the council's rating base also decreases. This means councils can face a struggle over time to maintain and renew essential services. This is especially true for smaller councils who lack economies of scale.

F11.3 Councils, particularly in high-growth areas, often invest too slowly or underinvest in infrastructure, even though the additional revenues from growth are likely to cover the costs over the lifetime of the asset. Reasons include the front-loaded costs of infrastructure relative to growth revenue, debt limits, reluctance to fully use existing funding tools, and political pressures to keep rates low and avoid debt. City-shaping infrastructure and securing land corridors and public open spaces for future expansion put additional demands on revenue sources.

F11.4 Legislative, political, funding and financing barriers are limiting the ability of local authorities to provide sufficient infrastructure for development despite the high social returns that investing in such infrastructure would deliver.

F11.5 Many councils have adopted rating systems based on capital value, owing to a common belief that capital value rating is best practice. Yet the arguments in favour of this approach are weak at best. Basing rates on capital values acts as a tax on improving land: this discourages development. National evidence indicates that capital value may be less fair in terms of ability to pay. A shift towards land-value rating would produce more efficient and fair outcomes in urban areas.

F11.6 Value capture is a fair way to recover a portion of infrastructure costs because it targets the windfall gains of property owners that arise from the infrastructure. Tools that capture these gains are used overseas to help fund large infrastructure projects.

F11.7 Where wider national benefits arise from investment in local infrastructure, a case exists for central government to contribute to its cost.

F11.8 The factors driving population decline in smaller centres are often very difficult to counter and are likely to result in funding shortfalls that affect a council's ability to provide basic infrastructure services.

F11.9 Local income and expenditure taxes are sometimes used in other countries as a revenue source for local governments. However, implementing such tools in New Zealand would be complex and difficult. Such taxes would also make it more difficult for councils in towns or regions with declining populations to maintain existing services.

F11.10 Internationally, many central governments share a portion of their tax revenue with local governments. This revenue typically helps to fund expensive services such as health, education and social welfare. Yet local governments do not provide such services in New Zealand. Further, allocating tax revenue to particular councils is a complex task.

F11.11 Barriers to high-growth councils taking on more debt are an important explanation of shortfalls in infrastructure investment that have high net social returns. The main barrier in Auckland's case is the threat of a credit-rating downgrade. Other potential barriers are opposition to higher debt from existing ratepayers, and overly conservative prudential debt limits and Local Government Funding Authority rules.

F11.12 Regulatory barriers do not seem to prevent councils from using Public Private Partnerships (PPPs). Yet the small scale of many local government projects and a lack of experience with PPPs may make councils and the private sector reluctant to engage in PPPs.

F11.13 Existing specialist capability in the Treasury Public Private Partnership unit is available for councils to draw on. Examples such as the Waikato region's Local Authorities Shared Services Limited illustrate the advantages for councils from joint procurement, particularly when this is founded on a regional approach to planning for infrastructure that extends beyond the boundaries of individual territorial authorities.

Recommendations

R11.1

- Growth should pay for itself. Councils' funding and financing tool kits should be expanded so councils can cover the costs of growth – infrastructure investment and securing land for future infrastructure corridors and public open spaces – adequately, efficiently and fairly.

R11.2 A future planning system should allow councils to:

- set volumetric charges for both water and wastewater; and
- apply pricing for the use of existing local roads where this would enable more efficient use of the road network.

R11.3 Development contributions (and developer agreements) should be part of a future planning system as an important means to fund council infrastructure needed for new development to go ahead, and which is mostly for the use of those benefiting from the development. In setting and implementing development contributions, councils should:

- be open and transparent;
- reflect the actual cost of the infrastructure in a particular location and avoid over and undercharging;
- follow the development contribution principles set out in section 197AB of the LGA;
- have processes that allow developers and others to challenge development contributions if considered excessive; and
- maintain an open dialogue with the developer community.

R11.4 Councils should continue to use targeted rates in a future planning system as a way to recover the costs of broader community infrastructure from the beneficiaries, to the extent it is neither practical nor efficient to do so from user charges. Councils should also be open to the use of targeted rates as a means of non-linear pricing of infrastructure services, and as an alternative or complement to development contributions to recover the costs of infrastructure specific to a new development.

R11.5 In a future planning system, councils should levy property rates on the unimproved value of land. Where this would involve a change from a different current base, the reform should provide for a reasonable transition period.

R11.6 A future planning system should include a value-capture tool for councils' optional use to help fund infrastructure projects that benefit broad parts or the whole of a city. One way of applying value capture that would be feasible, efficient and fair is to enable councils to levy targeted rates on changes in land values. This would require a change in legislation.

R11.7 Central government should consider providing funding assistance and advice to councils in areas with declining populations to help meet infrastructure needs. This should be conditional on councils taking sensible steps to adapt to demographic change.

R11.8 Broad taxes based on local income and expenditure or revenue sharing between central and local government should not be part of a future planning system because they are complex, less efficient than rates based on land values, and should not be needed when councils use the full range of funding tools recommended by the Commission

R11.9 Councils such as Auckland that face a binding constraint on greater investment in infrastructure with high net social returns should tackle this serious problem by some combination of:

- raising more revenue so it can borrow more within prescribed debt-to-revenue limits;
- financing more infrastructure on the balance sheets of others, such as private homeowners and body-corporate entities in large new subdivisions; and
- working with central government and finance experts to make the case to credit-rating agencies to impose less stringent limits in return for assurances on creditworthiness and fiscal prudence.

Central government should consider capital grants or some form of debt guarantee, if that proves necessary to enable councils such as Auckland Council to invest in sufficient infrastructure for growth.

R11.10 Councils should consider public-private partnerships for all significant local government infrastructure projects, not just those seeking Crown funding

R11.11 A future urban planning system should give councils the capability to use a wide range of innovative infrastructure delivery models, including public-private partnerships. Councils, either alone or through joint agencies, will need to develop the capabilities to operate such models successfully. Future arrangements could build on existing specialist capability in the Treasury and current regional shared-services initiatives that increase project scale and develop project-commissioning expertise.

Chapter 12 – Other development models

Findings

F12.1 The forces that restrict the supply of new urban land and cause its price to greatly exceed its marginal opportunity cost are well entrenched. To shift them may require another measure to supplement the Commission's other recommendations and the new National Policy Statement on Urban Development Capacity. Opening the supply of urban land and infrastructure to greater competition would likely be an effective additional measure.

F12.2 A continuum of possible arrangements exist to address the ownership, funding, financing, operational and succession issues that would arise for new communities constructed under the competitive urban-land-markets model. Legal clarity and other reassurance will be needed for developers, investors and prospective residents to have the confidence to proceed.

F12.3 Enabling private providers to develop Autonomous Community Developments beyond current city footprints and to invest in associated trunk infrastructure to support them would make land and infrastructure markets more competitive and likely yield high social returns through meeting demand for urban expansion and affordable housing.

F12.4 Urban development authorities are commonly used overseas and can play an important role in de-risking development, providing a demonstration effect for private sector developers to follow, and bringing land to market.

F12.5 New Zealand's largest cities have established local urban development authorities or are planning to establish them.

F12.6 The ability of local authorities to compulsorily acquire land for housing or urban regeneration is unclear.

F12.7 Auctioning development rights to higher-than-normal density limits would enable councils to regulate development density efficiently in some cases (eg, by restricting the number of multi-storey apartment blocks in an area) and raise revenue to help fund associated infrastructure needs, and/or provide additional amenities to "compensate" affected communities.

Recommendations

R12.1 The government should facilitate Competitive Urban Land Markets in a future urban planning system. This would include creating a policy and legal framework to support private developers and investors to build and finance trunk infrastructure and Autonomous Community Developments.

R12.2 A future planning system should include a legislated regime similar to Special Housing Areas, in which certain developments undertaken by local urban development authorities are designated by Order in Council as having the potential to deliver significant numbers of dwellings, and within which the urban development authority will operate with different powers and land use rules.

R12.3 A future planning system should provide for "designated developments" undertaken by local urban development authorities to allow higher height and storey limits than in the Special Housing Areas regime, and to allow non-residential uses that may be necessary for the development to be economically viable.

R12.4 A future planning system should provide compulsory acquisition powers to local urban development authorities for 'designated developments', subject to the normal processes, compensation and protections of the Public Works Act.

R12.5 The Government should adjust the "offer back" provisions of the Public Works Act for use by urban development authorities, so that they are not obliged to offer back land that has been significantly redeveloped.

R12.6 The Government should provide for "designated developments" undertaken by local urban development authorities to operate under streamlined planning and consenting processes. This should include restricting public notification.

R12.7 The Government should look at other opportunities to support the activity of local urban development authorities to deliver on cities' goals for urban redevelopment, including through making Crown land available, partnering in specific projects, and ensuring that Housing New Zealand cooperates where relevant.

R12.8 In a future planning system councils should have the power to sell development rights as a means to achieve greater density in growing cities. They would use the power to efficiently regulate the number of structures that significantly exceed normal planning density rules. And they would spend the revenue raised on associated infrastructure costs and/or to provide additional amenities to affected communities.

Chapter 13 – Statutory framework, institutions and governance

Findings

F13.1 Departments as regulatory stewards have a duty to systematically and proactively monitor, review, and advise how to improve and get the best value out of the regulatory systems for which they are responsible. Responsibility for stewardship of the urban planning system is unclear and fragmented across a variety of agencies with an interest in planning and the environment, with no clear leader.

F13.2 Central government currently lacks sufficient capability and the systems needed to effectively undertake its regulatory stewardship responsibilities, including:

- monitoring the performance, condition and risks of the urban planning system;
- providing advice on improvements to the system; and
- supporting, if necessary, well-informed and timely intervention in that system.

Evidence also suggests that central government engagement with local authorities on planning issues is poor.

Recommendations

R13.1

A future planning system should:

- enable land use to be flexible and responsive to changing needs, preferences, technology and information;
- provide sufficient development capacity to meet demand;
- promote mobility of residents and goods to and through the city;
- safeguard the natural environment by defining the boundaries within which development and land-use activities must operate; and
- recognise and actively protect Māori Treaty interests in the built and natural environments.

R13.2

Future planning legislation should provide a clear statutory purpose covering the built and natural environments and their relationship; clear statutory objectives to guide regulation of activities impacting on each of the built and natural environments; and clear principles to guide decision makers on how to give effect to the statutory objectives.

R13.3

Future planning legislation should set out principles to guide the content of plans and the conduct of planning processes and decision making, so that planning is efficient, fair, transparent, focused on clearly defined and restrained statutory objectives and proportionate to the planning matters being regulated or decided.

R13.4

The primary statutory base for a future planning system should be a single piece of legislation covering land-use planning and resource management. The single piece of legislation should have clear and separate objectives for regulating the built and natural environments. There should continue to be separate legislation covering land transport management and the constitution and operation of local government.

R13.5

In a future planning system, regional councils should continue to have the primary responsibility for monitoring and enforcement of regulation for the natural environment in the regions.

R13.6

In a future planning system, local authorities should be required by statute to include (in the Regional Spatial Strategy (RSS), the Regional Policy Statement for the Natural Environment (RPS-NE) and in district Plans) a chapter on measures to recognise and actively protect Māori Treaty interests in land-use and resource-management planning.

Local authorities should, in preparing an RSS, an RPS-NE, or a district Plan, be required by statute to:

- engage in good faith with mana whenua;
- have regard to relevant provisions of iwi management plans (or their equivalent) in their region; and
- endeavour to reach agreement with mana whenua on how the RSS, RPS-NE or Plan can give effect to relevant provisions of iwi management plans.

R13.7 A future land-use and resource management-planning statute should contain cross-references to land transport management and local government statutes that:

- enable joint consultation and engagement processes when developing plans under the different statutes, where this is practical and efficient; and
- require plans developed under one statute to take account of provisions in existing plans under the other statutes.

R13.8 To provide greater clarity and focus in decision making, future planning legislation should provide for specific purposes and criteria for granting different types of resource consents. These purposes and criteria should be based on the separate statutory objectives established for the built and natural environments.

R13.9 A future planning system should provide for an Independent Statutory Agency to:

- appoint and provide administrative support to Independent Hearings Panels (IHPs);
- provide guidance to IHPs on the processes and procedures required to fulfil their mandate;
- develop a pool of capable panel members with the required range of skills; and
- provide advice to government on measures to improve the efficiency and effectiveness of the planning system in achieving statutory objectives.

R13.10 A future planning system should have clear and capable leadership on the built and natural environments and their interactions, with regulatory stewardship obligations clearly assigned to an appropriate central government agency.

R13.11 A future planning system should be based on a constructive relationship and interface between central and local government through:

- both central and local government providing input (formally or informally) into each other's policymaking processes, under an agreed set of principles or protocol;
- meaningful engagement and effective dialogue with local government occurring early in the policy process;
- cooperative approaches to addressing potential issues with implementing new legislation, or urban planning and environmental standards;
- the creation of formal and informal feedback loops to identify problems in the urban planning system when they first appear; and

the spread of information through the system and the sharing of expertise and knowledge.

R13.12 In a future planning system, regulatory stewards need to work closely with regional councils and territorial authorities to develop information systems that provide up-to-date, granular information on outcomes in both the built and natural environments

R13.13 A future planning system should provide for a National Māori Advisory Board on Planning and the Treaty of Waitangi. The Board should be established under statute and:

- monitor how the planning system gives effect to the principles of the Treaty of Waitangi;
- advise central government agencies (with stewardship responsibilities for the planning system) on policies, regulations, processes and methods that will best give effect to the principles of the Treaty of Waitangi; and
- carry out a Treaty of Waitangi audit of the planning system every five years

R13.14 Stewards of a future planning system should collaborate with the proposed National Māori Advisory Board on Planning and the Treaty of Waitangi, and with Māori more generally, to develop ways to introduce tikanga Māori and mātauranga Māori into methods to monitor and assess the performance of the planning system at the national, regional and local levels.

Chapter 14 – Culture and Capability

Findings

F14.1 A number of historical influences have shaped the planning culture in New Zealand:

- the moral precept of doing good for society by bringing "order" and "certainty" (dating from the Industrial Revolution which caused chaotic growth and widespread disease);
- the traditions of the English Garden City movement and a belief that planning, and the shape of the physical environment, is vital for the health and wellbeing of the community;
- the legislative frameworks, planning models and traditions imported from Britain, along with a workforce of influential British planners;
- a belief that urban areas need to be contained to protect agricultural soils, and that this was important for New Zealand's national identity; and
- the New Urbanism model of planning, that emerged from the United States in the early 1980s, and its belief in the role of design in achieving better cities and also shaping a better society.

F14.2 A "procedural" view of planning dominates the professional identity of the planning profession in New Zealand and overseas. This planning perspective emphasises how planners can make planning processes work more effectively, rather than examining whether planning is the best tool for achieving desired social outcomes.

F14.3 The planning profession in New Zealand has struggled to carve out a unique professional identity, and lacks some key elements of a professionalised regulatory workforce. In the absence of a strong professional identity founded on disciplinary knowledge, planners tend to fall back on legislation to define their role in the planning system. Friction and tension between subgroups within the planning profession also hinders the development of a clear professional identity.

F14.4 An emboldened planning culture has seen its perceived role and scope expanded in an attempt to solve a range of social and policy problems, despite:

- such issues being outside the control of local government, and beyond the scope of urban-planning and land-use regulation; and
- a lack of the necessary knowledge, capability and skills.

F14.5 Professional bodies provide an important source of cultural leadership for the planning profession. Cultural messages are transmitted through the accreditation of university courses, the direct provision of professional development opportunities, and by rewarding good practice.

F14.6 Planning practice is influenced by the organisational culture of councils, particularly in areas such as the relationship between planners and Māori, the level of organisational risk adopted, the influence of planners in council decision-making, and the general openness of councils to new and innovative approaches to planning tasks.

F14.7 The Resource Management Act (RMA) challenged existing planning culture and practice which led to resistance by planning practitioners and the carrying over of traditions, values and beliefs of the previous regime. The failure of the RMA to deliver on its goals highlights the importance of aligning and building culture and capability for successful reform.

F14.8 Good planning outcomes are more likely to be achieved when planning cultures:

- insist on robust, evidence-based, outcome-focused decision making;
- value continuous learning and feedback (ie, learning cultures);
- empower staff to "speak up" and challenge existing practice;
- stress the importance of being open, transparent and accountable;
- view facilitation and public education as important "planning tools";
- value operational flexibility and adaptation to changing socio-economic or environmental conditions;
- recognise the significance of the civic responsibility that comes with using the coercive powers of the state;
- acknowledge and respect the boundaries of planning's influence; and
- favour collaboration and communication.

F14.9 Inquiry participants widely accept the need for increased technical capabilities in planning, particularly in environmental sciences, economic analysis, and policy analysis more generally. Capability gaps in these areas hinder the ability of councils to undertake rigorous policy analysis and evaluation when carrying out their planning functions and, importantly, exercising their coercive planning powers. Participants also identified Council engagement with the community as needing enhancement, particularly through more effective engagement with Māori.

F14.10 How capable and skilled central government officials are in urban planning is crucial to a well-functioning planning system and achieving urban planning goals. However, evidence shows that capability and knowledge of local government and urban planning is poor within central government. Likewise, engagement with local government on policy design and implementation generally, and urban planning specifically, is also poor. This impedes the ability of central government to successfully carry out its regulatory stewardship role in regard to the urban planning system.

F14.11 In a future urban planning system, those carrying out the planning task will require access to a wide range of skills and knowledge, covering multiple disciplines and processes. This requires strong capabilities in critical thinking, evaluation and policy analysis skills, mediation skills, a capacity to listen to and understand the knowledge, analysis and opinions of experts, and to articulate trade-offs among issues raised.

Recommendations

R14.1 A future planning system should place greater emphasis on rigorous analysis of policy options and planning proposals. This will require councils to build their technical capability and skill in areas such as environmental science, economic analysis, policy analysis and evaluation. It would also require strengthening their understanding of Māori worldviews and more effective community engagement including with Māori.

R14.2 In a future planning system, central government should substantially improve its understanding and knowledge of, and engagement with, the local government sector, who are important implementers of much legislation. A greater capability to engage on urban planning issues will help promote more productive interactions between central and local government and achievement of mutual goals.

R14.3 In a future urban planning system, councils should have access to a wide range of skills and knowledge, covering multiple disciplines and processes. This will require councils to build strong capabilities in critical thinking; evaluation and policy analysis; mediation; and articulating trade-offs among issues.

Appendix A: Public consultation

Submissions

INDIVIDUAL OR ORGANISATION	SUBMISSION NUMBER
Allison Tindale	008, DR110
Aquaculture New Zealand	013
Associate Professor Caroline Miller	050
Auckland Council	047, DR086
Auckland District Law Society Inc	DR070
Auckland Regional Public Health Service	030
Azeem Khan	DR116
B Waghorn	009
Bay of Plenty Regional Council	DR111
Berry Simons Environmental Law	DR119
Business Central	DR085
BusinessNZ	018, DR066
Canterbury District Health Board	011, DR059
Catherine Scheffer	039
Christchurch City Council	DR090
Daryl Cockburn	DR106
David Hattam	041
Dr Douglas Fairgray	DR109
Duncan Rothwell	038
Dunedin City Council	032
Employers and Manufacturers Association (Northern)	049, DR087
Environment Canterbury	012, DR072
Environmental Defence Society	DR057
Far North District Council	045
Federated Farmers of New Zealand	021, DR096
Foodstuffs (NZ) Limited	DR108
Fulton Hogan	DR100
Future Proof	043
GNS Science	016
Goodman New Zealand	DR102
Greater Christchurch Urban Development Strategy	044, DR083
Greater East Tamaki Business Association Inc.	046
Greater Wellington Regional Council	DR080
Habitat for Humanity (Christchurch)	DR114
Hamilton City Council	004
Hawke's Bay District Health Board	040
Hill Young Cooper Ltd	006
Horizons Regional Council	025, DR097
Horticulture New Zealand Limited	DR073
ICOMOS New Zealand	048
Institution of Professional Engineers New Zealand (IPENZ)	DR058
Kathleen Vitasovich	DR053
Land Monitoring Forum	DR065

Local Government New Zealand	019, DR113
Masterton District Council	DR054
Mattie Wall	DR064
Meridian Energy	DR092
National Infrastructure Advisory Board	DR104
New Zealand Airports Association	DR081
New Zealand Association for Impact Assessment (NZAIA)	DR105
New Zealand Council for Infrastructure Development	020
New Zealand Institute of Surveyors	DR121
New Zealand Planning Institute	027, DR089
New Zealand Planning Institute Auckland Branch	DR088
New Zealand Society of Soil Science	DR094
New Zealand Telecommunications Forum	022
Ngāti Whātua Ōrākei Whai Maia Limited	DR076
NZCID	DR103
Otago Regional Council	036, DR093
Palmerston North City Council	024, DR062
Planz Consultants Limited	DR060
Ports of Auckland Limited	DR099
Professor Claire Freeman	DR117
Professor Hirini Matunga	052
Progressive Enterprises Limited	DR055
Property Council New Zealand	031, DR118
Public Health South	017
Rangitikei District Council	010, DR071
Regional Public Health and the New Zealand Centre for Sustainable Cities	035
Registered Master Builders Association	026
Resource Management Law Association of New Zealand Inc	DR115
Retail NZ	029, DR074
Rhys Phillips	001
Robert Riddell	003
Rosebank Business Association	051
Royal Forest and Bird Protection Society of New Zealand Inc	DR091
Selwyn District Council	033
Sir Geoffrey Palmer QC and Dr Roger Blakeley	007, DR122
SmartGrowth	042, DR063
Society of Local Government Managers (SOLGM)	DR107
Stephen Milner	014
Sustainable Cities	DR082
Tauranga City Council	DR112
The Architectural Centre	DR123
The New Zealand Initiative	DR075
The University of Waikato	DR079
Toi Te Ora – Public Health Service	015
Trustpower Limited	DR061
Upper Hutt City Council	DR120
Urban Design Forum	37, DR101
Vector Limited	DR098
Waikato District Council	002, DR124

Waikato Regional Council	DR077
Waipa District Council	005, DR056
Water New Zealand	023, DR067
Watercare Services Limited	028, DR069
Wellington Chamber of Commerce	DR084
Wellington City Council	034, DR068
West Coast Regional Council and Grey District Council	DR078
Whanganui District Council	DR095

Engagement meetings

INDIVIDUAL OR ORGANISATION

Adam Thompson
Alistair Bisley
Associate Professor Caroline Miller – Massey University
Associate Professor David Grinlinton – University of Auckland
Associate Professor Kenneth Palmer – University of Auckland
Auckland Council
Auckland Council, Auckland Design Office
Auckland Council, Finance Office
Auckland Council, Te Waka Angamua
Auckland Independent Māori Statutory Board
Bank of New Zealand
Bell Gully
Business New Zealand
Boffa Miskell
BRANZ
David Campbell
David Caygill
David Perenara-O'Connell
Department of Internal Affairs
Doug Arcus
Dr Roger Blakeley
Ecologic Foundation
Economic Development Agencies of New Zealand
Employers and Manufacturers Association
Environmental Defence Society
Environmental Protection Authority
Fletcher Building
Fulton Hogan
Generation Zero
Geoff Dangerfield
Gerald Blunt
Greater Christchurch Urban Development Strategy Partnership
Harvey Brookes
James Whetu
Judge John Hassan
Judge Laurie Newhook
Kevin Guerin
Local Government Funding Agency

Local Government New Zealand
Local Government New Zealand – Metro Sector
Local Government New Zealand – Rural and Provincial Councils
Mark Sowden
Ministry of Business, Innovation & Employment
Ministry for Primary Industries
Ministry for the Environment
Ministry of Transport
Morrison Low
Motu Economic and Public Policy Research
Muna Wharawhara, Te Amorangi Māori – Hamilton City Council
New Zealand Council for Infrastructure Development (now Infrastructure New Zealand)
New Zealand Fish and Game Council
New Zealand Initiative
New Zealand Labour Party
New Zealand Planning Institute
New Zealand Society of Local Government Managers
New Zealand Transport Agency
Ngā Aho Network of Māori Design Professionals
Ngāti Whātua Ōrākei Whai Maia
OliverShaw
Parliamentary Commissioner for the Environment
Papa Pounamu
Professor Hirini Matunga – Lincoln University
Professor Klaus Bosselmann
Professor Paul Spoonley
Professor Peter Skelton
Professor Philippa Howden-Chapman
Property Council New Zealand
Prue Taylor – University of Auckland
Rawiri Faulkner – Greater Wellington Regional Council
Ree Anderson Consulting Limited
Resource Management Law Association of New Zealand Inc.
Retail New Zealand
Royal Forest and Bird Protection Society of New Zealand Inc.
Russell McVeagh – James Gardner Hopkins
Sir Geoffrey Palmer QC
Sir John Hansen
Stuart Shepherd
Tauranga City Council
Te Rūnanga o Ngāi Tahu
Te Rūnanga o Ngāti Whātua
The Treasury
The Treasury, Public Private Partnership Team
Waikato Regional Council
Waikato River Authority
Waikato Tainui
Watercare Services Limited
Wigram Capital Advisors

Better Urban Planning wānanga

Te Noho Kotahitanga Marae, Unitec, Auckland 17 June 2016
Ngā Aho (network of Māori designers) and Papa Pounamu (NZPI Māori Interest group)

Engagement meetings in Australia

Brisbane City Council
Committee for Melbourne
Department of Planning and Environment – New South Wales
Department of State Development – Queensland
Department of Treasury and Finance – Victoria
Dr Owen Donald
Grattan Institute
Greater Sydney Commission
Infrastructure Victoria
Metropolitan Planning Authority – Melbourne
Paul Eagles
Planning Institute of Australia
Property Council of Australia

Seminars

Law and Economics Association of New Zealand – Auckland Independent Hearings Panel
New Zealand Transport & Infrastructure Summit
University of Otago – Sustainable Urban Transport
University of Otago – Urban Health and Sustainability: Affordable Housing
University of Otago – Resilient Urban Futures Annual Meeting

Presentations

BusinessNZ
Local Government NZ metro-mayors group
Local Government NZ rural provincial sector group
NZ Council for Infrastructure Development - Building Nations Symposium
NZ Planning Institute, Auckland
NZ Planning Institute Conference 2016 - The Next Generation Planning System Workshop
Roundtable – Ministry for the Environment, The Treasury, Local Government New Zealand
Regional Council CEOs forum
University of Otago Summer School "Drivers of Urban Change".

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