



DRAFT



Better urban planning

Draft report

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Draft Report

August 2016

The New Zealand Productivity Commission

Te Kōmihana Whai Hua o Aotearoa¹

How to cite this document: New Zealand Productivity Commission. (2016). Better Urban Planning Draft Report. Available from www.productivity.govt.nz/inquiry-content/urban-planning

Date: August 2016

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ISBN: 978-0-478-44035-5 (print)

ISBN: 978-0-478-44036-2 (online)

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Linkedin NZ Productivity Commission

¹ The Commission that pursues abundance for New Zealand

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

About the draft report

This draft report aims to assist individuals and organisations to participate in the inquiry. It outlines the background to the inquiry, the Commission's intended approach, and the matters about which the Commission is seeking comment and information.

This draft report contains the Commission's draft findings and recommendations. It also contains a limited number of questions to which responses are invited but not required. The Commission welcomes information and comment on any part of this report and on any issues that participants consider relevant to the inquiry's terms of reference.

Key inquiry dates

Submissions due on the draft report	03 October 2016
Engagement with interested parties on the draft report	August – November 2016
Final report to the Government	30 November 2016

Why you should register your interest

The Commission seeks your help in gathering ideas, opinions and information to ensure this inquiry is well informed and relevant. The Commission will keep registered participants informed as the inquiry progresses.

You can register for updates at www.productivity.govt.nz/subscribe-to-updates, or by emailing your contact details to info@productivity.govt.nz.

Why you should make a submission

Submissions provide information to the inquiry and help shape the Commission's recommendations in the final report to the Government. Inquiry reports will quote or refer to relevant information from submissions.

How to make a submission

The due date for submissions in response to this report is **3 October 2016**. Late submissions will be accepted, but lateness may limit the Commission's ability to consider them fully.

Anyone can make a submission. Your submission may be written or in electronic or audio format. A submission may range from a short letter on one issue to a substantial response covering multiple issues. Please provide relevant facts, figures, data, examples and documents where possible to support your views. The Commission welcomes all submissions, but multiple, identical submissions will not carry more weight than the merits of your arguments. Your submission may incorporate relevant material provided to other reviews or inquiries.

Your submission should include your name and contact details and the details of any organisation you represent. The Commission will not accept submissions that, in its opinion, contain inappropriate or defamatory content.

Sending in your submission

Web: www.productivity.govt.nz/make-a-submission

Email: info@productivity.govt.nz

Post: Better Urban Planning Inquiry
New Zealand Productivity Commission
PO Box 8036
The Terrace
WELLINGTON 6143
New Zealand

The Commission appreciates receiving an electronic copy of posted submissions, preferably in Microsoft Word or searchable PDF format. Please email the files to info@productivity.govt.nz.

What the Commission will do with the submissions

The Commission seeks to have as much information as possible on the public record. Submissions will become publicly available documents on the Commission's website. This will occur shortly after receipt, unless your submission is marked "in confidence" or you wish to delay its release for a short time. Please contact the Commission before submitting "in confidence" material, as it can only accept such material under special circumstances.

Other ways you can participate

The Commission welcomes feedback about its inquiry. Please email your feedback to info@productivity.govt.nz or contact the Commission to arrange a meeting with inquiry staff.

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Contents

Terms of reference	iii
About the draft report	v
Key inquiry dates	v
Why you should register your interest.....	v
Why you should make a submission	v
How to make a submission.....	v
What the Commission will do with the submissions.....	vi
Other ways you can participate.....	vi
Contacts.....	vi
Terms in te reo Māori	xiii
Overview	1
Why this inquiry is important.....	1
What makes a high-performing city?.....	1
Planning can contribute to wellbeing.....	2
Outcomes from the current system	2
Urban trends in New Zealand	4
A diagnosis of the current planning system.....	4
What changes are needed?	6
A future planning framework.....	7
Issues still to be resolved.....	10
Conclusion.....	11
1 About this inquiry	13
1.1 What the Commission has been asked to do.....	14
1.2 The current planning system.....	15
1.3 The changing nature of urban areas	15
1.4 Land is valued for many reasons.....	16
1.5 The Commission’s approach.....	17
1.6 Guide to this report.....	19
2 High-performing cities	20
2.1 Introduction.....	21
2.2 The benefits of high-performing cities.....	21
2.3 Why do cities grow?.....	25
2.4 Agglomeration costs limit the growth of cities.....	29
2.5 What makes a high-performing city?.....	30
2.6 Coordinating local and national government policy.....	33
2.7 Conclusion.....	35
3 A rationale for planning	36
3.1 Introduction.....	37
3.2 Rationales for planning in an urban setting	37
3.3 Planning, property rights, regulation and markets.....	46
3.4 Types of plans	49
3.5 Planning for cities as complex, adaptive systems.....	56
3.6 Conclusion.....	63
4 Urban trends	64
4.1 Introduction.....	64
4.2 How urbanised is New Zealand?.....	65
4.3 Population growth and decline.....	66
4.4 Demographic trends.....	70

4.5	Location of people, houses and jobs	72
4.6	Responding to growth and decline	82
4.7	Conclusion.....	87
5	The urban planning system in New Zealand	88
5.1	Introduction.....	88
5.2	Role clarity	89
5.3	Governance and decision rights.....	93
5.4	Decision review.....	104
5.5	Funding	106
5.6	Culture and capability	109
5.7	Communication and engagement	110
5.8	Ensuring the principles of the Treaty of Waitangi are taken in account.....	112
5.9	Systematic and cost-effective approaches to keeping regulation and policy up to date ...	113
5.10	Monitoring, leadership and management from the centre	115
5.11	Increasing legislative complexity, declining coherence and accessibility	121
5.12	Conclusion.....	122
6	Outcomes from the current system	124
6.1	Introduction.....	125
6.2	Air quality	126
6.3	Drinking and recreational water quality	131
6.4	Greenhouse gas emissions, and resulting rising sea levels from climate change	135
6.5	Sufficient urban development capacity.....	137
6.6	Congestion and road safety.....	140
6.7	Core infrastructure and services	143
6.8	Affordability of infrastructure and services over time.....	149
6.9	To what extent has the planning system contributed to these outcomes?.....	151
6.10	Conclusion.....	157
7	Regulating the built environment	158
7.1	Introduction.....	159
7.2	What characteristics should an urban planning system have?	159
7.3	How does current practice stack up?	160
7.4	What explains current practice?.....	173
7.5	Options for a future planning system.....	180
7.6	How to encourage better use of regulatory discretion?.....	194
7.7	Conclusion.....	195
8	Urban planning and the natural environment	196
8.1	Introduction.....	197
8.2	The natural environment in urban areas	197
8.3	Shortfalls in the existing system.....	198
8.4	Features of a future planning system	206
8.5	Conclusion.....	221
9	Urban planning and infrastructure	222
9.1	Introduction.....	222
9.2	What is infrastructure and why is it important for urban growth?	223
9.3	Current issues with the provision and planning of infrastructure.....	226
9.4	What is causing these problems?	229
9.5	Responses	232
9.6	Can the institutional arrangements within which water services are provided be improved?.....	238
9.7	Making provision for city-shaping projects.....	241
9.8	Conclusion.....	244
10	Infrastructure: funding & procurement.....	246

10.1	Introduction.....	247
10.2	The costs of infrastructure.....	247
10.3	Efficient funding.....	248
10.4	What tools are currently available to councils to fund infrastructure?.....	250
10.5	Barriers to efficient funding.....	251
10.6	Removing barriers to efficient funding.....	256
10.7	Are more far-reaching changes worth considering?.....	261
10.8	Procurement of infrastructure.....	263
10.9	Conclusion.....	271
11	Urban planning and the Treaty of Waitangi.....	272
11.1	Māori and urban development.....	273
11.2	The Treaty in legislation and jurisprudence.....	279
11.3	The Treaty and protection of Māori interests in planning legislation.....	282
11.4	The current law: Meshing two traditions.....	288
11.5	How well does the planning system recognise and protect Māori interests?.....	294
11.6	How would a new planning system provide recognition and protection of Māori interests?.....	299
11.7	Conclusion.....	302
12	Culture and capability.....	303
12.1	Introduction.....	303
12.2	What is culture?.....	304
12.3	Influences on culture and capability.....	306
12.4	Desirable cultural attributes for planning.....	319
12.5	What skills and capabilities are required for planning?.....	321
12.6	Capability gaps.....	326
12.7	Touchstones for successful reform.....	328
12.8	Conclusion.....	330
13	A future planning framework.....	331
13.1	Introduction.....	331
13.2	What drives cities?.....	331
13.3	What land-use planning can contribute.....	331
13.4	The current planning system – the Commission’s diagnosis.....	331
13.5	What changes are needed?.....	332
13.6	What would these mean for the operation and design of planning in the future?.....	333
13.7	Issues still to be resolved.....	339
13.8	Conclusion.....	340
	Summary of questions.....	342
	Findings and recommendations.....	345
	Appendix A Public consultation.....	360
	Submissions.....	360
	Engagement meetings.....	361
	Better Urban Planning wānanga.....	362
	Australia engagement meetings.....	362
	Seminars.....	363
	Presentations.....	363
	References.....	364

Tables

Table 3.1	Essential infrastructure services associated with land use.....	43
Table 4.1	Net internal migration across New Zealand’s fast growing cities, 2008–2013.....	69

Table 4.2	Selection of New Zealand spatial plans.....	84
Table 5.1	RMA national tools currently in force.....	94
Table 5.2	Demographics of submitters on the Auckland 2015–2025 Long-term Plan	112
Table 5.3	Local authority non-financial performance measures.....	117
Table 6.1	Proportion of population served by compliant water supplies, by zone size	132
Table 6.2	Proportion of population served by compliant water supplies, 2010–2011 to 2014–2015	132
Table 6.3	Trends for water clarity, nutrients and macroinvertebrate community index at NIWA sites, 1989–2013.....	133
Table 6.4	Median water quality scores by dominant land cover, 2009–2013	133
Table 6.5	New Zealand’s emissions by sector in 1990 and 2014.....	136
Table 6.6	Ten-year average renewals expenditure to depreciation, by asset class, as forecast in 2012–2022 long-term plans	150
Table 7.1	Percentage of processed land use and subdivision resource consent applications that are notified, 1997/98–2014/15	160
Table 7.2	Average times to process non-notified land use and subdivision resource consent applications, 2014/15.....	161
Table 7.3	Commercial and industrial zones in selected operative and proposed District Plans	168
Table 9.1	Responsibility for land transport functions in Wellington.....	242
Table 10.1	Net present value of infrastructure investment for local councils, 2016.....	254
Table 11.1	Urban Māori within Auckland, Hamilton, Wellington and Christchurch, 2013	274
Table 12.1	The perceptions that overseas planning institutes have about the role of planning	311
Table 12.2	Planning schools in New Zealand	313
Table 12.3	Behaviours that do not reinforce good planning culture	321
Table 12.4	Knowledge and skills needed for core planning functions	322
Table 13.1	Key differences between the current and future planning systems.....	337

Figures

Figure 1	Two possible future legislative models	10
Figure 2.1	Distribution of New Zealand's population across cities, 2015	21
Figure 2.2	Labour productivity in selected New Zealand cities, compared to the rest of New Zealand, 2012.....	23
Figure 3.1	Summary of principles for allocating regulatory roles	53
Figure 4.1	Agglomeration Index for OECD countries, 2008.....	66
Figure 4.2	Average yearly population growth of New Zealand main urban areas, 1996–2015.....	67
Figure 4.3	Population change of urban areas, 1996–2015	67
Figure 4.4	Population growth projections for New Zealand main urban areas, 2013–2043.....	68
Figure 4.5	Projected population change of urban areas, 2013–2043.....	68
Figure 4.6	Age structure of selected New Zealand territorial authorities, 1996 and 2013.....	71
Figure 4.7	Components of population change in Auckland, 1997–2015	72
Figure 4.8	Age structure of Auckland vs rest of New Zealand, 2013.....	72
Figure 4.9	Ethnic structure of Auckland vs rest of New Zealand, 2013	72
Figure 4.10	Percentage change in population-weighted density for New Zealand cities	74
Figure 4.11	Population-weighted densities of Australasian cities, 2011 and 2013	74
Figure 4.12	The contribution to dwelling growth by distance from centre of four cities.....	75
Figure 4.13	Absolute change in the dwelling density of Auckland, 2001–2013.....	76
Figure 4.14	Location of jobs in knowledge-intensive services, 2015.....	77
Figure 4.15	Job growth by sector in New Zealand, 2000–2015	77
Figure 4.16	Share of employment growth by distance from the centre of four cities, 2000–2015	78
Figure 4.17	Absolute changes in employment density in Auckland, 2000–2015.....	79
Figure 4.18	Most and least preferred dwelling type to live in, 2015	80
Figure 4.19	Preference between size and proximity to urban centre by age, 2015	80
Figure 4.20	Income and qualification distribution for New Zealand cities, 2013.....	81
Figure 5.1	Hierarchy of RMA Plans	93
Figure 5.2	Types of local authorities.....	94
Figure 5.3	Activity classifications under the Resource Management Act.....	95
Figure 5.4	RMA Plan preparation process.....	96
Figure 5.5	Percentage of resource consent decisions made, by decision maker, 1997/98–2012/13	98
Figure 5.6	The LTMA planning hierarchy	103
Figure 5.7	Summary of local government revenue sources, 2013–2014	107

Figure 5.8	Forecast sources of council capital funding, 2016	107
Figure 5.9	2015–2018 National Land Transport Fund revenue and investment flows.....	108
Figure 5.10	Percentage of councils monitoring the effectiveness and efficiency of their plans and policy statements	114
Figure 6.1	National yearly average concentrations of PM10, 2006–2013.....	126
Figure 6.2	Yearly average particulate levels in major Australian and New Zealand cities	127
Figure 6.3	Yearly average PM2.5 exposure levels of an average resident, by OECD country.....	128
Figure 6.4	Yearly average nitrogen dioxide concentration levels at six highway sites, 2007–2013	129
Figure 6.5	Exceedances of WHO sulphur dioxide daily guideline, 2005–2013.....	130
Figure 6.6	Maximum ozone concentrations in 8-hour periods, 1996–2013.....	131
Figure 6.7	Nominal per-hectare land prices in major New Zealand cities by type, 1996–2014	137
Figure 6.8	Gross adjusted disposable income spent on housing, by OECD country, 2012	138
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.....	139
Figure 6.10	Share of New Zealand’s population living in crowded and severely crowded housing, 1991–2013.....	140
Figure 6.11	Morning peak traffic congestion in selected New Zealand cities, 2003–2015	141
Figure 6.12	All-day traffic congestion in selected New Zealand cities, 2003–2015	141
Figure 6.13	Fatal crashes, on a per-capita and per-vehicle basis, 1950–2014	142
Figure 6.14	Injury crashes, on a per-capita and per-vehicle basis, 1950–2014.....	142
Figure 6.15	Yearly road deaths per 100 million kilometres travelled, 2001 and 2013	142
Figure 6.16	Proportion of residents reporting they have “easy” or “very easy” access to green spaces	143
Figure 6.17	Proportion of population living within 500m of a bus stop, 2007/08 and 2008/9	144
Figure 6.18	Million hours spent travelling each year, by mode, for various years since 1989.....	144
Figure 6.19	Million public transport trip legs each year by people aged over 5, for various years since 1989.....	145
Figure 6.20	Condition Index performance, by type of road, 2006–2015.....	146
Figure 6.21	Pavement Integrity Index performance, by type of road, 2006–2015.....	146
Figure 6.22	Smooth Travel Exposure performance, by type of road, 2006–2016.....	147
Figure 6.23	Percentage of the population connected to a wastewater treatment plant, early 1990s to 2013.....	147
Figure 6.24	Municipal waste generated per capita, 2013	148
Figure 6.25	Estimated yearly emission index of key pollutants from road transport, 2001–2013.....	154
Figure 6.26	Yearly emissions from burning wood or coal for home heating, 2006 and 2013	155
Figure 6.27	Yearly average population growth for OECD countries, 2004–2013	156
Figure 6.28	Yearly average absolute population growth 2004–2014.....	156
Figure 7.1	Wellington City Council centres hierarchy	163
Figure 7.2	Council responses to questions on changes in the use of different activity classifications in their RMA Plans over the past 10 years	169
Figure 7.3	Nominal per-hectare prices of land in major New Zealand cities, by type, 1996–2014.....	173
Figure 7.4	Survey responses to the statement “local interest groups drive planning decisions”	174
Figure 7.5	Local authority responses to the statements.....	192
Figure 10.1	Whole-of-life costs for public works.....	247
Figure 10.2	Infrastructure costs in Auckland by development density, 2015.....	248
Figure 10.3	How important is the cost of new infrastructure in influencing the rate of residential development?	252
Figure 10.4	How important are city budget constraints in influencing the rate of residential development?	252
Figure 10.5	Local authority response to the statement.....	253
Figure 10.6	Local authority response to the statement.....	255
Figure 10.7	Local authority response to the statement.....	257
Figure 11.1	Conceptualising urban Māori.....	274
Figure 11.2	Councils’ perceptions of barriers to engagement with iwi/Māori on planning	297
Figure 12.1	Sources of professional and organisational culture	305
Figure 12.2	Levels of culture	305
Figure 12.3	Reasons for professional membership not being required.....	316
Figure 12.4	Influences on planning culture	319
Figure 12.5	Number of students enrolled in planning courses, 2007–2014	324
Figure 12.6	Areas of significant capability gaps	326
Figure 12.7	Institutional context of planning	329
Figure 13.1	Two possible future legislative models	339

Supplementary documents

This report has been informed by the following supporting documents, which are available from www.productivity.govt.nz/inquiry-content/urban-planning

Colmar Brunton. (2016). *Productivity Commission Urban Planning Council Survey Report*. Report prepared for the New Zealand Productivity Commission.

McDermott, P. (2016). *Culture and capability in the New Zealand planning system*. Report prepared for the New Zealand Productivity Commission.

Miller, C. (2016). *Culture and capability within the New Zealand planning system*. Report prepared for the New Zealand Productivity Commission.

Ngā Aho & Papa Pounamu. (2016). *Better Urban Planning - Report from Māori Built Environment Practitioners Wānanga*. Edited by Desna Whaanga-Schollum, Biddy Livesey, Richelle Kahui-McConnell and Dr Diane Menzies. Commissioned by the Productivity Commission. Tāmaki Makaurau, Aotearoa New Zealand.

Palmer, K. (2016). *Legal issues in the New Zealand planning system: Compendium*. Prepared for the New Zealand Productivity Commission.

KEY

Q

Questions

F

Findings

R

Recommendations

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 international readers.

Term	Description
ahi kā	Burning fires of occupation, continuous occupation – title to land through occupation by a group, generally over a long period of time
Aotearoa	Māori name for New Zealand
awa	River, stream, creek
hapū	Kinship group, clan, tribe, subtribe
iwi	Often translated as “tribe”. Iwi is a collection of hapū (clans) that are composed of whānau (defined below). The link between the three groups is genealogical.
kainga	Village, settlement, habitation
kaitiaki	Trustee, minder, guard, custodian, guardian, caregiver, keeper, steward
kaitiakitanga	Guardianship, stewardship, trusteeship, trustee
kotahitanga	Unity, togetherness, solidarity, collective action
mahi	Work, practice, operation
mahinga kai	Garden, cultivation, food-gathering place
mana	Prestige, authority, control, power, influence, status, spiritual power, charisma
mana whenua	The iwi or hapū who are recognised as deriving mana (authority/status) from their ancestral connection to a particular piece of land or stretch of coastline
manaaki	Support, hospitality, kindness, generosity
manaakitanga	The process of showing respect, generosity and care for others. It has an overtone of hospitality towards those outside a group one identifies with. In its simplest definition (hospitality), all Māori groups or whānau will exercise manaakitanga at some time.
marae	Literally “courtyard” – the open area in front of the whareniui (meeting house), where formal greetings and discussions take place. Often also used to include the complex of buildings around the marae.
mātauranga Māori	Māori knowledge – the body of knowledge originating from Māori ancestors, including the Māori worldview and perspectives, Māori creativity and cultural practices
mātāwaka/mataa waka	Refers to the Māori population living in an area who are not members of a mana whenua iwi or hapū of that area (different sources use different orthography)
maunga	Mountain
mauri	Life principle, vital essence, special nature – the essential quality and vitality of a being or entity – also used for a physical object, individual, ecosystem or social group in which this essence is located
mauritanga	The process of protecting, supporting or enhancing mauri – the life principle or vital essence of a physical object, individual, ecosystem or social group
orangatanga	The process of protecting, supporting or enhancing oranga – welfare, health
Pākehā	New Zealander of European descent; literally English, European or foreign
papakāinga	Original home, home base, village, communal Māori land
pouhere taonga	New Zealand Historic Places Trust

Term	Description
puna	Spring, well, pool
rangatira	Chieftain, chieftainess, master, mistress, boss, supervisor, employer, landlord, owner, proprietor
rangatiratanga	Contested term in the context of Te Tiriti o Waitangi. It can refer to “chieftainship” or “chiefly authority and leadership”. Other interpretations include “sovereignty” and “autonomy”.
rohe	Boundary, district, region, territory, area, border (of land)
Rūnanga	Governing body associated with an iwi
taiao	Natural environment
takutai moana	Coast, foreshore and seabed
Tāmaki Makaurau	Auckland
tangata whenua	Literally “the people of the land”
tāonga	That which is precious or treasured
tauīwi	Non-Māori people
taunga hou	Literally “new anchor” – people of Māori descent and Māori ethnicity, but who through choice or circumstances do not link back to their own iwi/hapū
taura here	Binding ropes, urban kinship group, domestic migrants, kinship link
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.
tikanga	Literally “the things that are correct”. Sometimes translated as “protocol” or “customary practice”, tikanga is the customary system of values and practices that have developed over time and are deeply embedded in the social context.
tohu	Sign, mark, symbol, emblem, advice, suggestion, guidance
ture	Law, rule, statute, act (of parliament)
urupā	Burial place
wāhi tapu	Sacred place, sacred site – a place subject to long-term ritual restrictions on access or use (eg, a burial ground or a battle site)
wairuatanga	Spirituality
wānanga	Seminar, conference, forum; tribal knowledge, lore, learning; in modern times used to refer to a publicly owned tertiary institution that provides education in a Māori cultural context
whaitua	Region, designated area, territory
whakapapa	Genealogy, genealogical table, lineage, descent
whānau	Typically translated as “families”. Whānau may refer to nuclear or extended families.
whānaungatanga	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	Land

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 will look beyond the current resource management and planning system to consider fundamentally different ways of delivering urban planning. The aim of the inquiry 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 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 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 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” (Ngā Aho & Papa Pounamu, 2016, p. 31).

But the growth of cities also creates costs as a result of people working and living in close proximity to one another. 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 segregation of people across space by income. 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 can be effectively 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 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 or residential units. As a result of these wider social developments, cities evolve in unexpected and unpredictable ways.

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, populations and demographic patterns, 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 that 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 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 also create the opportunities and conditions that enable people and firms to make their 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 ensure that communities have access to the public spaces, facilities and amenities that help support wellbeing and vibrancy in cities

However, there are limits to what planning can achieve, and attempts to steer cities in particular directions can be harmful. To make the greatest contribution to wellbeing, planning systems need to be open to growth, able to respond to unexpected change, and respectful of the decisions made by 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 the extent to which the following four goals are likely to be achieved:

- flexibility and responsiveness - ability to change land uses easily;
- provision of sufficient development capacity to meet demand;
- mobility of residents and goods to and through the city; and
- ability to fit land-use activities within a defined biophysical envelope.

Outcomes from the current system

An important avenue of investigation for this inquiry is 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, service and infrastructure provision and planning. 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 focus of this inquiry on urban planning, the Commission has focussed 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 population growth pressures;
- 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.

Available data provides a mixed picture of the performance of the urban planning system in New Zealand. (Box 2)

Box 2 **Outcomes from the current urban planning system**

- Air quality generally complies with national standards, is good by international levels, and has improved against some measures. Despite these improvements, 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.
- 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.
- 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. Partly 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 public transport 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 appear to score somewhat poorly against a number of international benchmarks.

The ability of councils to change or improve 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 described above 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. For environmental outcomes, these dynamics include pressure both from some sectors not to regulate pollution stringently. In the urban environment, these dynamics include pressure from incumbents 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.

Urban trends in New Zealand

The inquiry investigated a number of important urban trends in New Zealand cities. A rich picture of spatial transformation can be observed, which raise important policy issues and insights for this inquiry (Box 3).

Box 3 **New Zealand urban trends**

- New Zealand is a largely urbanised country, yet this result 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 and small towns. Other common definitions lead to lower levels of urbanisation.
- Population growth in New Zealand has been unequally distributed, with much growth concentrated in or near Auckland while most other main urban areas have grown either modestly or not at all. Populations have mostly declined in smaller urban areas. These trends are projected to continue.
- Auckland is larger, younger, denser, faster growing and more ethnically diverse than other New Zealand cities. Strong natural increase and international migration have driven its growth.
- New Zealand cities tend to grow out rather than up. Except for Wellington, recent urban growth has largely occurred in outer suburbs.
- New Zealanders in cities are living closer together. In particular, the populations of Auckland and Wellington have become significantly denser over the last 15 years. Both cities are among the densest in Australasia, although they are not very dense by international standards.
- Significant income and education disparities exist in New Zealand's largest cities. 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 meet this goal. While cities have become denser overall, growth tends to be accommodated largely through developing land in outer suburbs, rather than through the sought-after intensification of inner-city areas. Barriers to densification include a lack of development capacity and community support for inner-city living.

A diagnosis of the current planning system

The Commission has reviewed the component parts of New Zealand's urban planning system and identified a number of institutional, legislative, regulatory and process deficiencies that hamper its performance and achievement of the above urban planning goals.

Institutions, legislation and processes

The starting point for reviewing New Zealand's urban planning system is the efficacy and workability of the three primary statutes – the RMA, the LGA, and the LTMA. 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 amendment to the planning statutes have increased their complexity and reduced their coherence.

Fundamentally, the planning system aims to deal with conflicts between competing demands for resources (eg, land, clean air, fresh water), competing citizen interests and competing values (eg, development, amenity, and environmental protection). Yet the current system makes the resolution of these conflicts harder than it should be.

An important conclusion of this inquiry is that the planning legislation lacks clarity and focus. Chapters 7 and 8 outline how ambiguous and broad language in the RMA and LGA has led to a regulatory overreach in urban areas, and a lack of stringency in the regulation of the natural environment. Overreach in urban areas has created unduly restrictive rules that obstruct development, unhelpful exercises of regulatory discretion and unnecessary conflicts and costs.

Setting clear priorities within the planning system is particularly difficult (with the exception of the land transport system). The broad framing of Part 2 of the RMA (which sets out the Act's purpose and principles) provides limited guidance on how to differentiate important from less-important natural environmental issues, and does not give prominence to urban issues. Central government has a number of tools it can use to emphasise particular issues or approaches (such as National Policy Statements (NPSs) and National Environment Standards (NESs)). Yet such instruments can sometimes be slow to prepare and translate into local plans and policies, and have no clear hierarchy. It is unclear, for example, what a council should do when it faces conflicts between different national instruments.

At the local level, 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)

Planning decisions have local and national impacts. A lack of central government presence in the urban planning system has meant that the planning system has not represented the national interest well for many years. This has led to unbalanced decisions. For example, decisions that suit some local concentrated interests, but have harmful wider effects, most notably rising land and housing costs.

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.

Finally, another important finding of this inquiry is that the planning 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 indiscriminating approach to avoiding adverse effects, and infrastructure funding tools that do not adequately reflect or recover costs or account for the risk placed on councils also inhibit the system's ability to respond promptly to growth pressures.

What changes are needed?

The Commission has identified a number of priority areas for change.

Clearer distinctions between the built and natural environment

The natural and built environments require different 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, 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 the same framework, a future planning system should clearly distinguish between the natural and built environments, and clearly outline how to manage the interrelationship between the two.

Greater prioritisation

A future system should be clearer about its priorities, especially at a national level and regarding land use regulation and infrastructure provision. New Zealand's system is unusual by international standards in that central government has relatively blunt tools with which to signal its priorities, and key legislation (ie, the RMA) provides little guidance. 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). This reflects unresolved tensions within the RMA around the balancing of environmental and socio-economic interests. One area where the system adequately identifies priorities is land transport management. A future planning system would benefit from applying elements of this model more broadly.

More responsive infrastructure provision

A future planning system needs to be responsive in providing key infrastructure, especially where cities are facing high population growth. Infrastructure is a binding constraint on increases in the supply of development capacity, and on the ability to respond to growth pressures. A future planning system needs a clearer statutory framework for water services, funding mechanisms that better recover costs and reflect the risks involved, better procurement practices, and tools for councils to manage pressures on existing assets.

A more restrained approach to land use regulation

A future planning system should only apply rules where there is a clear net benefit, where the link to externalities is clear, and where alternative approaches are not feasible. This implies:

- broader zones that allow more uses,
- greater reliance on pricing and market-based tools rather than rules;
- less use of subjective and vague aesthetic rules and policies;
- greater use of 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); and
- clearer and broader "development envelopes" within which low-risk development is either permitted or only subject to minimal controls.

Stronger capabilities within councils and central government

A key lesson from the implementation of the RMA is that successfully introducing a new planning regime is not just about replacing legislation. It also requires changes to the underlying institutions – both formal and informal – and capability and culture. In particular, a future planning system would place greater emphasis on rigorous analysis of policy options and planning proposals. Councils will need to build their technical capability in areas such as environmental science and economics. Soft skills such as communication, mediation and facilitation skills will need strengthening, as well as an understanding of Māori worldviews.

Central government will also need to improve its urban planning capability and knowledge of the local government sector more generally (Chapter 12).

A future planning framework

This section sets out what a high-performing planning system would look like. As such, it provides a framework against which to judge current practice and potential reforms in resource management, planning and environmental management in urban planning.

A presumption that favours development in urban areas, subject to clear limits

The legislation governing urban planning would clearly specify that the primary purposes of the planning system are to:

- enable development and changes in land use;
- ensure the provision of sufficient development capacity to meet demand; and
- promote the mobility of people and goods to and through cities.

The legislation would also make clear that urban development would need to fit within biophysical limits (specified through the Government Policy Statement (GPS) on environmental sustainability, outlined below).

Clearer legislative purposes will provide better guidance to councils on the sorts of land use rules and policies that should be put in place. A permanent independent hearings panel (IHP) would then scrutinise these proposed rules against the legislative purposes (Chapter 7). Clearer purposes would also give councils greater scope to accept only private Plan changes that promoted the goals of flexibility, sufficient supply, mobility, or fitting urban development within biophysical limits.

Factors that should help to encourage more responsive infrastructure provisions in support of development include:

- the greater availability of value capture mechanisms (such as targeted rates that capture the uplift that arises from rezoning);
- more use of pricing for water and roads;
- clearer statutory arrangements for water infrastructure; and
- better aligned legislative planning requirements (Chapters 9 and 10).

Councils would be encouraged to adopt more sophisticated approaches to procuring infrastructure, and central government could provide greater advisory support to local authorities wishing to use such tools (eg, public-private partnerships).

A clearer set and hierarchy of priorities for the natural environment

In a future planning system, central government would issue a GPS on environmental sustainability that would have to be given effect to in local plans. This GPS would differ from the current NPSs and NESs in that it would lay out clear environmental priorities and articulate principles to help decision makers prioritise environmental issues when faced with scarce resources or conflicting objectives.

The aims of replacing NESs and NPSs with a single GPS on environmental priorities would be to:

- focus the efforts of the planning system on protecting aspects of the natural environment most at risk or under pressure;
- provide clearer guidance to councils on where to put their resources;
- encourage central government to regularly review the state of the environment and identify priority areas for action; and

- coordinate the environmental protection efforts of local government (through planning) and central government (through its regulatory and funding levers).

As it can take some time to change plans and implement new policies, the GPS will need to have some longevity.

Ideally, the development of each GPS would be informed by scientific advice on the state of the environment, and on the most significant threats to its health. Chapter 8 cited some criteria from the Parliamentary Commissioner for the Environment which could be used to guide advice on an environmental GPS.

More, and more robust, environmental management tools

Rather than relying primarily on rules and other command and control methods, councils would have access to a wider array of policies, including market-based tools. Under a future planning system, central and local government would work more closely to:

- develop standardised methods, data and assumptions to inform effective and locally tailored strategies for adapting to climate change; and
- remove barriers to the development and use of market-based instruments.

More effective management of cumulative effects is a priority for any future planning system. The existing “predict and control” approach struggles to cope with the complexity and uncertainty of natural systems. A greater emphasis on adaptive management is needed.

Infrastructure pricing and funding that more accurately reflects actual costs, use and impacts

The prices charged for installing and using infrastructure under a future planning system would better reflect the actual costs of providing and operating those assets, and the negative externalities created by overuse. This will help to encourage more efficient locational decisions by developers, ease congestion and discourage wasteful use of scarce resources. It would also help to avoid unnecessary investment and debt costs for councils. A clearer process for central and local government to identify, assess and agree on large-scale “city-shaping” infrastructure works should help projects with wider spillover benefits to emerge and succeed. There is also scope for local authorities to make greater use of innovative procurement models, such as public-private partnerships. A future planning framework should ensure councils have the capability to use such infrastructure delivery models (Chapters 9 and 10).

Rezoning and regulatory change that adapts more rapidly to circumstances

Instead of every change in Plan provisions and land use regulations going through the Schedule 1 process, under a future planning system a larger share of land use rules would change automatically in response to pre-identified, objective triggers. In urban areas, this could include land prices hitting certain thresholds or the installation of specified infrastructure. In rural areas, land use rules could be linked to predetermined environmental standards (eg, if nutrient levels in rivers increase beyond particular levels, more stringent controls could be “switched on”). This would provide a more responsive regulatory environment.

Similarly, where price differentials between land zoned for development and non-developable land at the fringe of cities exceed thresholds set by central government, local authorities will be obliged to provide more development capacity, either through “upzoning” within established areas or through rezoning and servicing new greenfields land (NZPC, 2015). Ensuring that the commitment to bring land price inflation under control is credible, and to act where the land price threshold is exceeded, will require the Crown to have the powers and capacity to ensure land is rezoned and serviced, if necessary.

A focus on those directly affected by change, not third parties

Notification requirements in a future planning system would be more squarely focused on those directly affected by a resource consent application or land use Plan change. This would better align the operation of

the system with its fundamental purpose of managing negative externalities. It would also reduce the opportunities for vexatious litigation, and increase the certainty and timeliness of decisions.

The general public would continue to be able to participate in the processes for reviewing land-use plans, but the ability to appeal council decisions on a Plan would be limited. Only those individuals or groups who could demonstrate that the changes in policy or rules would directly affect them would be able to appeal. Where the council accepted the recommendations of the permanent IHP on a change or review of a Plan, no individual or group could then appeal.

A different role for the Environment Court

The Environment Court would play a different role under the planning system proposed by the Commission. The introduction of a permanent IHP, narrower notification criteria, and more limited abilities to appeal council decisions on regulatory plans for land use, would reduce the Court's workload. This would help provide greater finality and certainty about regulatory decisions.

The Court would, however, still be needed to hear cases where:

- councils rejected recommendations from the IHP;
- directly affected parties wished to challenge a consent decision;
- applicants wanted to challenge resource consent decisions or conditions; or
- decisions of national importance were "called in".

The Environment Court would also continue to have roles and functions under other statutes.

More representative, less rigid consultation

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

- encourage and enable participation by people affected, or likely to be affected, by a decision; 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 laid 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 (Chapter 7).

Continued 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 11). So there should continue to be an expectation under a future planning system that councils will engage with Māori/iwi early on in the development and review of Plans, and clear provisions to ensure that engagement. This 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).

Spatial planning as a core, and fully integrated, component

Spatial plans should be a standard and mandatory part of the planning hierarchy in a future system. New and expanded infrastructure increases the supply of development capacity and can improve the mobility of people and goods. Signalling the future location and timing of infrastructure investment is therefore important for the efficient and effective operation of land markets, and for the achievement of the goals of a future planning system. Ensuring that sufficient land (for public streets, other infrastructure networks and public open spaces) has been secured and planned ahead of development is also important for the efficient future growth and operation of cities.

In recent years a number of local authorities have recognised these benefits and adopted spatial plans that lay out their long-term vision for urban development and help to align land-use planning and the provision of infrastructure. Yet these spatial plans have no official status under the RMA, which leads to frustrating duplication of process.

Making spatial plans a formal and mandatory part of the planning system risks adding to the system’s overall cost and complexity. Given the focus of spatial plans on infrastructure and transport planning, there would seem to be opportunities to partially or fully replace the infrastructure strategy requirements of the LGA and regional land transport plan requirements of the LTMA with a properly defined spatial plan. Removing some other elements of the current planning hierarchy may also be possible.

To ensure that spatial plans are sufficiently flexible to cope with the uncertain growth and evolution of urban areas over time, councils should use real-options analysis when preparing them.

Central government as a more active partner in the planning process

Central government would more clearly signal the national interests in planning decisions, and would monitor the overall performance of the planning system in meeting national goals (ie, flexibility, sufficient development capacity and accessibility) and environmental priorities.

Because poor local planning decisions can create wider social costs and residual risks for the government, central government will continue to need intervention powers. These would include the ability to override local plans in a limited set of circumstances, to co-ordinate or require common land use regulatory approaches to specific issues (eg, the installation of utilities), and to direct council infrastructure units or providers where there is a need to ensure a credible commitment to reducing land prices.

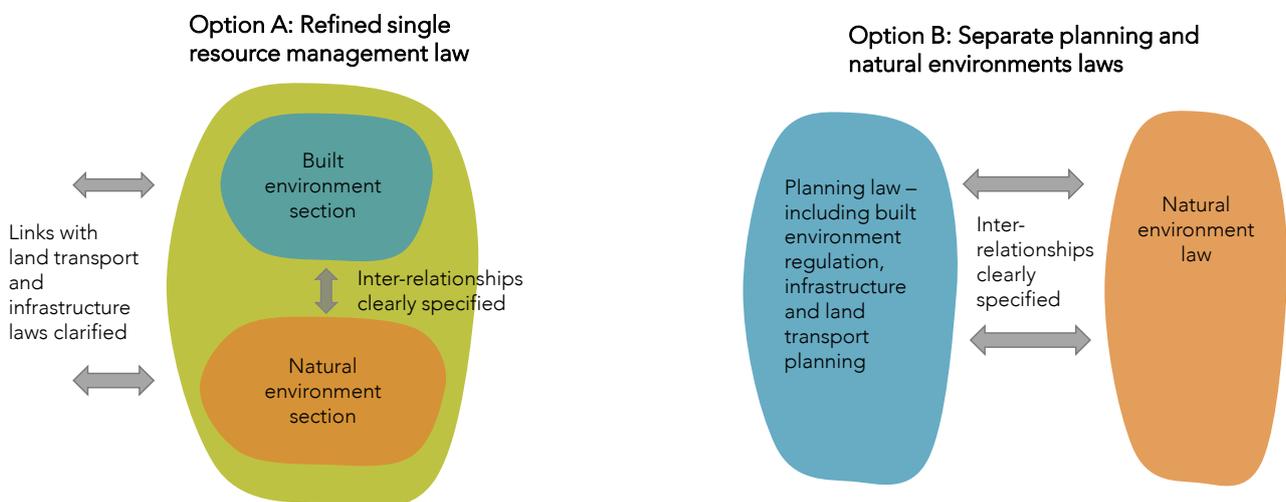
Issues still to be resolved

The Commission is seeking feedback on two issues still to be resolved

Legislative separation of planning and environmental protection?

Setting the goal of having clearer distinctions between the natural and built environments raises the question of how to reflect this in legislation. The Commission has considered two approaches – retention of a single resource management law, but with clearly separated natural and built environment sections; and establishment of two laws, which regulate the built and natural environment separately (Figure 1). Under either approach, the Commission envisages land use legislation having separate purposes and definitions for the natural and built environments. Feedback is sought on which approach would work better.

Figure 1 Two possible future legislative models



Centralisation of environmental enforcement, or greater oversight of regional councils?

Making progress on environmental priorities will require more robust monitoring and enforcement. Performance by regional councils on this front has been disappointing. Monitoring efforts are often under-resourced and enforcement decisions show evidence of some political interference (Chapter 6). This raises the question of whether different institutional arrangements would lead to better performance.

One option is to expand the Environmental Protection Authority's (EPA) role to take over national environmental regulation, enforced and monitored through a network of regional offices. A less radical alternative would be to increase oversight of council monitoring and enforcement activities. For example, the EPA or Environment Ministry could be explicitly given responsibilities to audit and report publicly on the monitoring and compliance performance of regional councils.

Feedback is sought on which of these two options would be the most effective in monitoring and enforcing environmental regulation.

Conclusion

High-performing cities have planning arrangements that enable them to succeed in a complex and dynamic environment with unpredictable long-term outcomes. Well-designed urban planning systems can contribute to greater wellbeing by helping to manage the inherent conflicts between competing citizen interests, competing values, and competing demands for resources. By providing the necessary institutional and regulatory architecture for people to make choices about their future, planning systems help to maximise the considerable benefits of living and working in cities while minimising the costs.

However, while urban planning has a legitimate and important role in addressing distinct problems of urban development, there are limits to what planning can achieve. Overly intrusive and restrictive planning will sap the dynamism of cities and erode the benefits from living and working in cities.

A review of the component parts of New Zealand's urban planning system has identified a number of deficiencies that are discussed in this report. The Commission has found that the current planning system is slow to adapt and is risk averse. Processes for updating land use rules are slow and uncertain. There is too much unnecessary, poorly-targeted regulation. Many councils have sought to manage or direct the evolution of cities in highly-detailed and prescriptive ways. Resistance to change from local residents and barriers to funding new infrastructure also inhibit a city's ability to grow and respond to change.

The system's problems have their roots in both its design and implementation. Ambiguous and broad language in current planning laws has led to overly restrictive rules in urban areas, 'scope creep', and an under-emphasis on the natural environment. The relevant primary legislation does not give prominence to urban issues, and it is difficult to set clear priorities for the natural environment. The lack of central government guidance has led to decisions that suit local interests, but which have negative wider impacts such as rising land and housing prices.

A future planning system should be forward-looking, responsive and adaptive. This means a more restrained approach to land use regulation, infrastructure that is delivered at the right time and at the right place, and infrastructure pricing and funding that more accurately reflects actual costs, use and impacts.

A new system should also make a clearer distinction between the built and natural environment and unambiguously state the important priorities, especially at the national level. This would provide the necessary guidance to councils on how to apply the law and where to put council resources.

Finally, and importantly, any future planning system will not be successful unless there are stronger professional capabilities at both the local and central government level, along with an organisational culture that is fit for purpose to meet the new demands of a future planning system. The absence of these aspects is perhaps the most important lesson and legacy from implementing the RMA.

In a future planning system, a different relationship between both levels of government will be required, one that is based on mutual understanding, collegiality and effective interactions, as both are mutually dependent on each other for their success.

As Ed Glaeser, the eminent Harvard economist says in his book, *Triumph of the cities* (2011); 'cities 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 draft report sets out what such a framework would look like and seeks feedback from interested parties on this.

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 raises 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.
- The planning system has many different interests and actors, with a diversity of beliefs about the value of land and land use. A planning system aims to deal with inherent conflicts that arise between these competing values (eg, development, amenity, and cultural and environmental protection).
- In examining different planning approaches and design attributes that should underpin a future planning system, the Commission has assessed to what extent the following urban planning goals are likely to be achieved:
 - flexibility and responsiveness – ability to change land uses easily;
 - provision of sufficient development capacity to meet demand;
 - mobility of residents and goods to and through the city; and
 - ability to fit land-use activities within a defined biophysical envelope.

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 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, 2016, p. 31).

But the growth of cities 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 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 Terms of Reference notes 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.

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 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 this 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 principle 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 current planning system suffers from poor integration and cohesion (NZPC, 2012a; NZPC, 2015a). The various requirements of the three planning Acts create a complex web of plans, with interactions at a number of points. This complexity makes it difficult to effectively and efficiently coordinate decisions around land use, transport services and infrastructure provision. For example, to make a particular area of land ready for development – setting planning controls, installing trunk infrastructure, providing sufficient capacity on the roading network – local authorities may take decisions through at least three distinct processes, each with different timeframes and implementation speeds.

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 this change, 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 raises 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 occurring. The reality is that cities are assemblies of inter-connected private businesses, public agencies, third sector and voluntary organisations, communities, households, and individuals for whom the world is neither stable nor predictable.

The challenge for this inquiry is articulating an urban planning framework that is not overly directive in regulating land use in our 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 Land is valued for many reasons

The planning system has many different interests and actors, with a diversity of beliefs about the value of land and land use. A planning system aims to deal with the inherent conflicts that arise between different beliefs and competing values (eg, development, amenity, and environmental protection). Differences arise because the concept of “value” goes beyond simply assessing how much income or wealth a parcel of land can generate. “Non-market” values are also central to discussions about the value of land and land use. Economists generally think about the total value of a resource as consisting of three components:²

- use value – the value that people derive from using land either directly (such as when land is used for housing) or indirectly (such as when people enjoy ecosystem services) ;
- non-use values – the value that people assign to conserving land in its current form for future generations (ie, bequest value), or the value people derive from knowing that land will continue to exist undisturbed (ie, existence value); and
- option value – the value that people place on being able to use land in the future. While use value reflects the value of current uses, option value reflects the desire to preserve opportunities for future use.

For some parcels of land (such as a retail property), direct-use values will be the greatest contributor to the total value of land. For other parcels (such as native species habitats), non-use values or indirect-use values will be the major component of total value. Adams and Watkins (2014), both professors of urban studies and planning, put forward a similar typology of values in their report *The Value of Planning* (Box 1.2).

Box 1.2 Land is valued for many reasons

Adams and Watkins acknowledge that “value” has different meanings for different people. They identify six different types of value that can be enhanced by planning:

- exchange value, revealed by the price at which buildings are traded;
- use value, evident in appeal of places to occupiers, reflected in their contribution to productivity, profitability and competitiveness;
- social value, reflecting the extent to which places help connect people, enhance social interaction, reinforce civic pride, encourage social inclusion and promote neighbourly behaviour, while reducing vandalism and crime;
- environmental value, shown by the degree of adaptability, flexibility and robustness and reflecting concern for intergenerational equity and biodiversity;
- image value, demonstrated in the contribution places make to corporate identity, prestige, vision and reputation; and
- cultural value, apparent in the relationship of a place to location and context, and its contribution to the rich tapestry and broader patterns of historical development of the town or city in which it is situated.

Source: Adams & Watkins (2014), p. 12.

² See for example, Arrow et al. (1993), Atkinson & Mourato (2006), and Tietenberg & Lewis (2009).

1.5 The Commission's approach

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

- regulate negative external (spill over) 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 logical, 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 easily;
- provision of sufficient development capacity to meet demand;
- mobility of residents and goods to and through the city; and
- ability to fit land-use activities within a defined biophysical envelope.

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. These focus on arrangements that will minimise the sum of decision and errors costs, and be sustainable over time.

- Minimise the sum of decision and error costs (Sunstein, 2008). 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).
- Be sustainable over time – that is, able to adapt to changing goals and values over time.

Box 1.3 Competing views on what is an ideal planning framework

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. (*Politics*, 1330b17)

1.6 Guide to this report

The draft report is structured as follows.

Chapter	Description
Chapter 2	<i>High-performing cities</i> – 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	<i>A rationale for planning</i> – explains what planning is all about – its nature, what problems it is trying to solve, its potential 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	<i>Urban trends</i> – 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	<i>The urban planning system in New Zealand</i> – outlines the key features of New Zealand’s urban planning system, assesses the system’s performance against principles of good regulatory practice, and discusses some recent developments in the system’s evolution.
Chapter 6	<i>Outcomes of the current system</i> – reviews recent developments in key environmental and urban outcomes, and considers the contributions made by the planning system.
Chapter 7	<i>Regulating the built environment</i> – discusses the use of regulation as an urban planning tool. It assesses the performance of current land use regulatory practice against key goals, and suggests options for a future urban planning system.
Chapter 8	<i>The natural environment</i> – focuses on the role of urban planning in controlling negative spillovers that detract from people’s enjoyment of the natural environment, highlights some of the shortcomings of the existing planning system, and suggests a number of important design elements necessary for a future planning system.
Chapter 9	<i>Urban planning and infrastructure</i> – focuses on planning urban infrastructure, coordinating it with land use, and providing different types of infrastructure. It finds that better integration across planning Acts is needed, and that the interaction between central and local government on major infrastructure projects could be improved.
Chapter 10	<i>Infrastructure: funding and procurement</i> – investigates the potential for local governments to achieve net benefits for urban development through better pricing, funding and procurement of infrastructure. It finds scope to improve urban outcomes through these three means.
Chapter 11	<i>Urban planning and the Treaty of Waitangi</i> – 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 12	<i>Planning capability and culture</i> – 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 suggests cultural and capability attributes that would support a future urban planning system.
Chapter 13	<i>A future planning framework</i> – summarises the key points of the Commission’s diagnoses of the current urban planning system’s strengths and weaknesses, outlines what needs to change, and describes what these changes would mean for the operation and design of a future system.

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 identifying models for better urban planning (Chapter 13). Later chapters discuss in more detail the issues briefly discussed here, such as the trade-off between the cost of housing and commuting times (Chapter 7), and the provision of infrastructure (Chapter 9 and Chapter 10).

2.1 Introduction

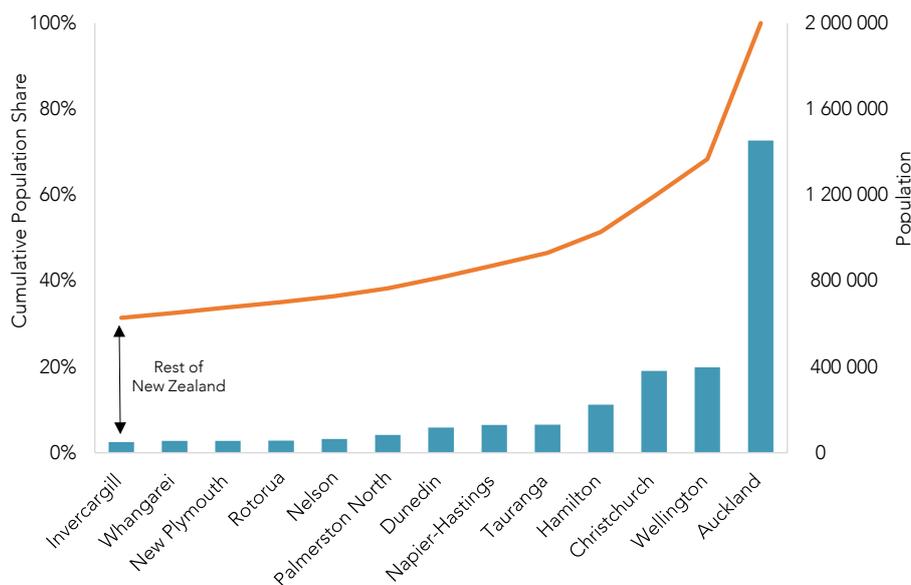
This chapter discusses

- 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 and that promote wellbeing; and
- interactions between local land use planning and national policy.

2.2 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 2.3).

Māori, as the indigenous people, have a special relationship with the land on which New Zealand cities are built (Chapter 11). Many Māori aspire to live in cities with "great spaces and places for Māori to be Māori" (Ngā Aho & Papa Pounamu, 2016, 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).

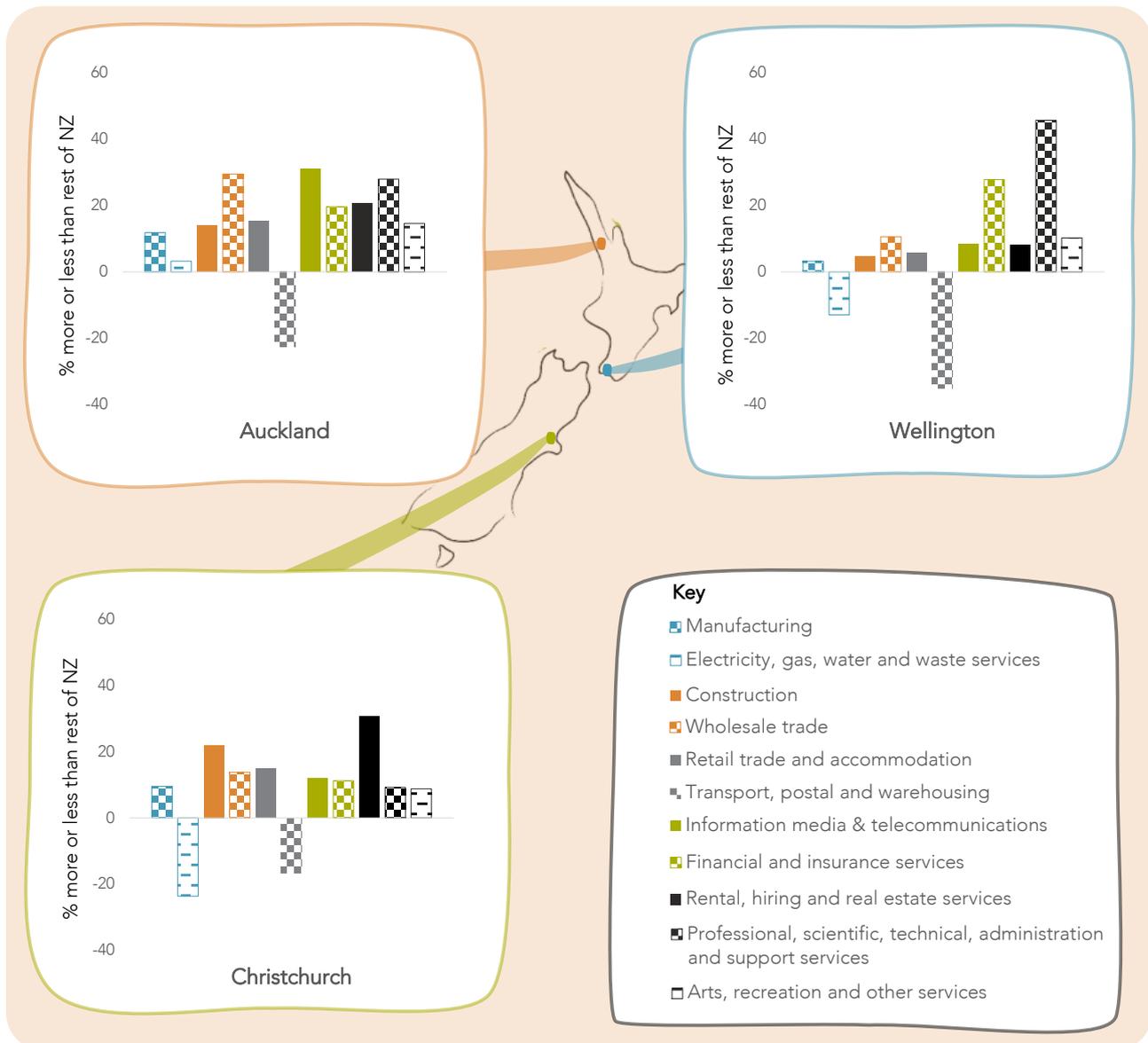
People with low skills may also benefit from locating in cities with many skilled people. Low-skilled people are attracted to cities and earn higher wages as a result, though they also face higher costs (section 2.4) (OECD, 2015a).

Knowledge-intensive services have been growing in importance in New Zealand and elsewhere. By 2014 they generated 20% of New Zealand's GDP (MBIE, 2014).³ 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 selected 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.

³ 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.⁴ 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.⁵ 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.⁶

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.⁷ 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

⁴ 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.

⁵ Maré (forthcoming) 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.

⁶ 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.

⁷ This also assumes that the effects are proportional across cities of different size.

institutions they 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 now 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.

2.3 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 2.2). 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 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.⁸ 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 2.2).

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).⁹ 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.

⁸ Jacobs preferred solutions did not persuade Alexander (1996).

⁹ 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 2.2). 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.¹⁰

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).

2.4 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 2.2; Chapter 7). 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 9. The important question of who pays for new infrastructure (or upgrades to existing infrastructure) is discussed in Chapter 10.

¹⁰ 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 2.5).

2.5 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 2.4; 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.¹¹

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.¹² 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 7, Chapter 9 and Chapter 10.

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 2.4, 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).

¹¹ 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.

¹² 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.¹³ The effect was mitigated by around 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 7). 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. Yet in some cases, the stated social objectives are very ambitious and largely the responsibility of central government to pursue. Chapter 7 discusses how councils can face an “objective overload” and conflicting goals that distract them from the critical purpose of land use planning – providing sufficient development capacity to meet demand.

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 (see submissions cited in Chapter 7). 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 or even a very significant policy instrument for improving many of the outcomes across this diverse range of issues (Chapter 7; Chapter 8).

2.6 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)

¹³ 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.

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.

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 7 and Chapter 8 respectively. Similar issues can arise in the provision of infrastructure (Chapter 9 and Chapter 10).

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 7 discusses the challenges that high-growth councils face in releasing land for housing and providing for denser development of existing urban areas. Chapter 10 discusses the challenges they face in funding infrastructure to accommodate growth, whether through intensification or greenfield development.

2.7 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 evolution and complex, adaptive nature. These are essential building blocks for the Commission’s analyses, findings and recommendations about better ways to undertake urban planning in New Zealand.

3.1 Introduction

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 asset – 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, jobs growth, environmental management and infrastructure.

3.2 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 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 the 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 from which both parties emerge feeling better off, is a possibility.

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.

Worth noting is that 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.

How could urban planning solve or mitigate the problem?

Three potential and different government-led remedies can 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 designation 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 successfully set up to deal 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. For some urban externalities, the costs of setting up, operating and enforcing a charging regime are likely to outweigh the benefits.¹⁴

The limitations of private bargaining and “pollution” taxes/charges have left the direct-regulation arm of urban planning to do the heavy lifting to try 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 attaching 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 would have to locate in a heavy industrial zone well away from residential zones. Sections 3.3 and 3.4 further analyse different approaches to planning regulation, including zoning, and how such regulation affects property rights and market-based decisions.

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).

¹⁴ Charges to reflect external effects are an example of “market-based instruments”. Chapter 8 covers their use as regards spillovers that cause adverse effects on the natural environment.

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 is impossible (or at least highly impractical) to exclude people from using and benefiting from it.

Given this, it is not practical to charge users and, accordingly, private firms will choose not to supply it (except in rare cases)¹⁵. Like the problem of external effects, the challenge of producing public goods is a type of “market failure” of a private, free-market system.

To further nail the concept, 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 allow entry to school or medical treatment only on payment of a charge. 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 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 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 might 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

¹⁵ 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.

government plans and public-submission processes, 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 not too much of a stretch 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 thought a reverse instance of "pollution charges" for negative externalities.¹⁶

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, drinking water, stormwater and wastewater infrastructure. While it is difficult to generalise, private firms can sometimes fund investments such as these and provide services to customers with benefits in greater efficiency and 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 (see Chapter 10).

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.¹⁷ Having several competing road, rail or water networks could be extremely expensive and not in the long-term interest of consumers.¹⁸

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 inefficient, monopoly prices and profits. And the regulation of a private monopoly provider is a major and difficult undertaking, and may result in no greater efficiency or innovation than under a public provider.

¹⁶ For instance, councils and governments sometimes provide such payments to owners of heritage buildings for their repair or earthquake strengthening.

¹⁷ 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).

¹⁸ Networks competing side by side may drive prices down and give consumers a choice, but this scenario has serious 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.

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.¹⁹ 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. Such services 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; 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 fund; 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
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
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 under Part 4 of the Commerce Act 1986

¹⁹ 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
Education	Central government; some private provision	No; however specialised and expensive institutions such as universities are subject to economies of scale.	Central government taxation; private provider charges
Health	Central government; some private provision	No; however specialised facilities such as hospitals are subject to economies of scale.	Central government taxation; private provider charges and 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 with price-disclosure regulation under the Part 4 of the Commerce Act

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 resort complex in an attractive but isolated area may depend on the government 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 did, they would be at risk of having a “stranded asset” worth little if the others did not invest. They would also be at risk of being in a weak bargaining position with the 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). The government too is at risk if it spends a large amount on road and water infrastructure and that money is wasted because the 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 residents (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 government) gives rise to other problems. For example, the central planner’s decisions tend to be based on poor information, 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 and infrastructure investors, as well as residents, all participate in developing a high-level picture of the city’s future development. Chapter 9 has further discussion and a range of views on the merits of spatial planning, especially as a means to integrate infrastructure investment with land-use planning.

Summarising the rationales for urban planning

Three main rationales for urban planning exist.

- 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 biophysical 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 government a logical option.
- The third rationale is to invest in and operate local and regional infrastructure to provide essential services for local 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 in the purpose statement of the Local Government Act 2002 (as amended in 2012) (the LGA). The LGA’s purpose is to provide “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” (section 3(d)).

While local authorities in New Zealand and other countries very commonly address all three purposes through their planning activities this is not without exception. However, given that planning is used in nearly all urban environments, the Commission believes it is very important to examine carefully *how* an urban planning system (in its legislation, regulations, institutions, culture and practice) can best carry out these functions.

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 meet the needs 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.

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

3.3 Planning, property rights, regulation and markets

Plan making, planning 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 property rights involving landowners or others. The parties include business owners and a variety of groups representing specific or wider public interests. Clashes of rights or interests, but also enhancements to them, can occur in regard 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 (section 3.2).

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 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. Rises in 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 them 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.²⁰

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 10).

Section summary

All three planning functions (section 3.2) 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 connected to its vitality and performance. A challenge for planning is to perform its functions without sapping the dynamism of markets in stimulating entrepreneurship and innovation.

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).

²⁰ 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.

Planning may also protect people's collective interests in important ways. These include protecting ecosystem services; the interests of residents who do not own property in living in attractive, convenient surrounding; 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.

3.4 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. 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.

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). Chapter 9 further discusses 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 those plans that are based on rules for a spontaneous order (Box 3.4).

Box 3.4 Approaches to planning: rules for a made order versus rules for a spontaneous order

Planners base rules for a made order on a clear belief about what a desirable future city looks like and their plans identify in detail the pathway to reach that destination. This approach uses “patterning instruments” that Moroni (2012, 2015) describes as directional rules for delineating a particular configuration or arrangement of the urban system. The local authority uses these instruments to guide not only its own actions but also those of private parties.

Patterning instruments are typically “map-dependent” in the sense that different rules apply for different tracts of land within the same city. They try to generate a particular social and built order directly; they are “shaping devices” and are “future orientated”. Traditional land-use plans use

patterning instruments by specifying which activities and what types of buildings are permitted in various zones of the city.

Rules for a spontaneous order restrict patterning instruments to a council's own activities – that is to guide and discipline its own decisions about providing local public goods and infrastructure on public land. For regulating private actions, a council would restrict itself to using instruments of another kind – known as “framework instruments”. Moroni describes framework instruments as “non-map-dependent” rules in the sense that they do not vary by place within the area covered by the local authority (but could well vary from one local authority to another). Nor do these rules “define the specific role of the various parts and components of the urban structure; rather they merely *exclude* certain interrelationships among them”. Framework instruments generate a social and built order only indirectly and not intentionally. They are not “future orientated” but “present orientated”, not shaping devices but “filter devices”. Filtering occurs through “rules of the following kind: ‘No land transformation and no building development or use may produce externalities of type E, F and D’; ‘No building of type H may be constructed within X metres from building of type K’; and so on” (Moroni, 2015, p. 257).

A further distinction between patterning and framework instruments is that the former typically depend on predictions of variables such as population and business growth. If these predictions change the specific patterning rules in a land-use plan, then specifying what happens where and when will need updating. In contrast, “[f]ramework-instruments do not rely on specific predictions: they are independent from predictions, or they are dependent on very general *qualitative* ones” (p. 257). Consequently, framework rules do not require revision when predictions are updated.

Moroni cites *urban codes* as paradigmatic examples of framework instruments. This is because urban codes typically comprise a set of rules that are:

- few in number;
- simple and unambiguous in their formulation;
- applicable to general types of situations or actions and to everyone equally;
- independent of any specific end-state;
- relational rather than directional;
- stable and adhered to in the long run; and
- intended merely to prohibit people from interfering in the private domains of others, rather than imposing some active duty or action.

In summary, urban codes have the purpose not to prohibit certain activities in particular places of the city. Rather, their purpose is to prohibit certain externalities everywhere. The issue is not use, but the negative *effects* of use.

Moroni does not oppose regulation as such and accepts that governments sometimes need to limit private property rights. But Moroni 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 3.5).

Top-down versus bottom-up planning

The distinction between top-down planning and bottom-up planning involves the important questions of who owns plans and what is the allocation of decision rights to make plans and act under them. These

questions are 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 providers of local public services and enablers of local democracy. 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 a standard level of services;

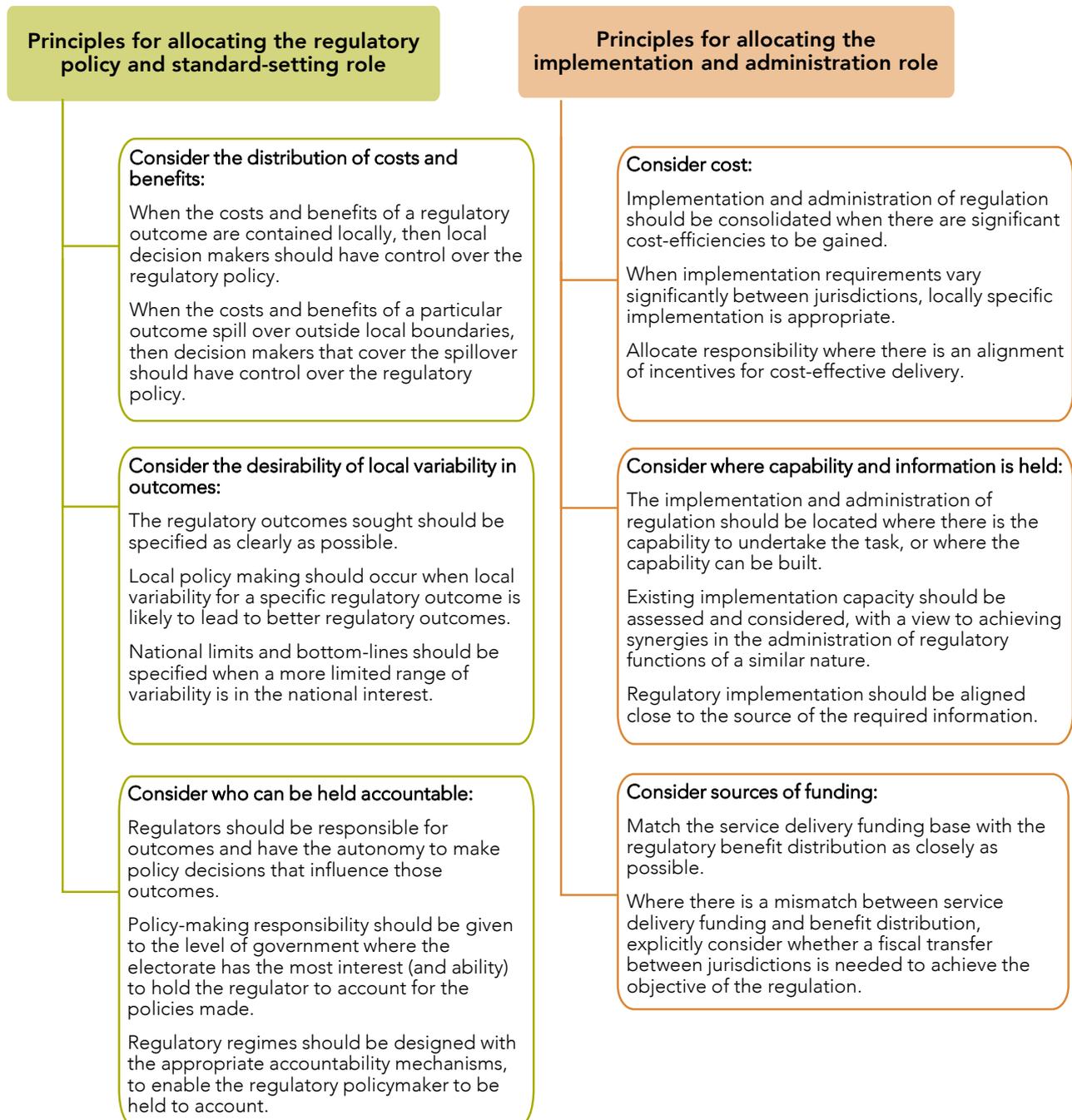
The benefits of decentralisation include:

- 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).

In its inquiry into better local regulation identified a framework for allocating regulatory roles between central and local government (Figure 3.1).

Figure 3.1 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 have documented and 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). Local, non-government governance arrangements for taking collective actions were often (but not invariably) found to be 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 (11 of them) 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*²¹ 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 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.²² Currently, 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 spent and project delays from dealing with large but fragmented organisations. Internally, such organisations hold different viewpoints, and their teams are not coordinated (Grimes & Mitchell, 2015).

In a streamlined and integrated planning system, the customer experiences 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.

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).

²¹ 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.

²² This sort of complexity and frustrating experience can and does exist elsewhere – even within the “integrated” RMA system.

3.5 Planning for cities as complex, adaptive systems

Chapter 2, describes how cities are composed of an extremely 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 the feasibility of urban planning beyond a certain point. 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.²³

Researchers in complexity have shown that models in which agents interact using simple rules can generate complex patterns (Colander & Kupers, pp. 127, 2014). 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 had 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 their 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.

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.

²³ 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.

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.

New Zealand's earliest state houses were built in Patrick Street from 1906, although they were sold 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 became 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 Tenth's 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 Hikoikoi 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 Hikoikoi – 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 Hikoikoi. The weavers source their own flax, which is abundant in the region.

Source: Butterworth, 1988; Johnston, 1999, 2009, 2015; Love, 2015; MoH, 2016a; Wellington Tenth's 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 effects of interventions in detail 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 the most at risk of tripping over the reality of urban complexity and its unpredictability. Indeed, trying to direct land use, building design and transport configuration along a specified and detailed path to the 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 and its wider 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 3.4 and Box 3.4). 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). Analogous processes would likely suit a collaborative, participative approach to planning.

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 7). 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)

As a result, Colander and Kupers (2014) proposed that policy should aim to positively influence the evolution of institutions.

It is worth noting that this 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 neighbourhood would have realistic housing targets as its share. The community 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, will be important insights for developing a more effective urban planning system.

A hybrid approach to urban planning

The two approaches to urban planning 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 (Box 3.4; section 3.4). 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) of 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, commonsense 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.

3.6 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 9).

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 7).

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 7; 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 of this result 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 results.
- 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. Populations have mostly declined in smaller urban areas. 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 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.

4.1 Introduction

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 correlated 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.

4.2 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 Measuring urbanisation

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.

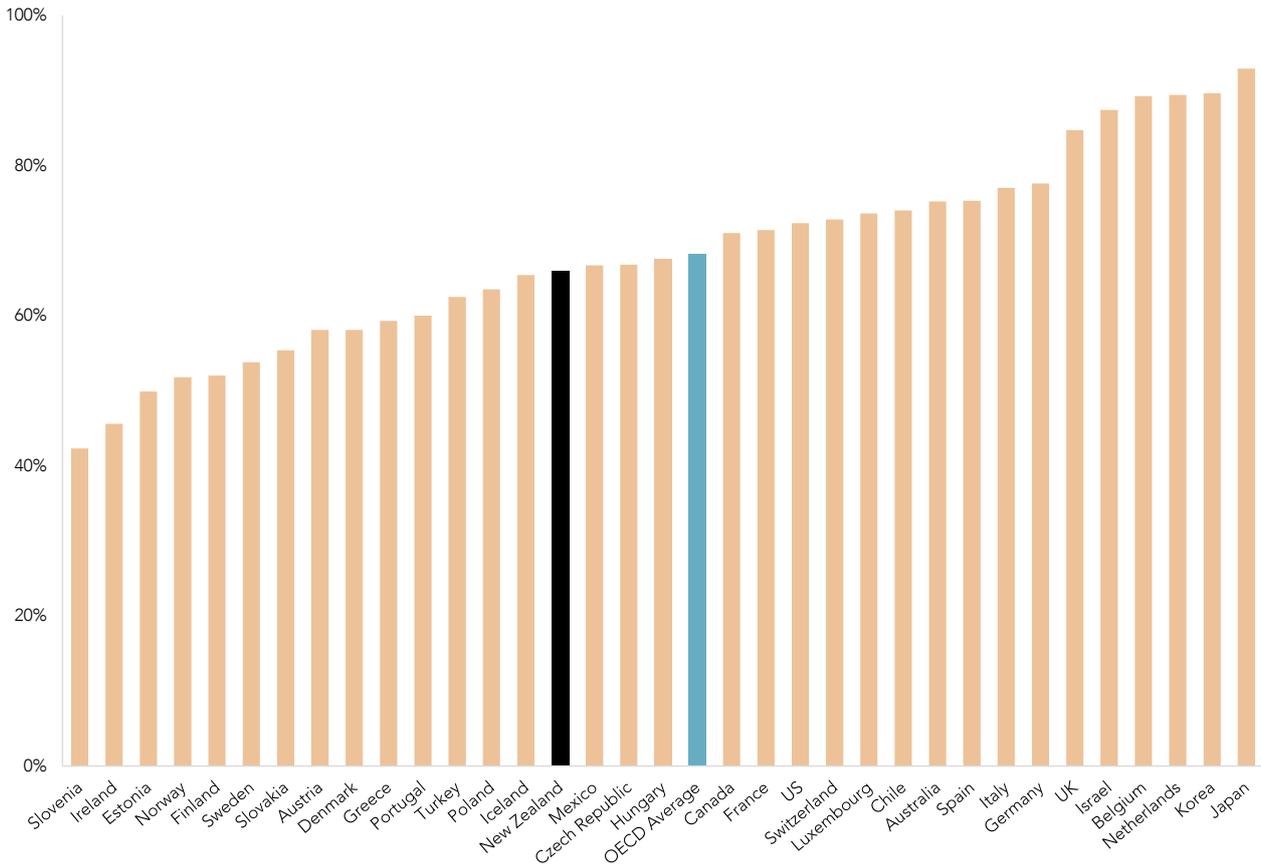
Other country definitions vary considerably, leading to unreliable comparisons. For example, in Japan, urban areas include any area with more than 50 000 people, while Iceland defines an urban area as any locality with more than 200 people. Countries also use different methods to define urban area boundaries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

Notes:

1. The Agglomeration Index represents the percentage of a country’s population who live in urban areas.

F4.1

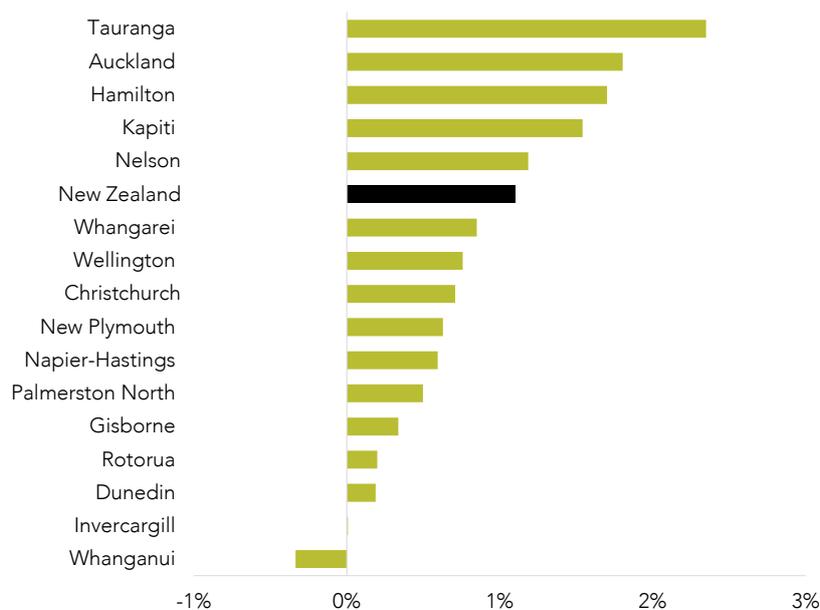
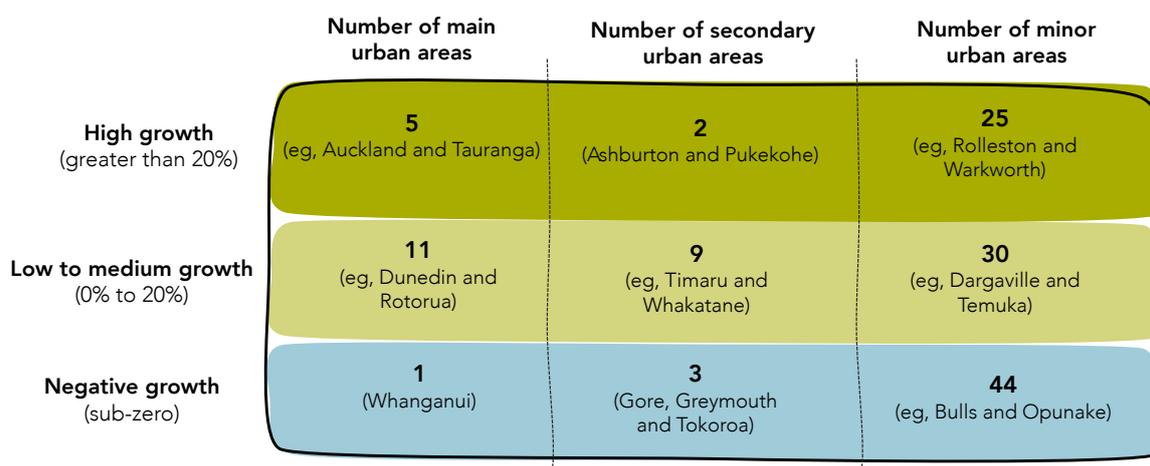
The extent of New Zealand’s urbanisation depends very much on the definition used. The commonly cited figure that 86% of New Zealanders live in urban areas is based on a New Zealand-specific definition. Other definitions indicate lower levels of urbanisation.

4.3 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 the decline has affected larger cities as well as 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).²⁴ 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, however populations in Invercargill and Dunedin are projected to remain stable.

²⁴ 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 minor urban areas (Figure 4.5). Approximately 9% of New Zealanders live in urban areas projected to face decline. Most main urban areas are not projected to decline, although 8 of the 14 secondary urban areas 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

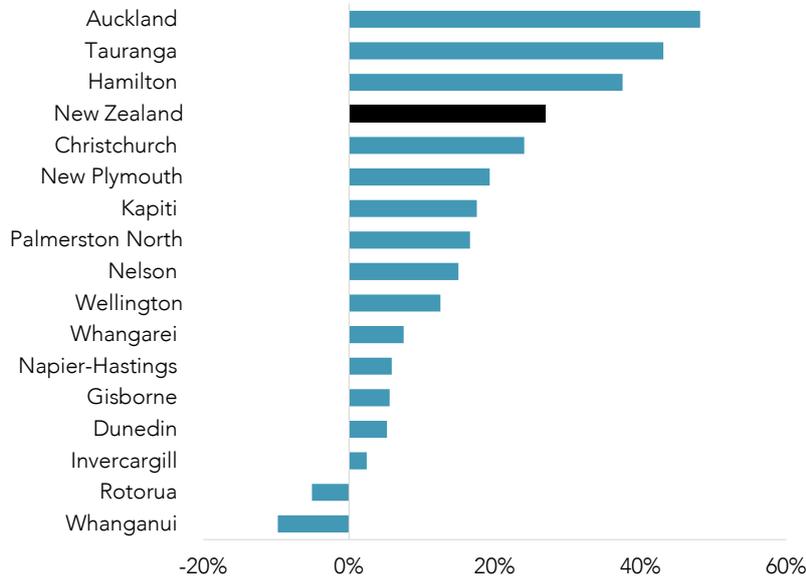
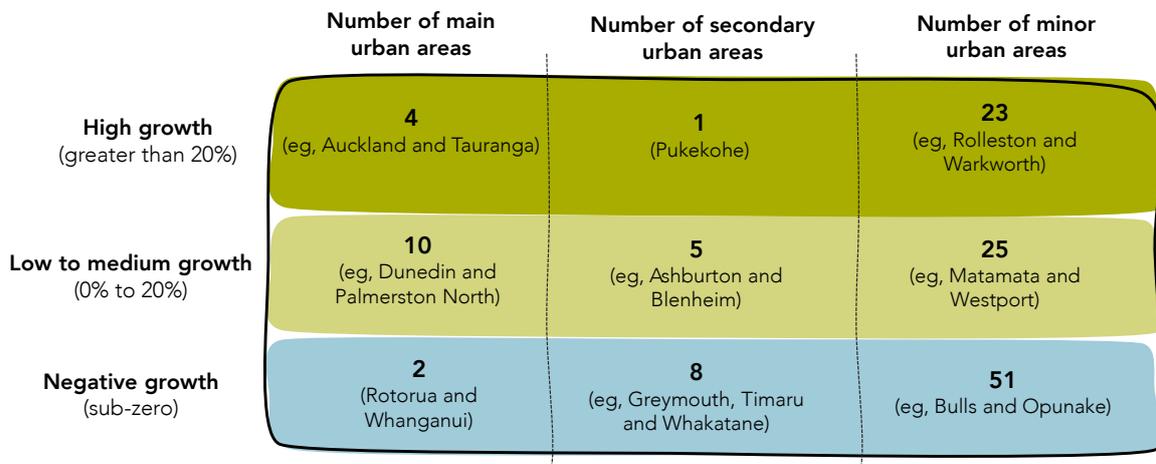


Figure 4.5 Projected population change of urban areas, 2013–2043



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 will be discussed in more detail later in this chapter.

4.4 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.

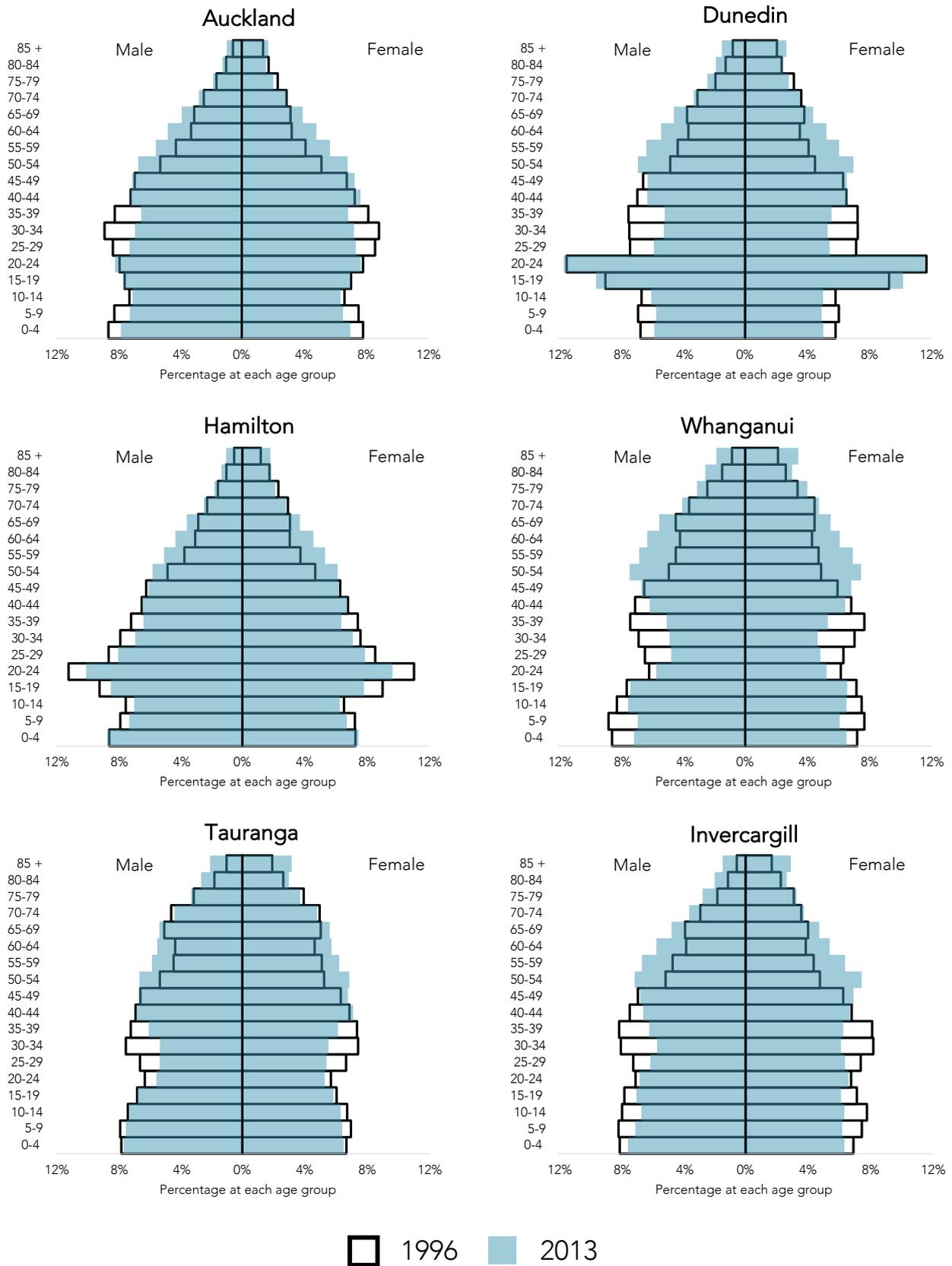
Net migration has played a cyclical role in influencing growth in Auckland.²⁵ Over 42% of Auckland's growth since 1996 is due to migration, compared with 15% for the rest of New Zealand. Net migration levels were highest between 2002 and 2006, and during 2014 and 2015, while most other periods saw lower 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 growth was 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

²⁵ 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

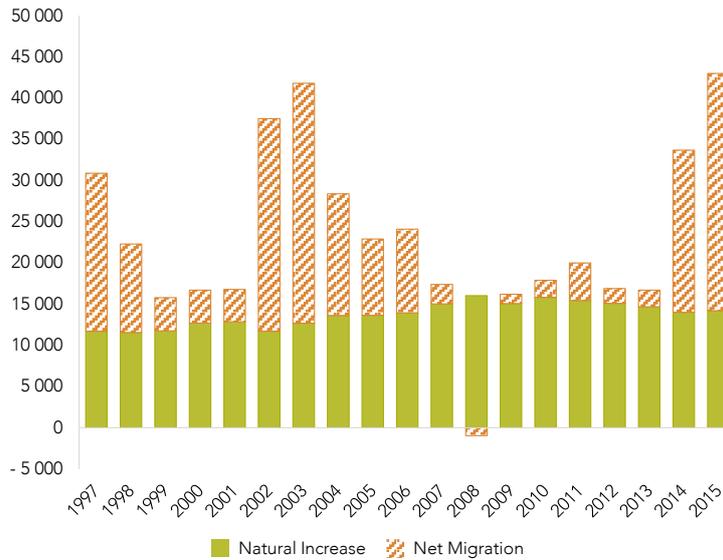


Figure 4.8 Age structure of Auckland vs rest of New Zealand, 2013

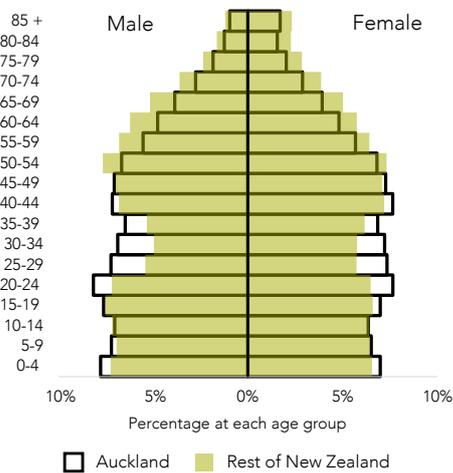
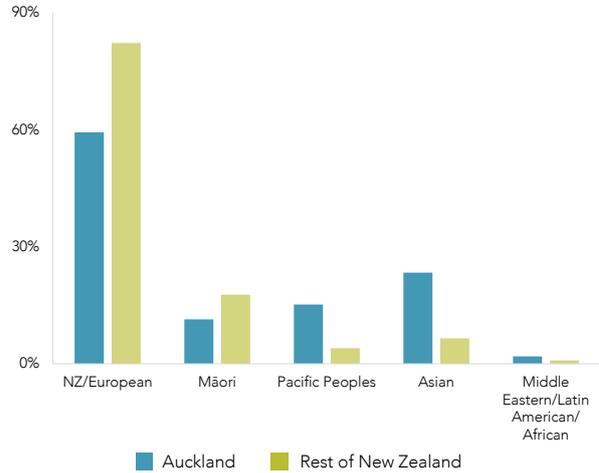


Figure 4.9 Ethnic structure of Auckland vs rest of New Zealand, 2013



Source: Productivity Commission analysis of Statistics New Zealand data.

4.5 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/km², Christchurch has a density of 2 000 people/km² and Hamilton has a density of 2 200 people/km². 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 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

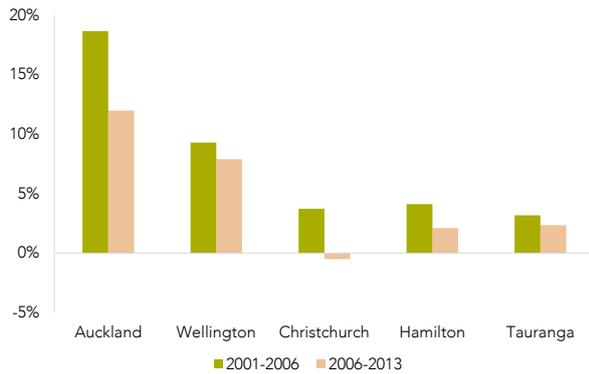
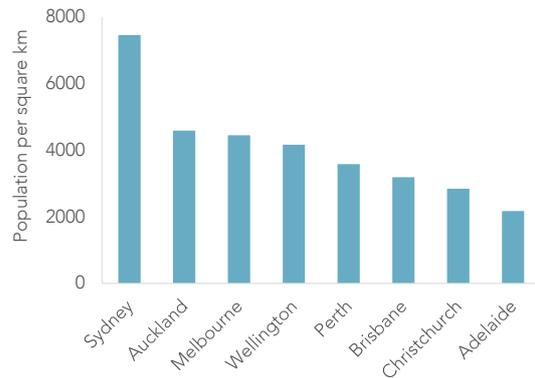


Figure 4.11 Population-weighted densities of Australasian cities, 2011 and 2013



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.

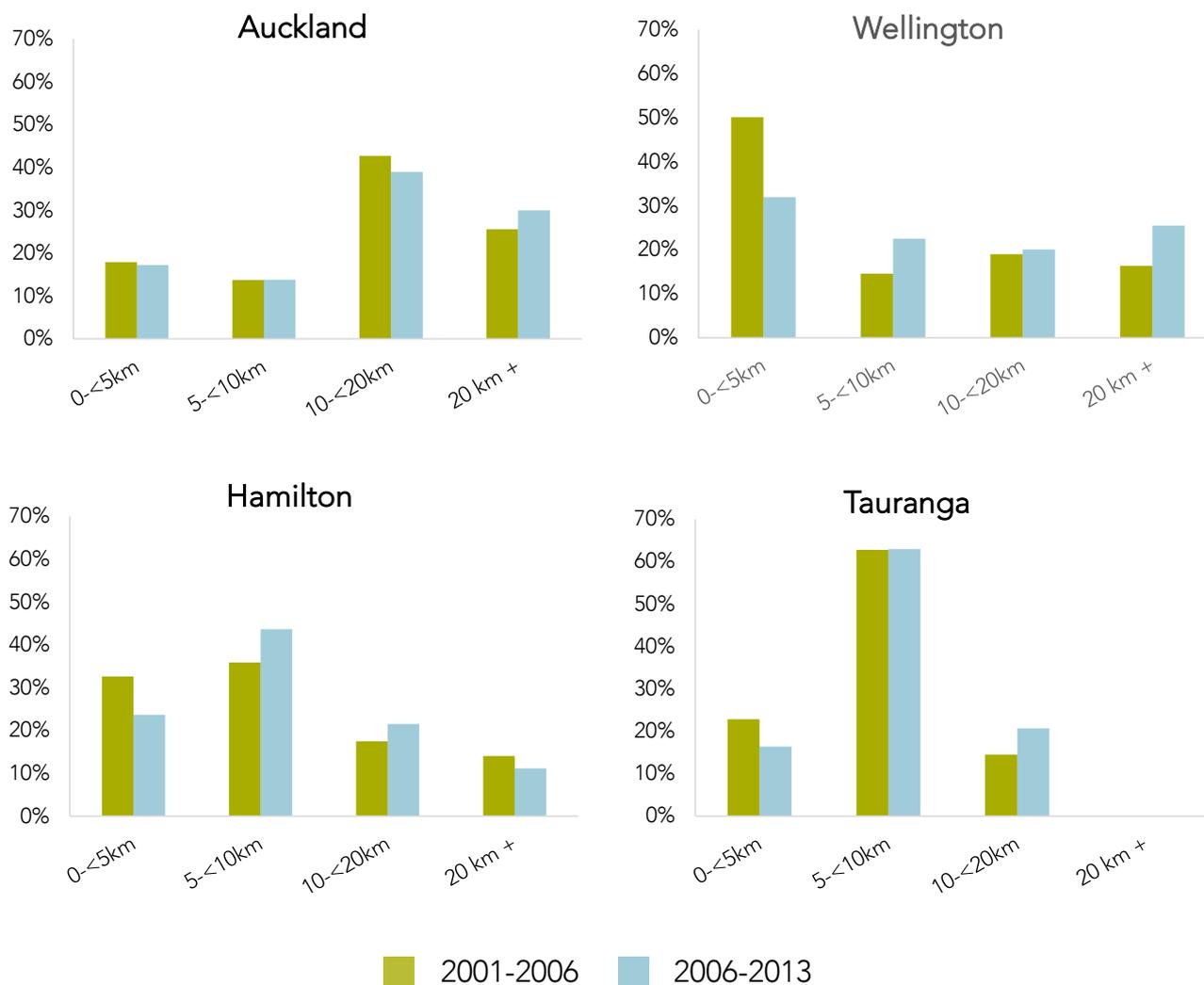
F4.3

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:

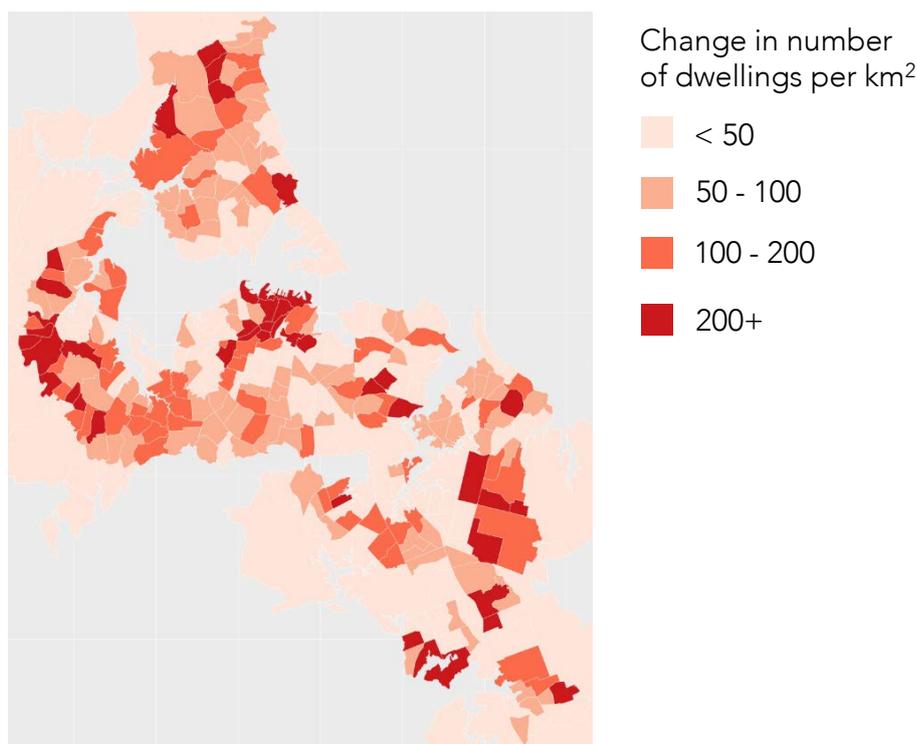
1. Distance to the centre of each city studied is measured as a linear distance between centres and each area unit.

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.

Auckland's dwelling density increased significantly between 2001 and 2013, yet 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.²⁶ 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).

²⁶ 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 certain level of wealth and where people can choose where they live.

Conversely, Ehrenhalt (2012) suggests that more affluent 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.²⁷ The Commission's inquiry into *Using land for housing* (2015a) noted that services industries tend to congregate in the centre of

²⁷ Knowledge Intensive Services are defined by the Ministry of Business, Innovation and Employment (2014) using the ANZSIC06.

cities to take advantage of agglomeration benefits. As Chapter 2 discussed, 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

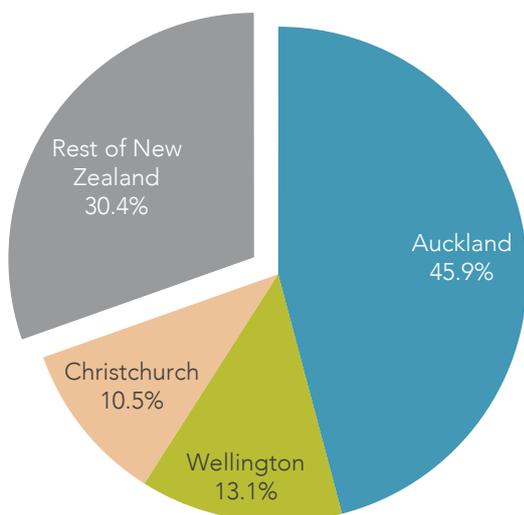
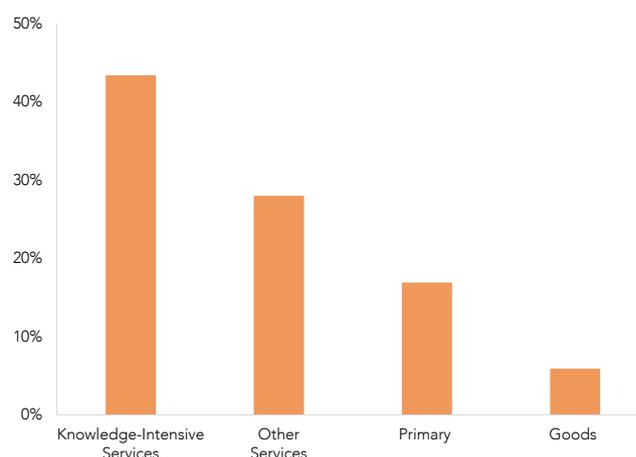


Figure 4.15 Job growth by sector in New Zealand, 2000–2015



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. Employment growth 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.

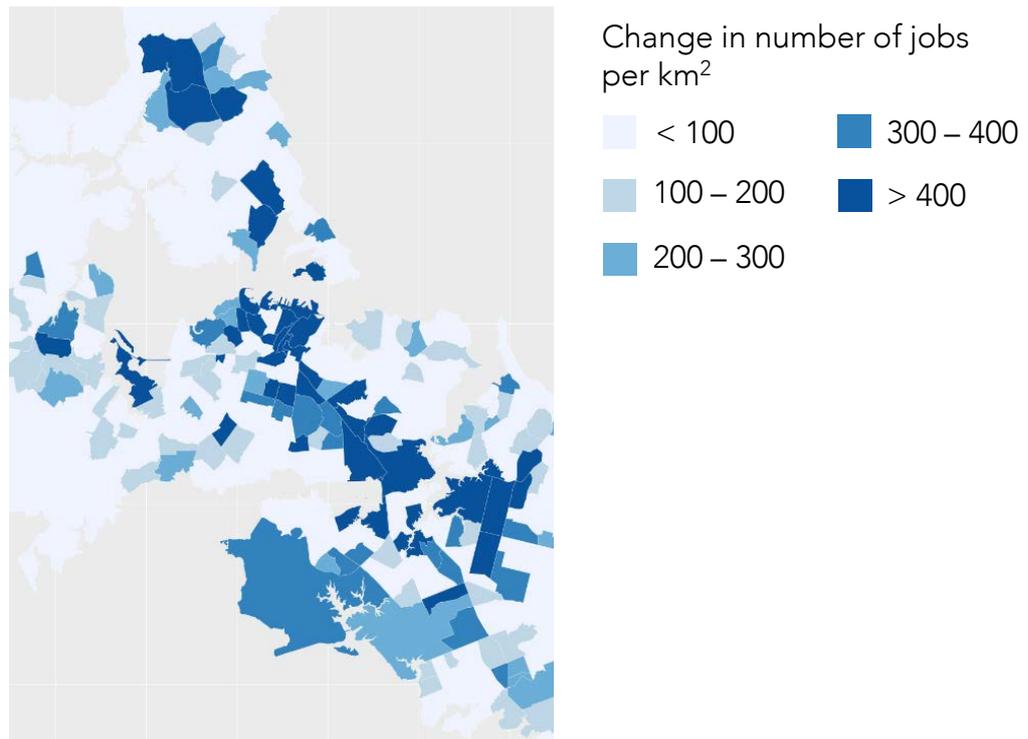
Notes:

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, stand-alone 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, stand-alone 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

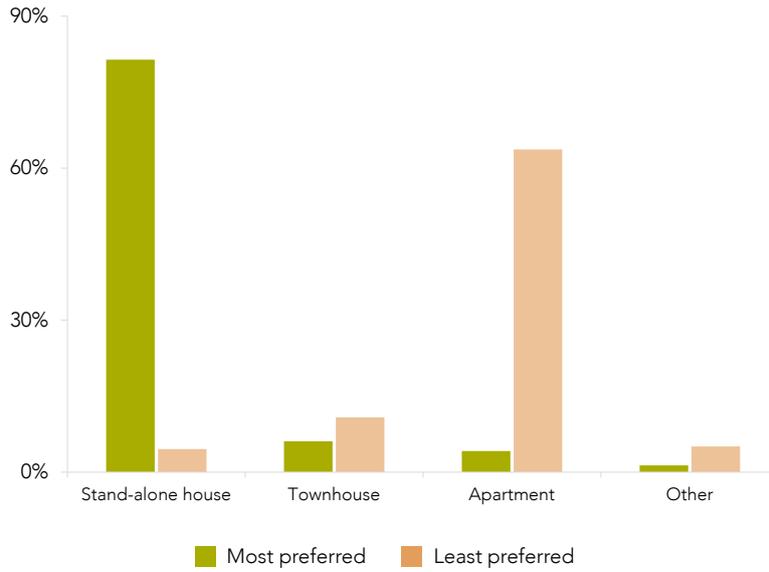
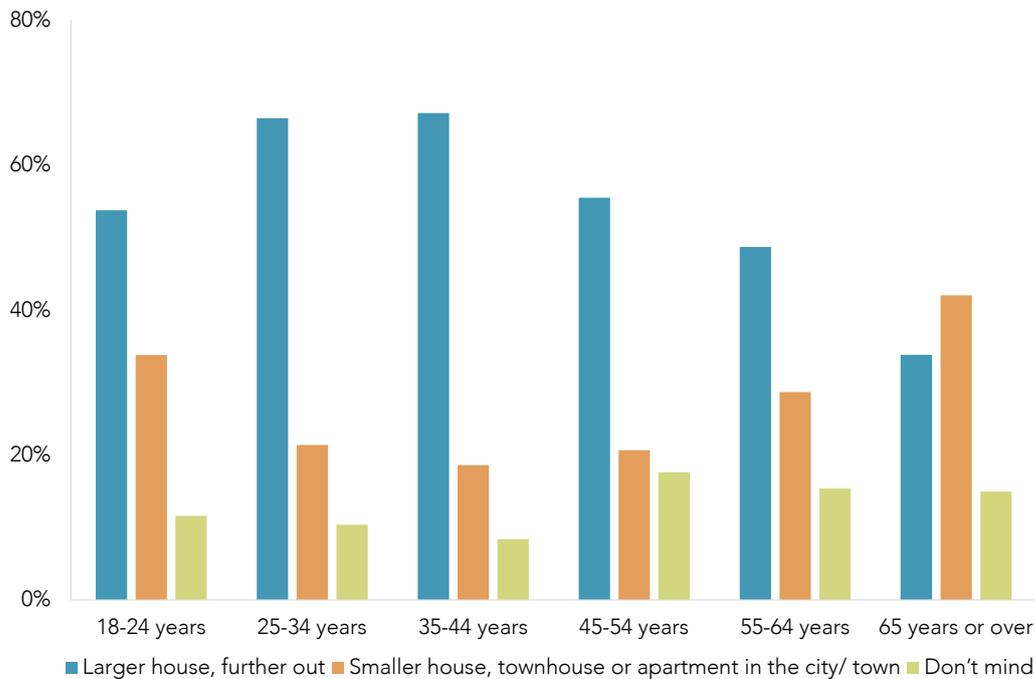


Figure 4.19 Preference between size and proximity to urban centre by age, 2015



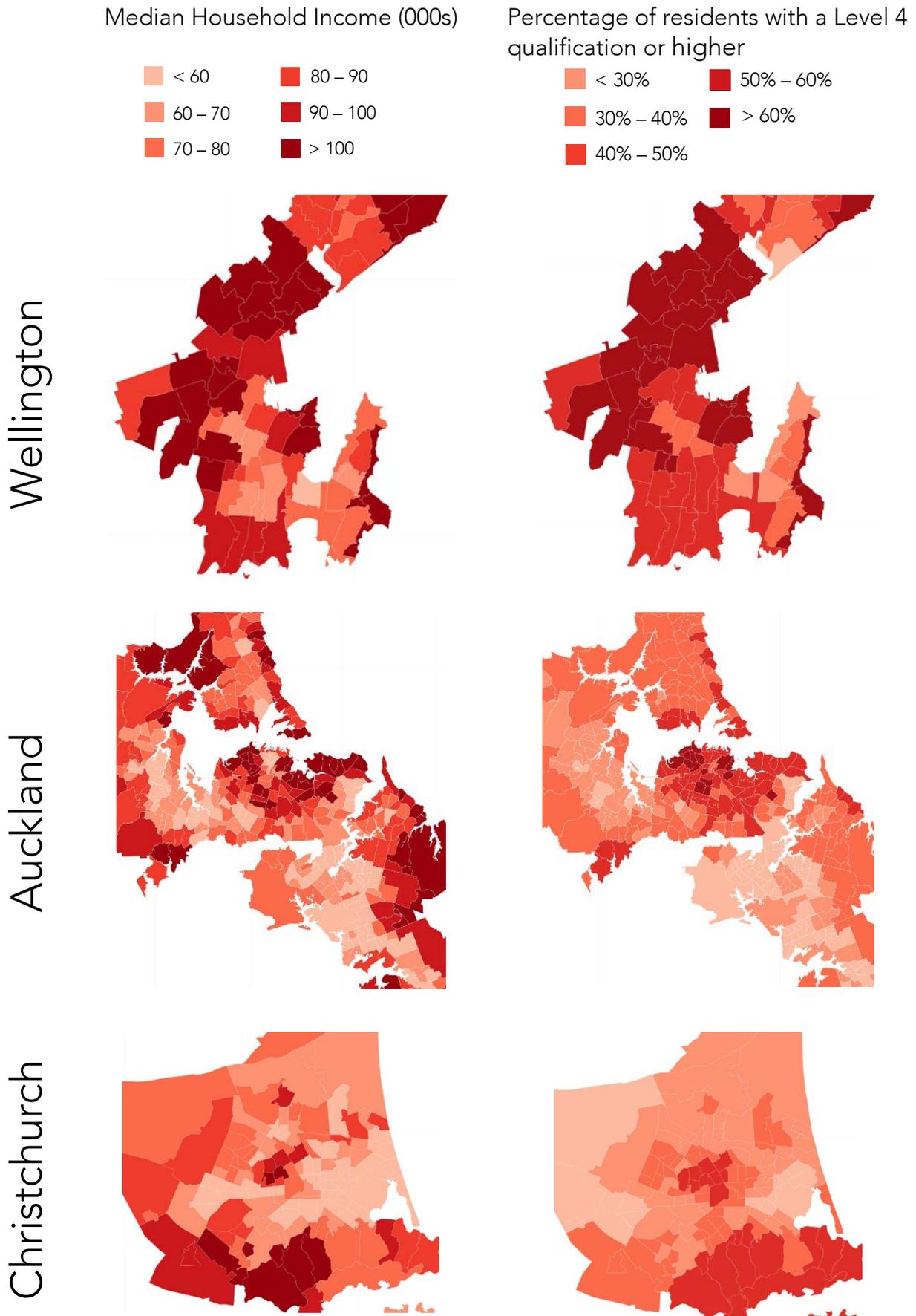
Source: Productivity Commission analysis of Howden-Chapman et al. (2015) data.

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 highlighted, 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.

4.6 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. 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 4.3 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	<ul style="list-style-type: none"> • 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 ²⁸	Auckland Council	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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

²⁸ 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 4.5). A high concentration of development in outer suburbs may not 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 4.4 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).

4.7 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 The urban planning system in New Zealand

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 amendment 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 tightly 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 a trend towards
 - tighter central control over local government and reduced local discretion; and
 - legislative exceptions (specific to regions) from the main planning system.

5.1 Introduction

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. This chapter describes the key features of New Zealand’s current planning system and discusses some recent debates about the role of planning and local government, which are relevant to this inquiry.

For the purposes of this chapter, the Commission has analysed 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.

5.2 Role clarity

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.

Two key points of debate for the RMA are the meaning and implications of “sustainable management” (section 5), and whether the RMA adequately reflects cities. Chapter 8 discusses the concept of

“sustainability” in more detail. 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.²⁹

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.

Compared with former planning Acts, the RMA is virtually silent on urban areas. It focuses on the environment, the definition of which refers to urban issues only indirectly:

environment includes—

- (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. (RMA, section 2(1))

“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).

²⁹ The implications of the Supreme Court’s *Environmental Defence Society Inc. v New Zealand King Salmon Ltd* are discussed in K Palmer (2016)

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, 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).

Debates about the LGA have concentrated on the wide scope given to local authorities in the 2002 Act's original purpose statement. 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 locks. Section 659 confirmed they could sell firewood. (Palmer & Palmer, 2004, p. 230)

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])

"Well-being" was referenced throughout the Act, especially in relation to decision making. In making decisions about promoting wellbeing and fulfilling their purpose, councils were expected to either contribute to enhance all four wellbeing dimensions, or make explicit trade-offs between them (Reid, 2010). The then government's discussion document on the need for new 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 redefined 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.³⁰
- In 2012, the LGA’s purpose statement and the purpose for local government were amended to remove the references to the “four wellbeings”. The LGA’s purpose was reframed to provide “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”. The purpose of local government changed 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”.

The third 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)

F5.2

The differing purposes of the three planning Acts create internal tensions, duplication, complexity and costs.

³⁰ 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.

5.3 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 role 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

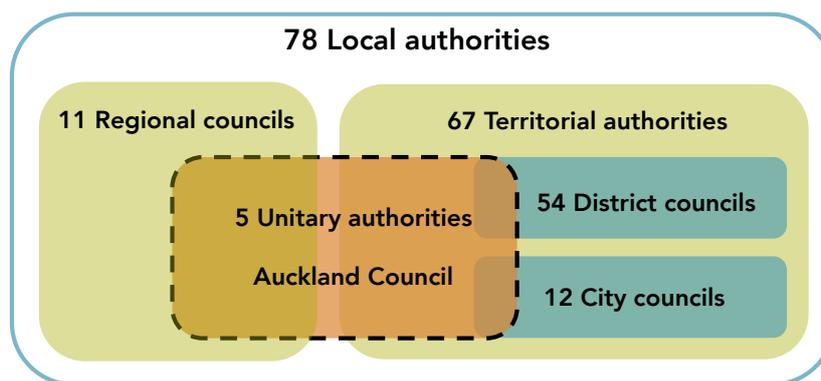
Decisions over the development of plans

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 tool was issued until 2004. Since then, three NPSs and five NESs have been introduced (Table 5.1). Others are currently being developed.

Table 5.1 RMA national tools currently in force

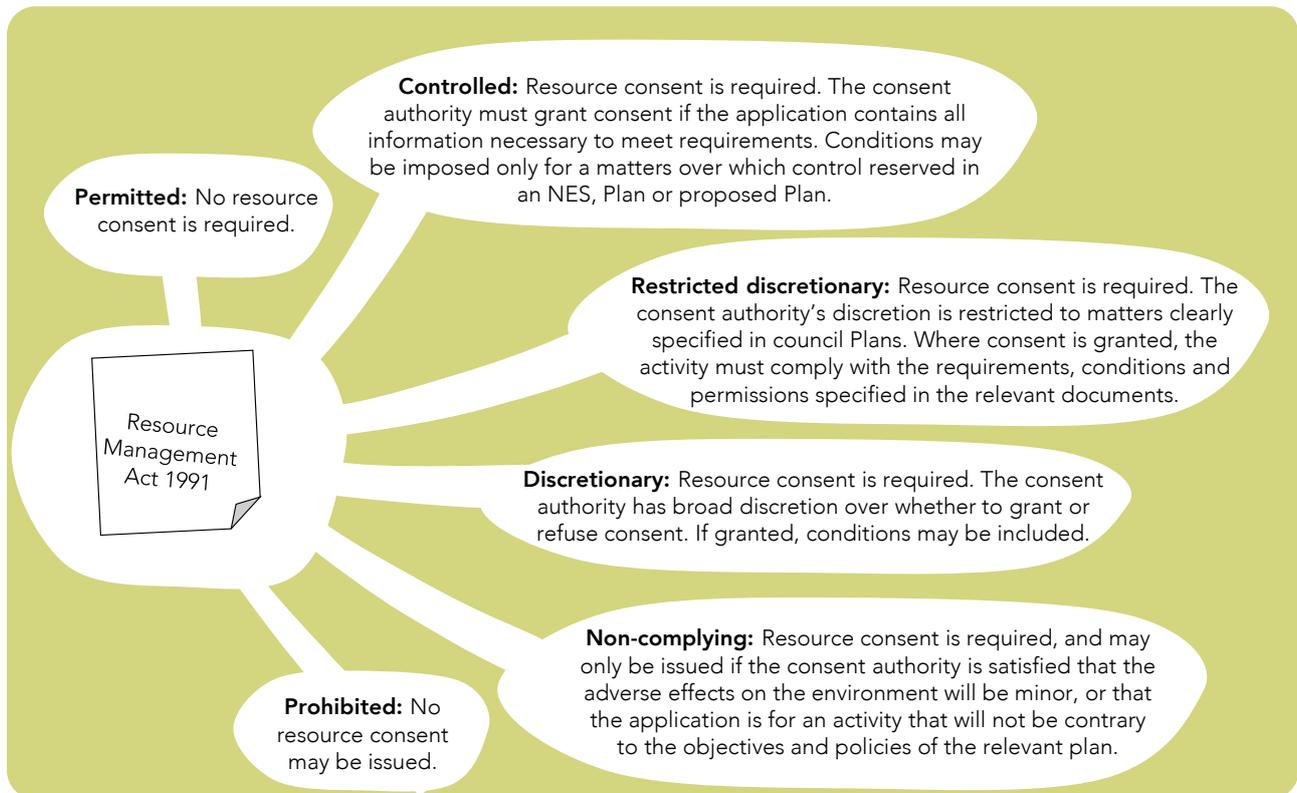
National tool	Year brought into force
New Zealand Coastal Policy Statement	1994 (new CPS issued in 2010)
National Environmental Standards for Air Quality	2004 (amended 2004, 2005, 2008, 2011)
National Environmental Standard for Sources of Drinking Water	2008
National Environmental Standards for Telecommunications 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

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).³¹

Figure 5.3 Activity classifications under the Resource Management Act

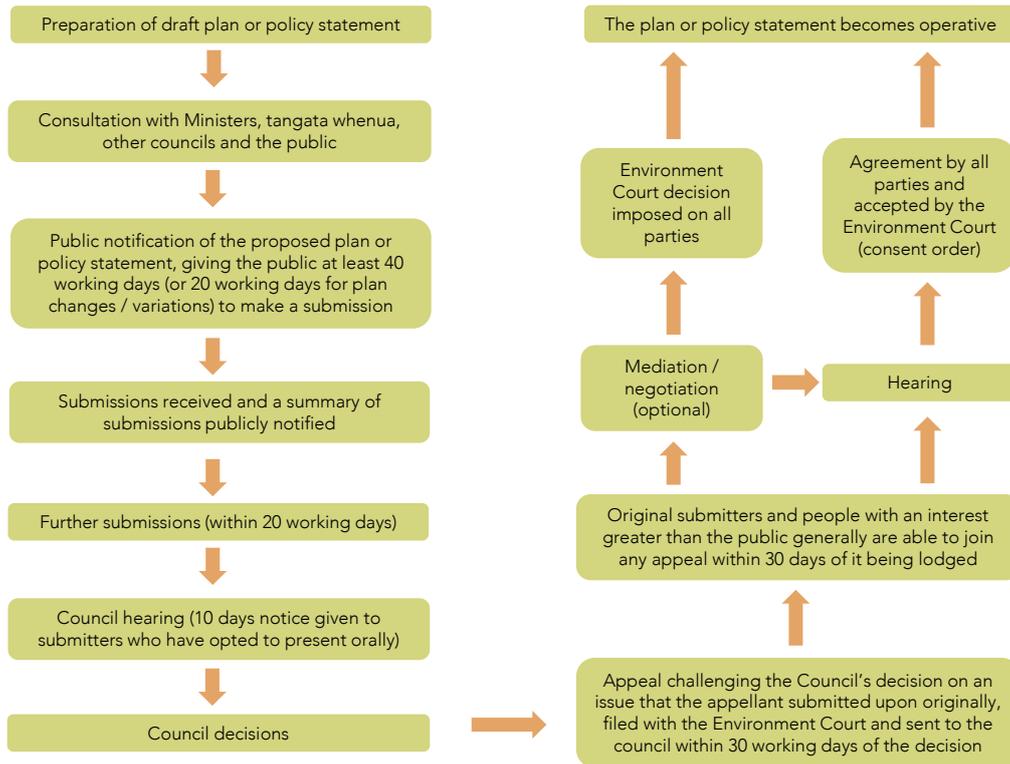


Territorial authorities can change the RMA Plans for its District Plans, while regional councils can change the RMA Plans for its Regional Plans and its RPSs. Councils are expected to review these Plans every 10 years, either in whole or on a rolling basis. The RMA lays down procedural requirements for 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.

³¹ No data on the activity classification was available for the remaining 2% of processed applications.

Figure 5.4 RMA Plan preparation process



Bespoke arrangements have been established for the Proposed Auckland Unitary Plan and the Christchurch Replacement District Plan. Independent Hearings Panels (IHPs) have been set up to hear submissions and make recommendations on the final content of the Plans to the Auckland and Christchurch City Councils. Ministers appoint the IHPs,³² which have prescribed terms of reference and must complete their tasks within set timeframes (Box 5.2). The IHPs make recommendations to the relevant councils on changes to their Plans, and the councils have the right to accept or reject these recommendations. However, when a council rejects a panel recommendation it will face a higher risk of having its Plan appealed.

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 may hear submissions on the PAUP, convene conferences of experts to resolve or clarify issues, refer specific issues and parties to mediation, and must make recommendations to Auckland Council on the Plan (including, where relevant, changes to the Plan). Auckland Council must then accept or reject each of the Panel’s recommendations. A submitter may object to the IHP if it declines to consider their submission or strikes out their submission in whole or in part. Except for the submitter making the objection (see below), no one can appeal the decisions 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.
- 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.

³² 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.

- 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 chairs the Auckland Unitary Plan IHP, which includes seven other members who are experts in urban planning, law, tikanga Māori, and economics.

Canterbury

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 make recommendations on a replacement Christchurch District 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 chairs the Christchurch IHP, which includes members who have significant legal, planning and development experience.

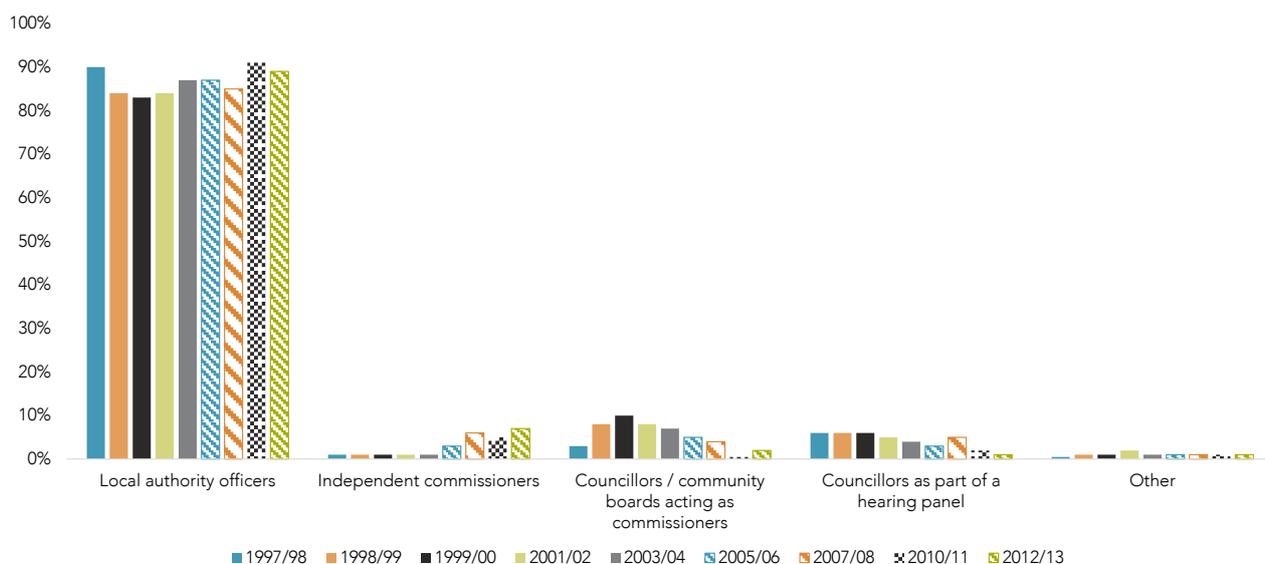
Ministers have the power to direct councils to change or review an existing RMA Plan, or to prepare a new Plan, where this would address an issue that relates to the council's function. Selected Ministers also have the right to be consulted on the preparation of new Plans, and have the right of audience 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 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 these types of 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.³³ 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 **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.³⁴ 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 considers 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...

³³ 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.

³⁴ 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).

F5.3

The founders of the Resource Management Act (RMA) envisaged it as an enabling statute that would produce “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],³⁵ 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 expansions in the role and scope of planning (NZPC, 2015a). 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)).

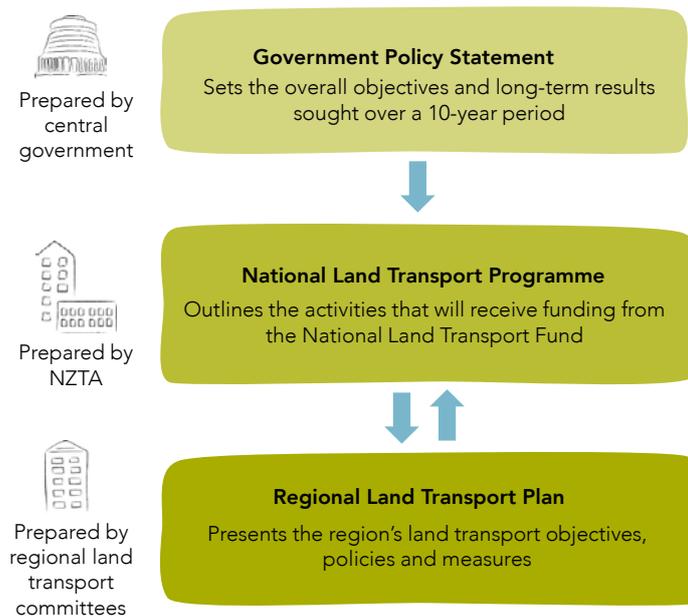
Land Transport Management Act

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 3-year National Land Transport Programme (NLTP),

³⁵ Long-Term Council Community Plans were renamed 'Long-Term Plans' in the 2010 amendments to the LGA.

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.³⁶ 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 NLTP is confirmed, local 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).

³⁶ 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.³⁷ 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 11).

5.4 Decision review

Decision review avenues 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;

³⁷ 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 is particularly unusual.

- No Australian state or territory provides for any right of appeal to 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 permit 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 New Zealand, no relevant submitter can appeal the Board's decisions to higher courts (K Palmer, 2013).

Similarly, third-party appeal rights – that is, the ability of people other than applicants for resource consents to appeal council decisions – are relatively wide in New Zealand. People notified of a resource consent application can make a submission on it, and may take appeals against the council's decision. For publicly-notified consents, any member of the public may make a submission. Third party appeal rights on development assessment (the equivalent of resource consents) are more limited in many Australian states and territories. England and Wales have no third-party appeal rights on planning permissions (K Palmer, 2013).

F5.4

Appeal rights in New Zealand are broader than in other comparable jurisdictions. The ability to appeal provisions of Plans is particularly unusual.

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 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 (where the IHP recommendations are accepted by councils) limited to points of law.

The role of the courts in the planning system 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). They 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).

Councils have also highlighted the costs and delays involved in 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.

Others, however, 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)

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 under the Local Government Act 2002)” (2012b, p. 7).

The 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 has 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. (2016, p. 19)

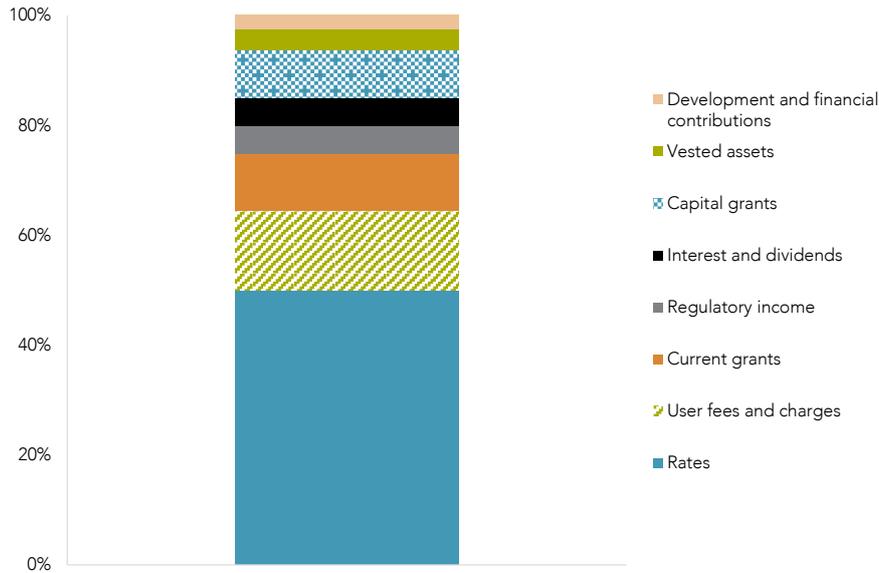
The Commission has previously found that participants in RMA processes were usually not incentivised to hold information back and that the Court-led mediation processes were working well (NZPC, 2013).

5.5 Funding

Local authorities in New Zealand fund their own regulatory activities and infrastructure needs, with the 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.

Figure 5.7 Summary of local government revenue sources, 2013–2014



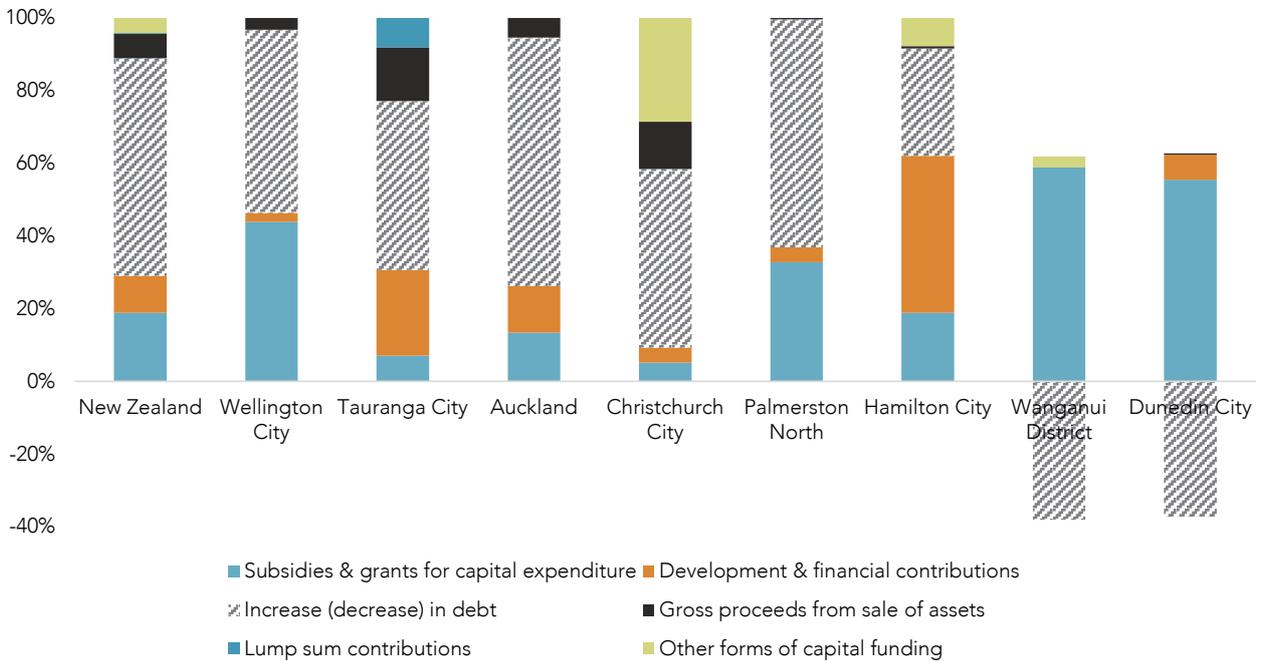
Source: Statistics New Zealand, 2015a.

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 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).

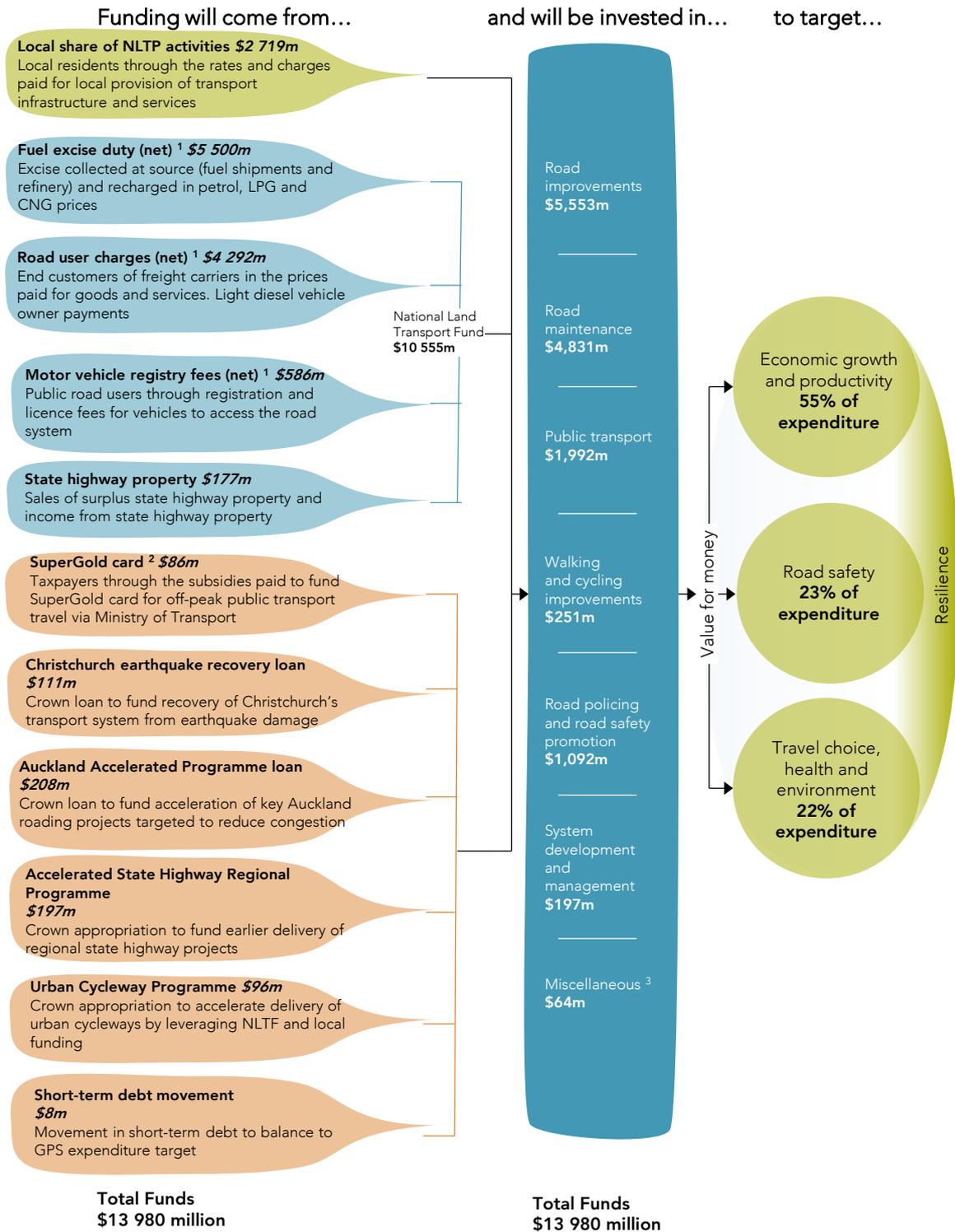
Figure 5.8 Forecast sources of council capital funding, 2016



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, 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.

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.

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).

5.6 Culture and capability

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 introduction of the RMA, and are ongoing constraints.

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 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 adherence 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 NZ 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 NZ’s institutional capabilities and too far ahead of the skill sets of practising planners” (pp. 100-101). In a similar vein, Frieder (1997) commented 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)

Miller (2007, 2011) argues that internal local authority cultures contributed to real and perceived performance problems. The separation of planning policy and consenting functions into separate units within many councils over the 1990s “not only broke the logical relationships between planning policy and implementation, but began by the late 1990s to create a belief that consents planning work was in some way ‘second rate’ and should be avoided” (2007, p. 173). As a result, “the consent sections, in essence the public face of planning, [were] often staffed by the least experienced and the least confident planning staff” (2011, pp. 186–87). Miller (2011) also cites studies of planning practice which

found problems with planners working in poorly resourced offices, with high and inconsistent workloads and under constant political pressure to minimise delays and costs but still expected to cost recover as much as possible. They were also faced with the unsolvable problem of being ‘unable to link environmental policies to the social and economic factors that drive them’. (p. 187)

More broadly, councils have faced rising regulatory obligations and capability challenges. In its report into local government regulation, the Commission noted:

- an increase in local government regulatory responsibilities;

- rising technical requirements and community expectations on councils; and
- concomitant pressures on local authority performance and capability.

In a survey of local authorities associated with that inquiry, half of all councils agreed that attracting qualified staff was a barrier to performing their regulatory functions. Further, 60% of councils said that planning, land use and water consents vacancies were typically the hardest to fill (NZPC, 2013).

F5.5

The carrying over of old traditions and institutions from the former Town and Country Planning Act, capability gaps, and local government restructuring, contributed to the Resource Management Act failing to achieve its potential.

5.7 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

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 attitudes³⁸ – 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

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)

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)

³⁸ NIMBY stands for "Not in my back yard"; BANANA stands for "Build Absolutely Nothing Anywhere Near Anyone".

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)

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).

5.8 Ensuring the principles of the Treaty of Waitangi are taken in 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 11 explores in more detail the performance of the current planning system in reflecting Treaty obligations.

5.9 Systematic and cost-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

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.

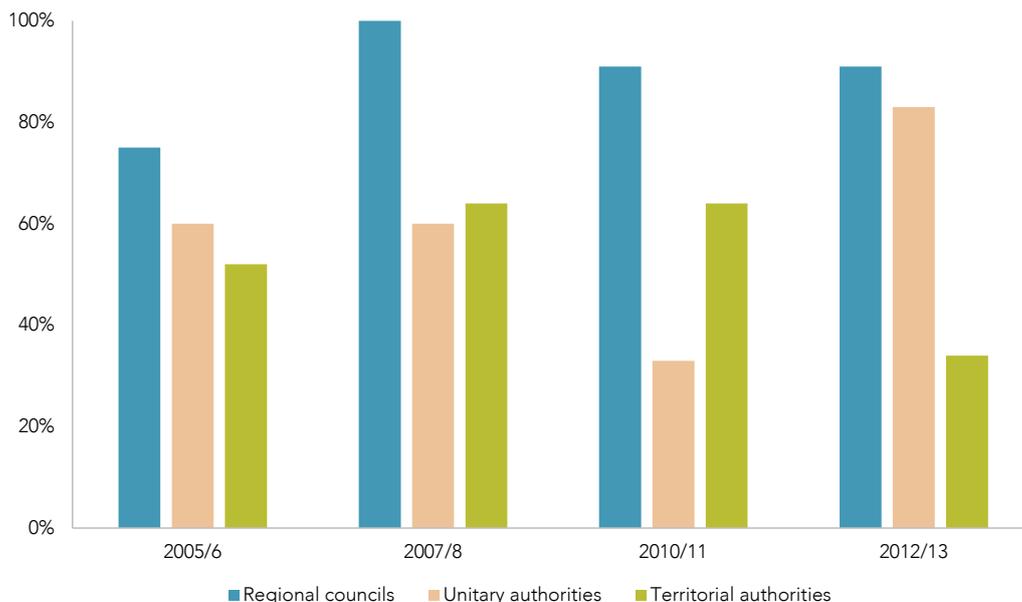
The Commission also observed:

- a “low level of prioritisation of monitoring and enforcement resources based on risks” (p. 79);
- inappropriate involvement by elected officials in decisions about investigations and prosecutions;
- inadequate feedback loops,
- a lack of balance in what is measured, and
- insufficient focus on the 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 analysis 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 the effectiveness and efficiency of their 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, these checks and balances have had disappointing effects.

5.10 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.

Cabinet officially views regulatory regimes in New Zealand as assets that should "deliver a stream of net benefits to New Zealand over time", and that the responsible departments should manage their regulatory regimes with that objective in mind (Box 5.5).

Box 5.5 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 improvement in 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 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.

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 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).

Central government's current ability to monitor the performance of the planning system varies, depending on the statute. In particular, the urban outcomes desired from the RMA lack 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
<ul style="list-style-type: none"> • Safety of drinking water • Maintenance of the reticulation network • Fault response times • Customer satisfaction • Demand management 	<ul style="list-style-type: none"> • System and adequacy • Discharge compliance • Fault response times • Customer satisfaction 	<ul style="list-style-type: none"> • System and adequacy • Discharge compliance • Response times • Customer satisfaction 	<ul style="list-style-type: none"> • System adequacy and maintenance 	<ul style="list-style-type: none"> • 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.

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.
- Amendments in 2014 required local authorities to prepare 30-year infrastructure strategies (discussed in section 0 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.³⁹
- Finally, amendments on 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"⁴⁰.
- 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

³⁹ The financial prudence benchmarks cover rates affordability, debt affordability, balanced budgets, essential services, debt servicing, debt control, and operations control.

⁴⁰ Section 32(2)(a)(i) and (ii).

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.⁴¹

F5.8

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.

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 is 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.

⁴¹ Where a Housing Accord is in place, the relevant council must approve the establishment of any Special Housing Area.

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.⁴²
- The new Council was required, at least in its initial year, to adopt a capital value rating system.
- 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 to make decisions, perform functions, and exercise powers by—
 - (a) promoting cultural, economic, environmental, and social issues of significance for—
 - (i) mana whenua groups; and
 - (ii) mataawaka of Tamaki Makaurau; and
 - (b) ensuring that the Council acts in accordance with statutory provisions referring to the Treaty of Waitangi. (section 81 of the Local Government (Auckland Council) Act 2009)
- 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.⁴³

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,⁴⁴ 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 (WRA). The WRA has 10 members, with the Crown and iwi appointing 5 each. The Crown appointees include 1 representative from the 4 territorial authorities, while each of the 5 iwi on the river has 1 representative. Unlike a regional council, the Crown funds the WRA.

⁴² Statute prevented the Council from disestablishing Watercare Services as a council controlled organisation until 30 June 2015.

⁴³ Provision was made for the Council to seek an extension of a further 20 working days.

⁴⁴ These additional powers include the ability to impose a moratorium on the issue of further water take and discharge consents.

The primary functions of the WRA are to set and review a Vision and Strategy for the Waikato River, monitor the Vision and Strategy's implementation, and fund some river clean-up activities. The Vision and Strategy form part of the Waikato RPS, meaning that local Regional and District Plans must give effect to it. If the National Policy Statements, or the New Zealand Coastal Policy Statement, are inconsistent with the Vision and Strategy, the Vision and Strategy prevails. Unlike with an RPS, the decisions on the review of the Vision and Strategy cannot be appealed to the Environment Court. The WRA cannot make rules to give effect to the Vision and Strategy; these remain the responsibility of the Waikato Regional Council. However, the regional council must amend its plans and rules to reflect the Vision and Strategy. The Institute of Policy Studies (2011) describes the significance of the Authority model:

[T]he Waikato region has two governance regimes... previously responsible for all of the Waikato River, the regional council has lost governance responsibility for water management in the river, and is in effect a management agency rather than a governance body. Authority has been transferred from the regional council to Waikato river iwi and central government appointees. (pp. 218–220)

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).

F5.9

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.

5.11 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 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 5.6).

Box 5.6 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)

F5.10

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.

5.12 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. Despite these improvements, 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. Partly 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 public transport 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.

6.1 Introduction

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 definition of the 'environment' that gives prominence to biophysical features.
- *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;⁴⁵
- 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.

⁴⁵ 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.

6.2 Air quality

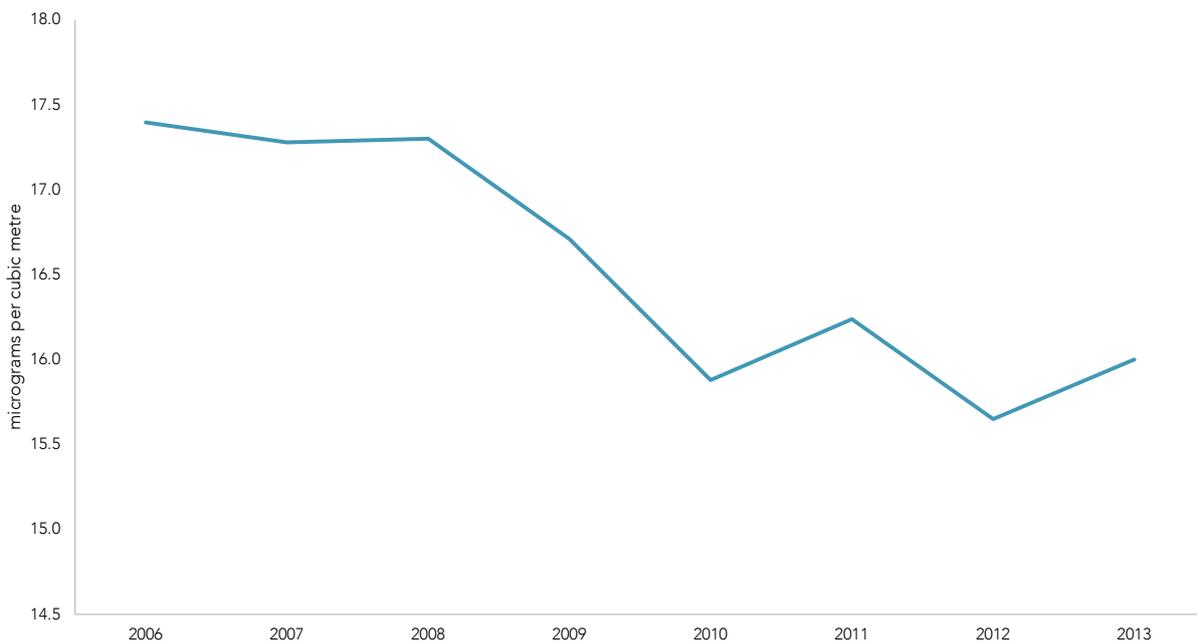
Air quality in New Zealand is measured against a number of indicators. The National Environmental Standards (NES) for Air Quality set ambient air quality standards, which regional and unitary councils must give effect to through their plans and policies. The standards set thresholds for five pollutants (PM10 (see particulate matter below), nitrogen dioxide, carbon monoxide, sulphur dioxide and ozone), and outline how many times these thresholds can be exceeded.⁴⁶ 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).

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 or 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 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).

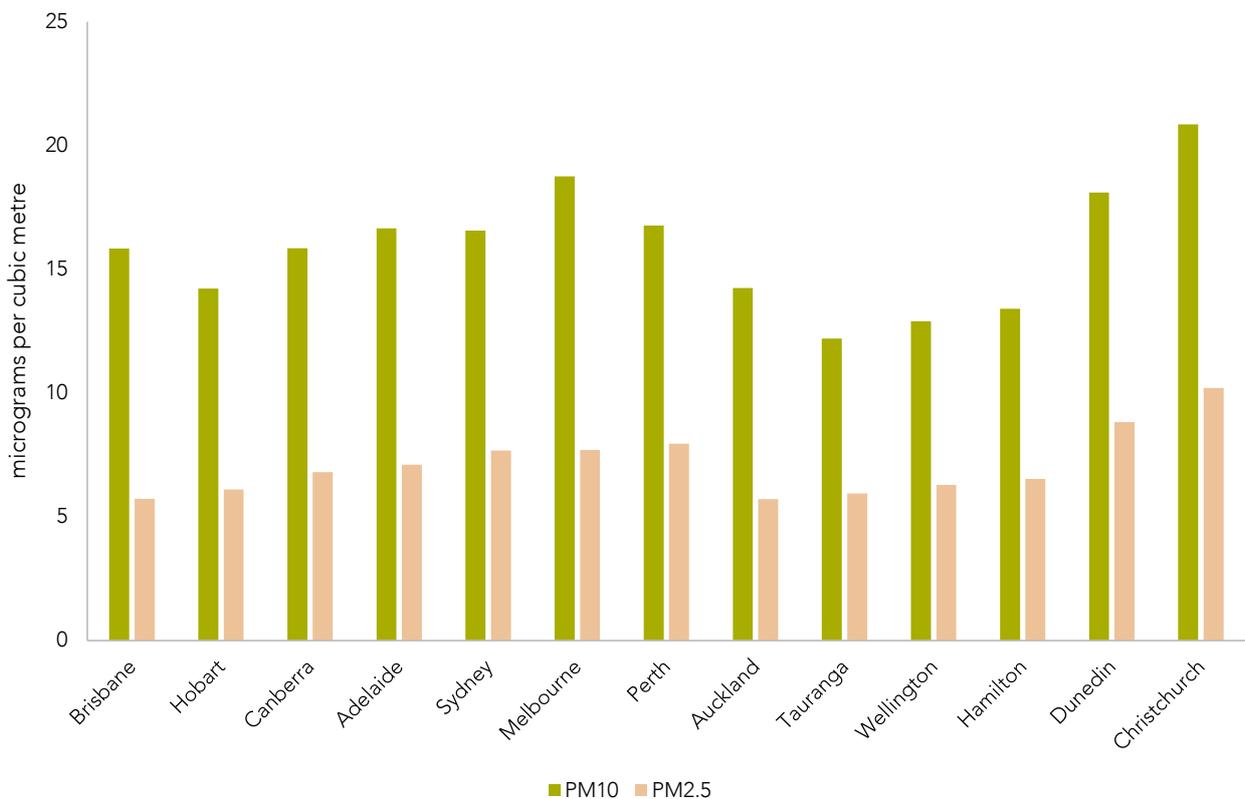
⁴⁶ For some pollutants (ie, ozone, and the higher sulphur dioxide threshold) no exceedances are allowed.

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

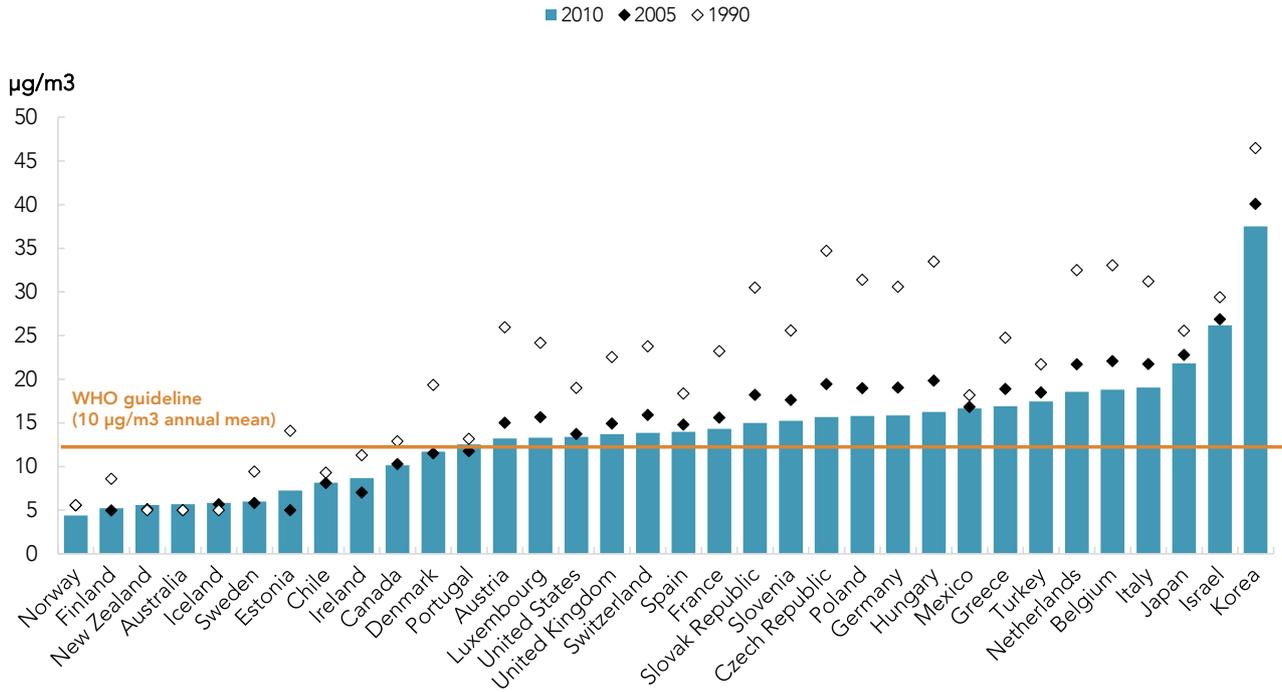


Source: Productivity Commission analysis of World Health Organization data.

Notes:

1. Results are from different points across the 2012 to 2014 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.

Notes:

1. The symbol µg refers to microgram.

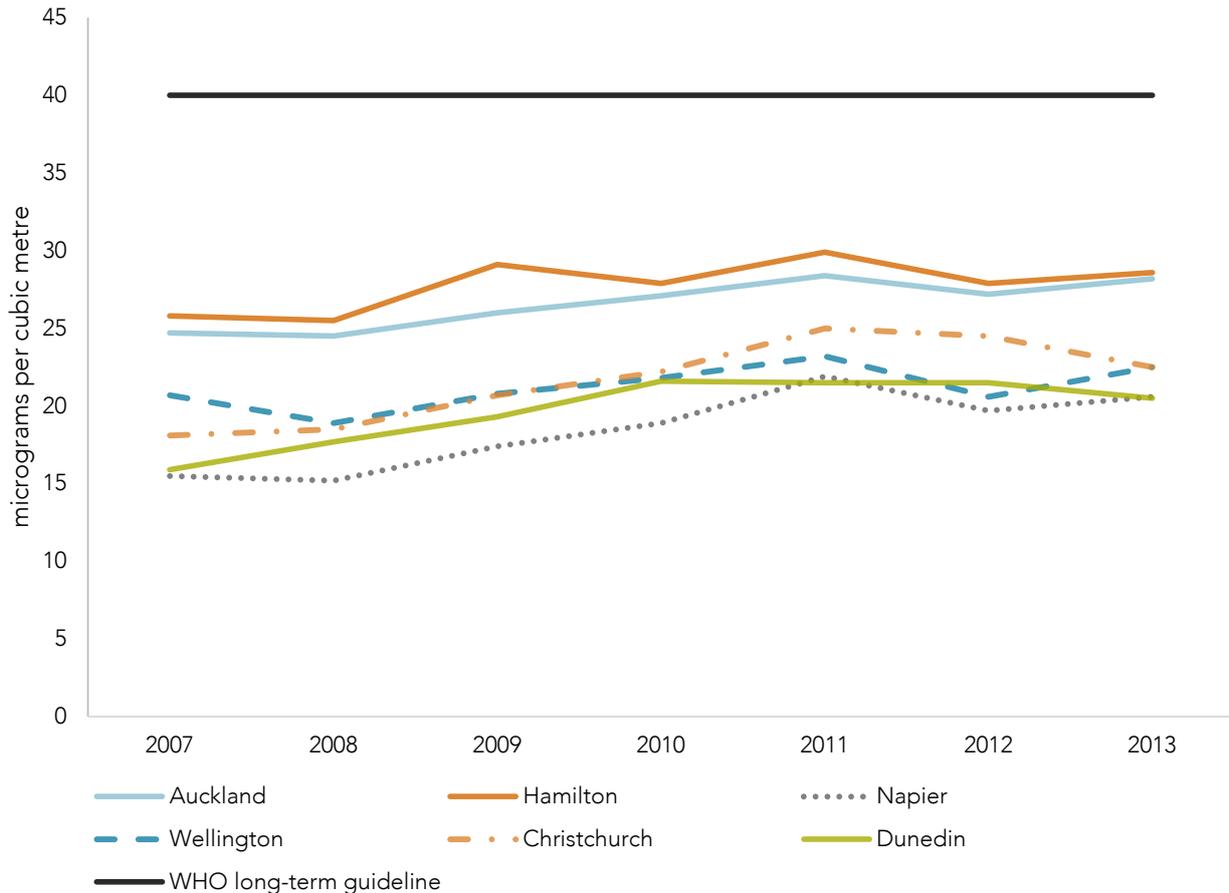
Exposure to nitrogen dioxide

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

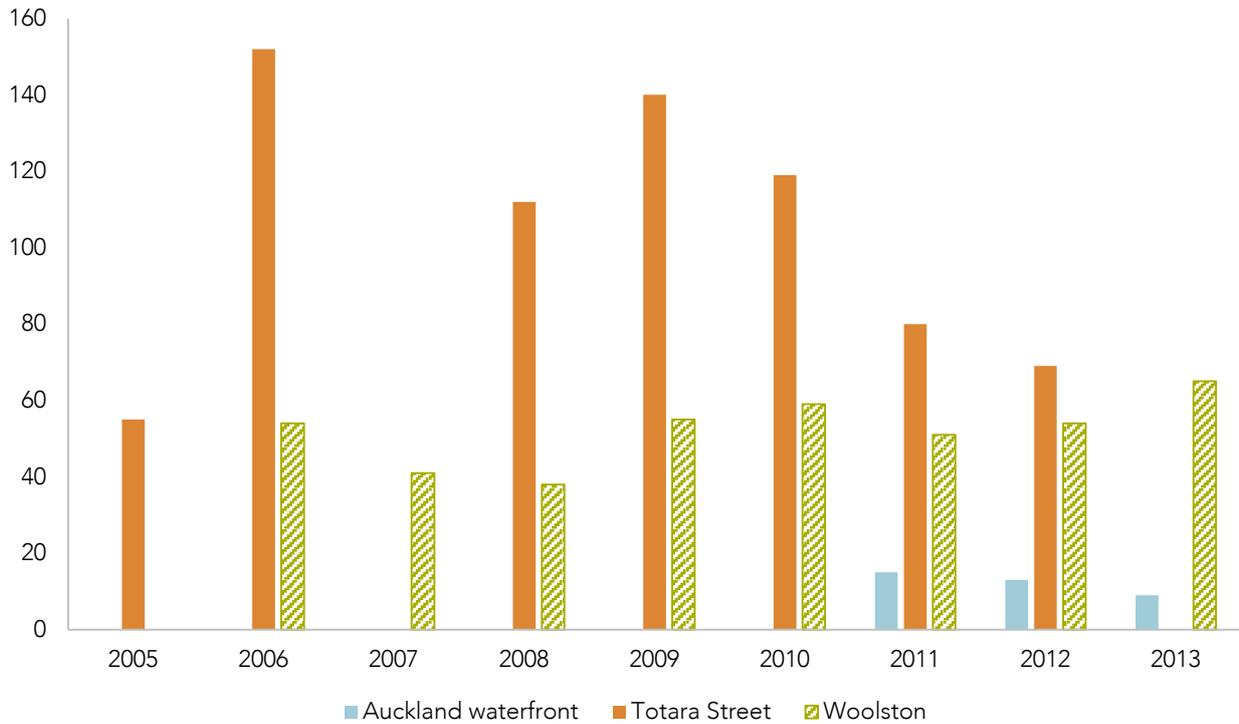
Sulphur dioxide is associated with respiratory and cardiovascular illness. The main source of sulphur dioxide emissions in New Zealand is industrial processes. According to MfE (2016b), “[s]ulphur dioxide levels in urban areas have decreased significantly since the 1970s and are generally below the ambient 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)⁴⁷ that have exceeded the 350 micrograms per cubic metre threshold on multiple occasions. 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.

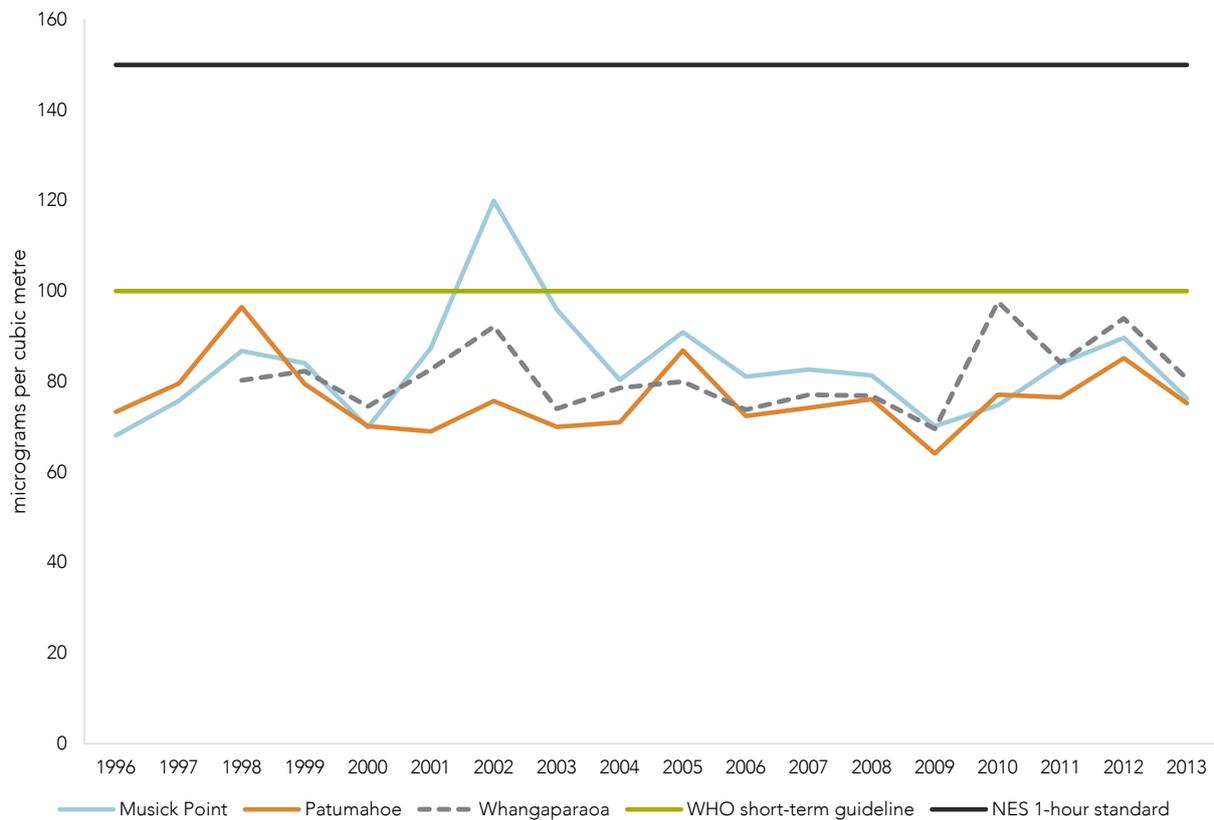
Notes:

1. 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.

⁴⁷ 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. However, air quality problems remain in some smaller New Zealand cities and towns.

6.3 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,⁴⁸ 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:

1. 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).

⁴⁸ 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 macroinvertebrate community index 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:

- 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/m ³	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:
 - 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 as major contributors to poor water quality (Perrie et al., 2012).
- 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,⁴⁹ 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, 2015).
- 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

⁴⁹ 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).

overflows were considered to be “the main source of microbiological contamination at beaches in or 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 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 enterococci 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).

6.4 Greenhouse gas emissions, and resulting 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). Much of the growth of emissions from the energy sector is due to road transport activities. 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
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:

1. '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.

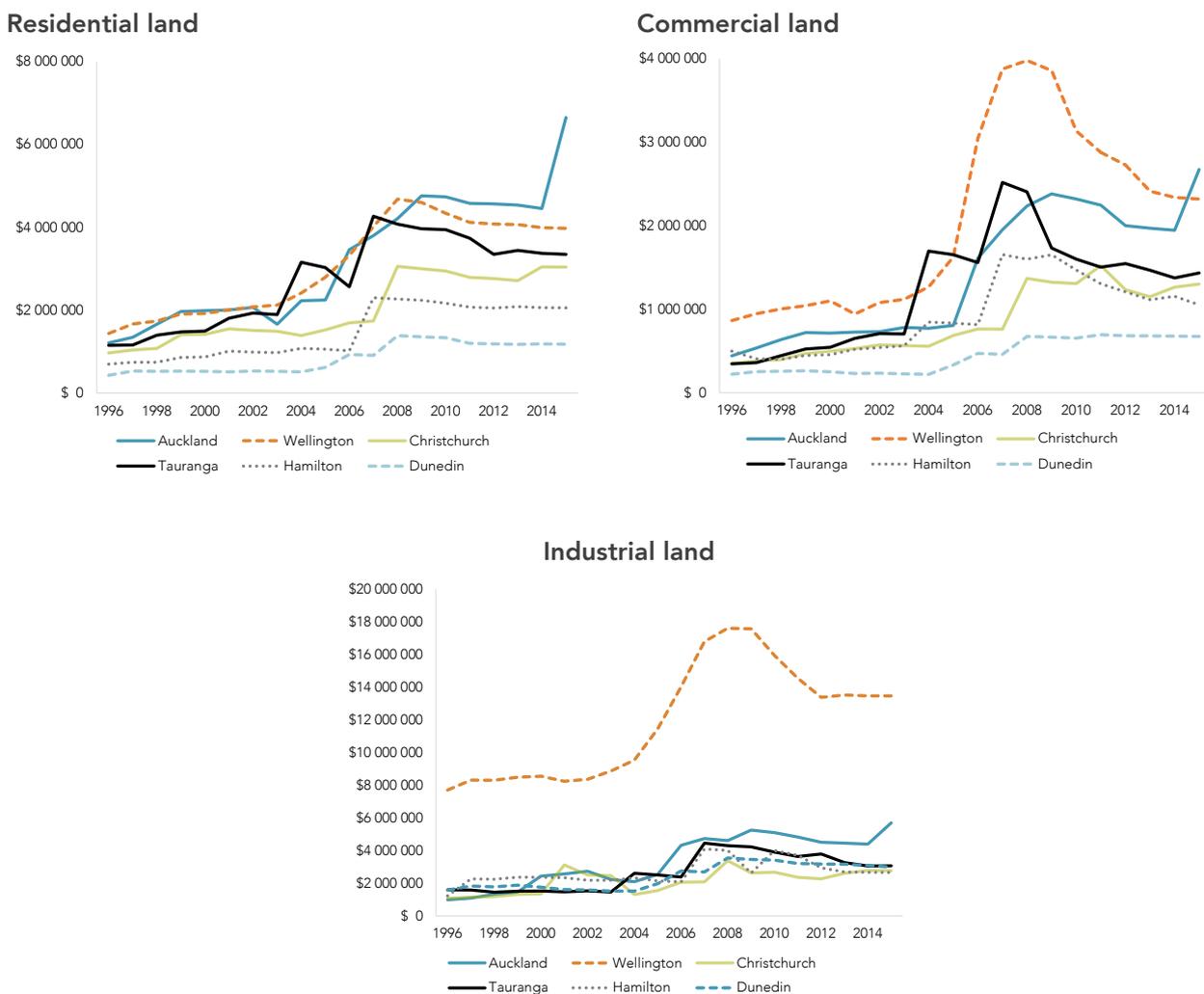
The Parliamentary Commissioner for the Environment has recommended that, in planning for climate change, councils need to "engage with coastal communities in a measured and empathetic way. The focus should be on preparing well rather than rushing" (PCE, 2015, p. 71). The Commissioner also recommended that central government provide better national direction, guidance and support for councils carrying out such planning (PCE, 2015).

6.5 Sufficient 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.⁵⁰

The best available measure of the adequacy of supply is 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.

⁵⁰ 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:

- the zoning of the land; and
- the provision of adequate infrastructure, existing or likely to exist, to support the development of the land, having regard to—
 - the relevant proposed and operative policy statements and plans for the region; and
 - the relevant proposed and operative plans for the district; and
 - any relevant management plans and strategies prepared under other Acts; and
- the rules and methods in the operative plans that govern the capacity of the land for development; and
- 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 Gross adjusted disposable income spent on housing, by OECD country, 2012

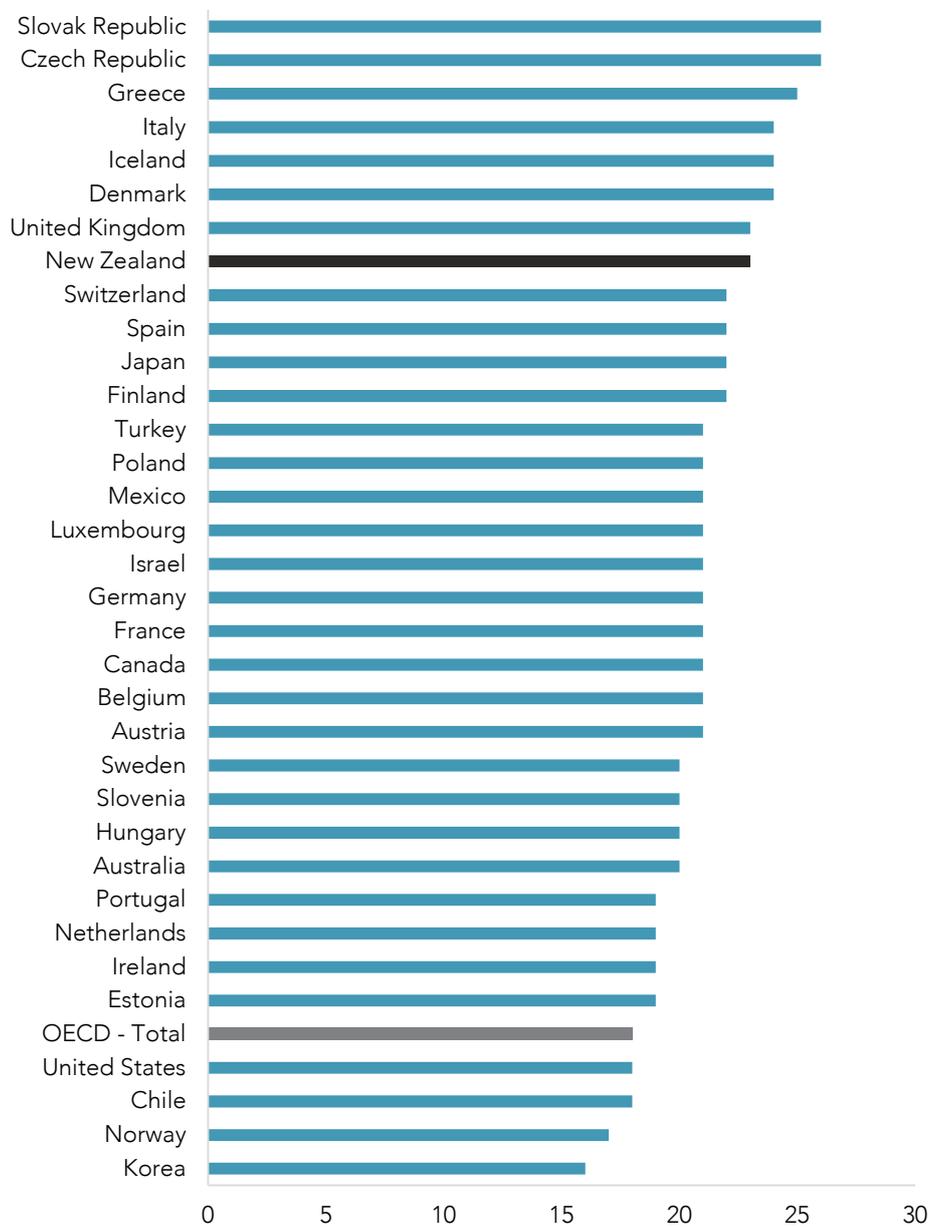
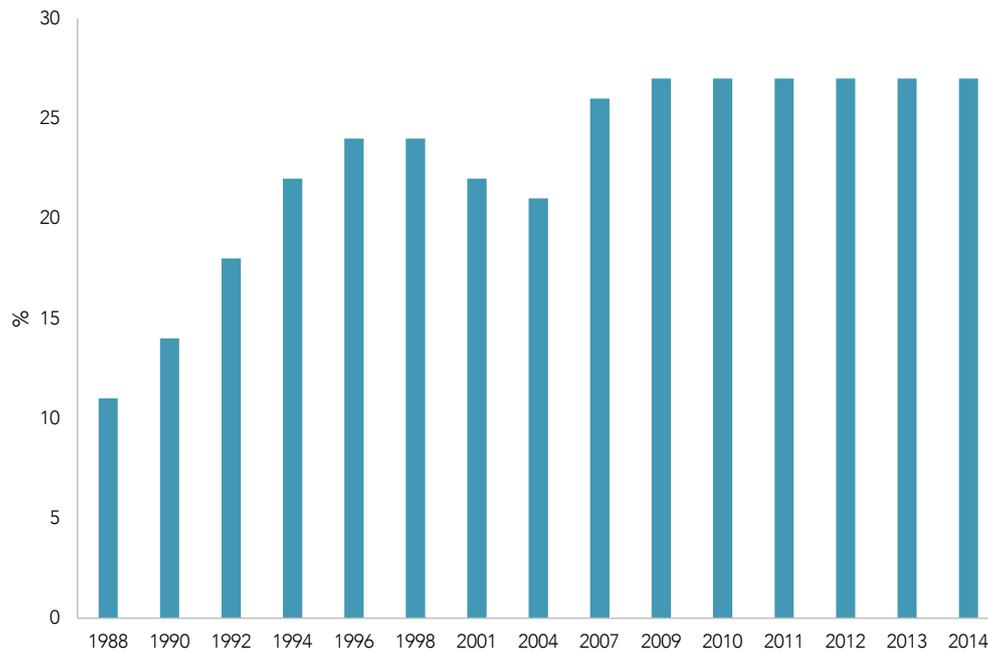


Figure 6.9 Share of New Zealand households that spend more than 30% of their disposable income on housing, various years between 1998 and 2014



Sources: Statistics New Zealand.

Note:

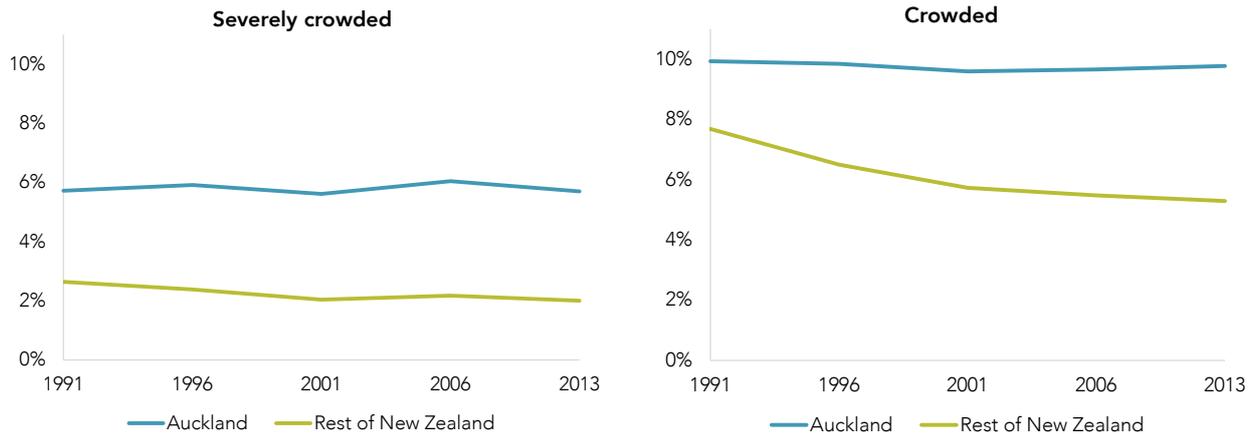
1. Results in Figure 6.8 for Iceland, Israel, Luxembourg, New Zealand, Poland and Turkey are estimated values.

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 and severely crowded housing, 1991–2013



Source: Productivity Commission analysis of Statistics New Zealand data.

Note:

1. 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, as 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.

6.6 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).⁵¹

⁵¹ 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

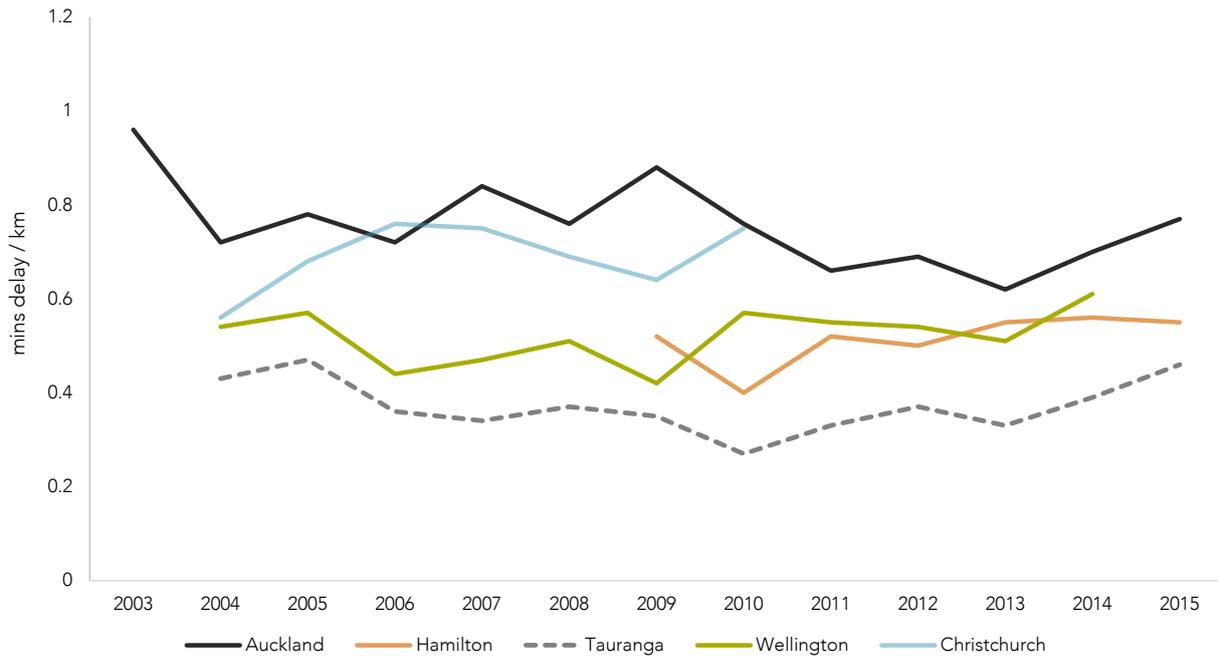
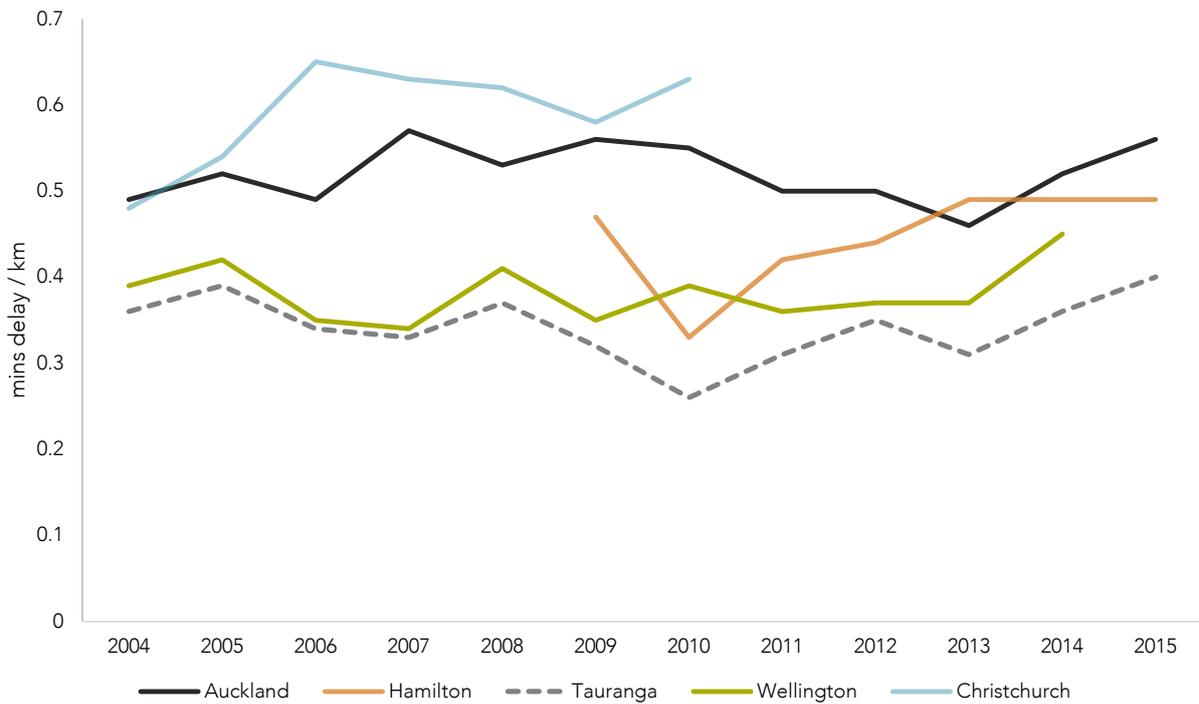


Figure 6.12 All-day traffic congestion in selected New Zealand cities, 2003–2015



Source: Productivity Commission analysis of Ministry of Transport data.

Note:

1. 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

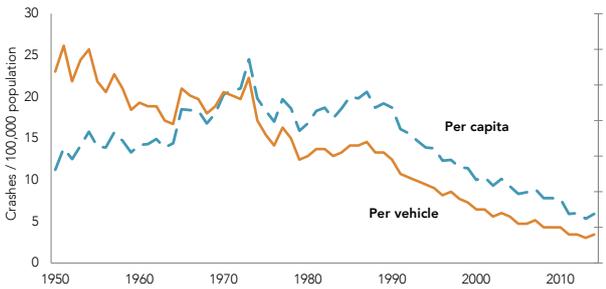
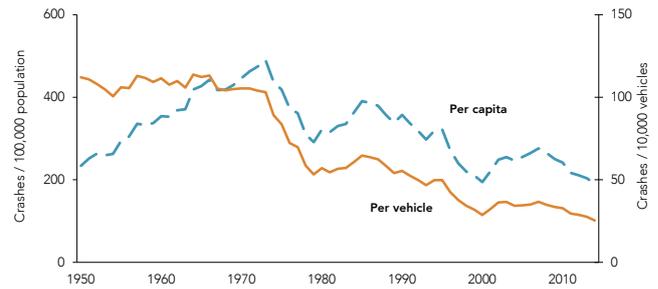


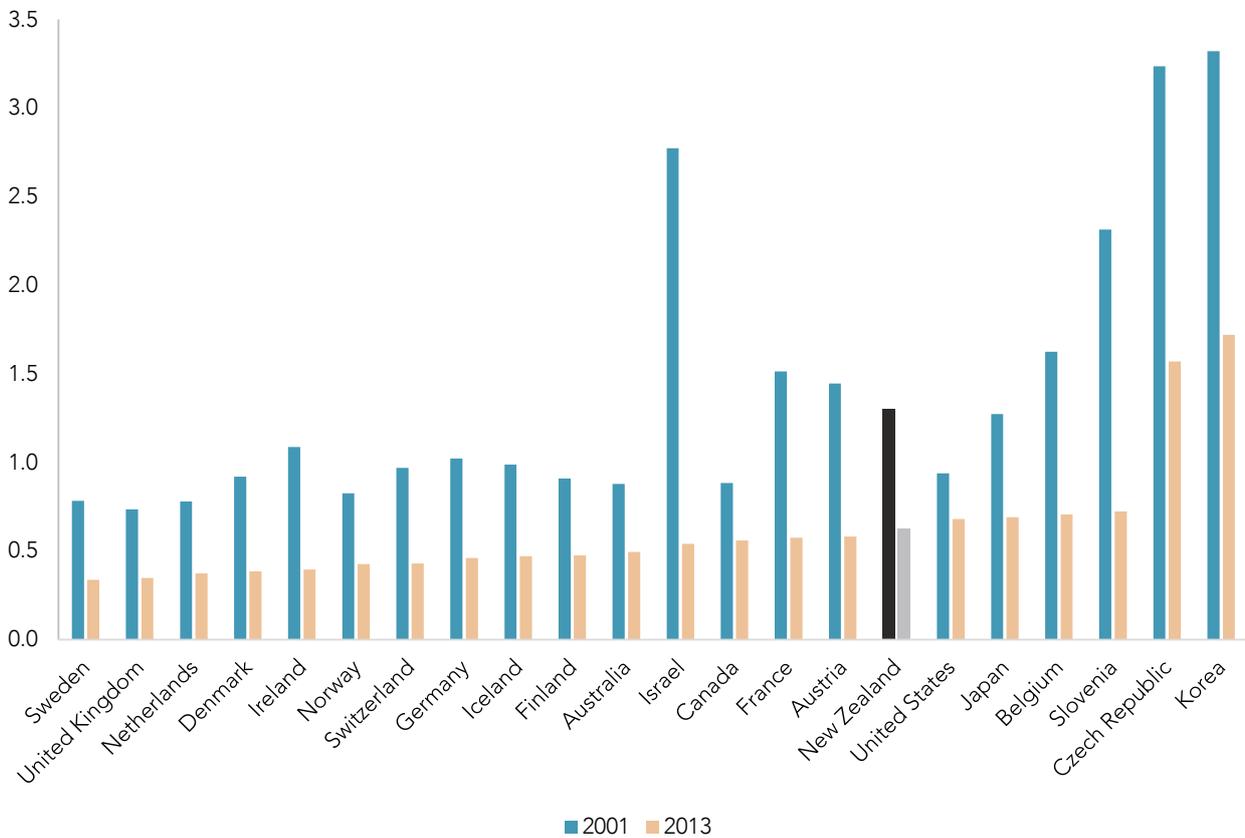
Figure 6.14 Injury crashes, on a per-capita and per-vehicle basis, 1950–2014



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

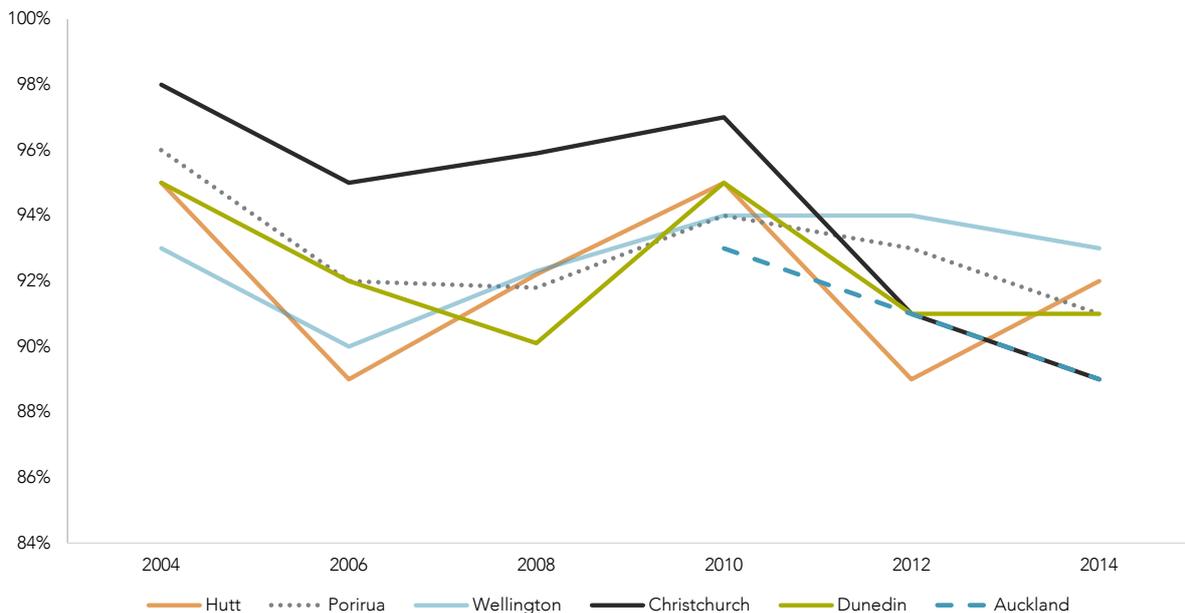
6.7 Core infrastructure and services

In their 2015–16 annual reports, local authorities will report against non-financial performance indicators covering the delivery of specified core services.⁵² 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:

1. 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.

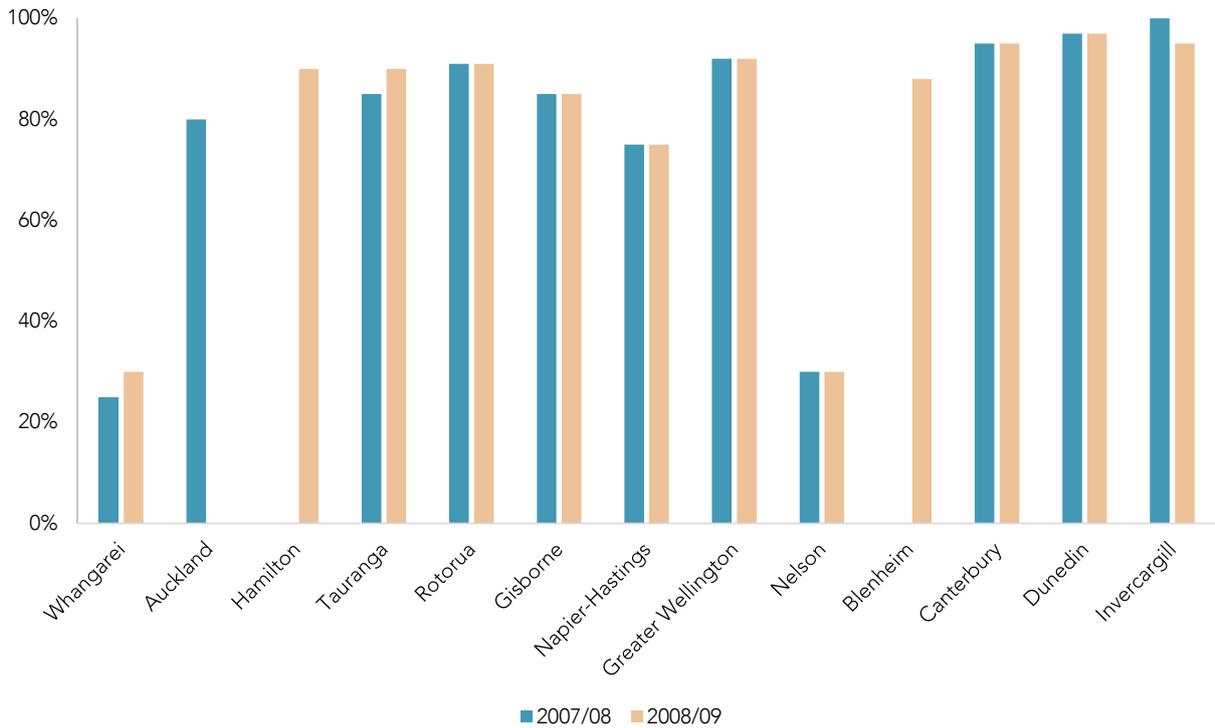
Using public transport to ease road congestion

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.

⁵² 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.

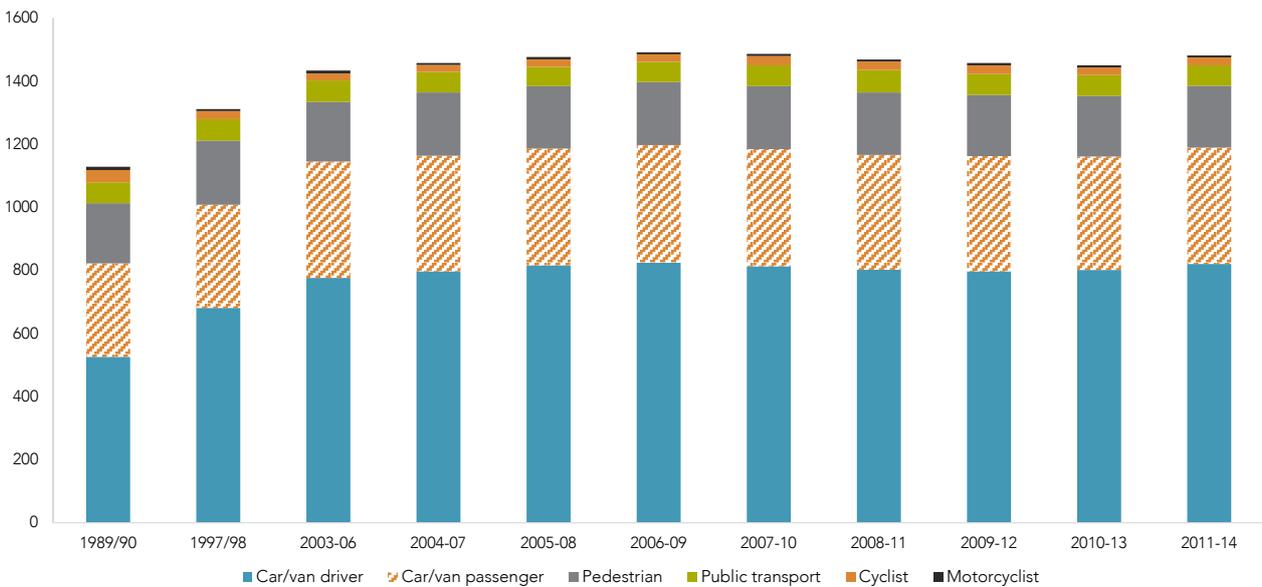
Figure 6.17 Proportion of population living within 500m of a bus stop, 2007/08 and 2008/09



Source: Productivity Commission analysis of MoT data.

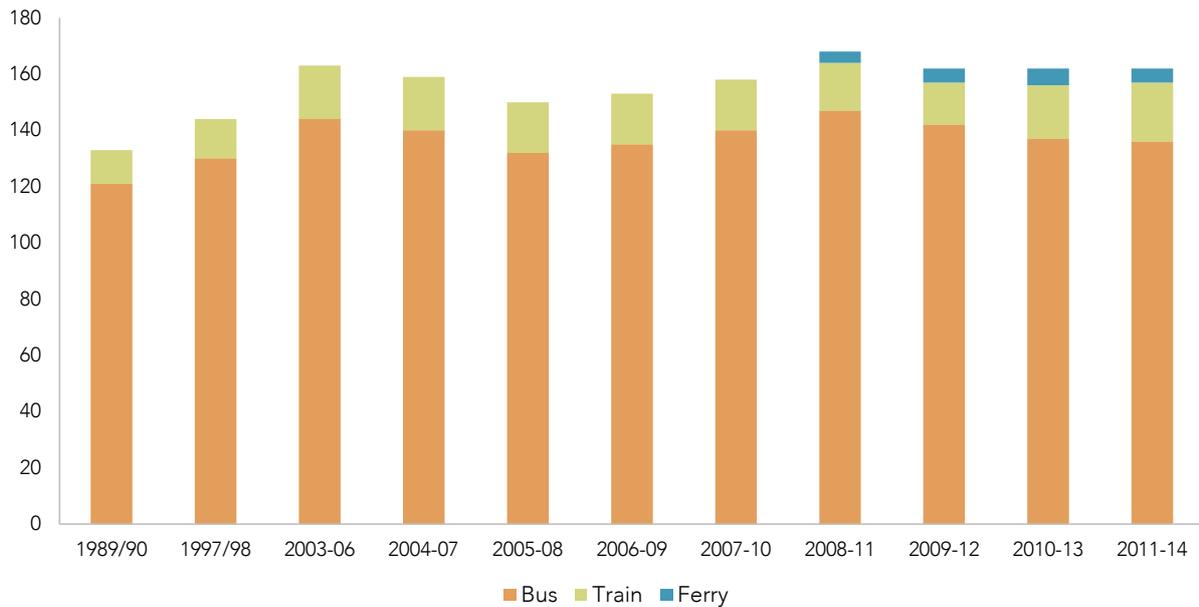
At a national level, public transport makes up a relatively small proportion of travel by any measure (duration, distance, trip leg) and its share has not significantly increased since the early 1990s (Figure 6.18). Data from the Household Travel Survey suggests that the total volume of trip legs taken 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 aged over 5, for 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.⁵³ 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

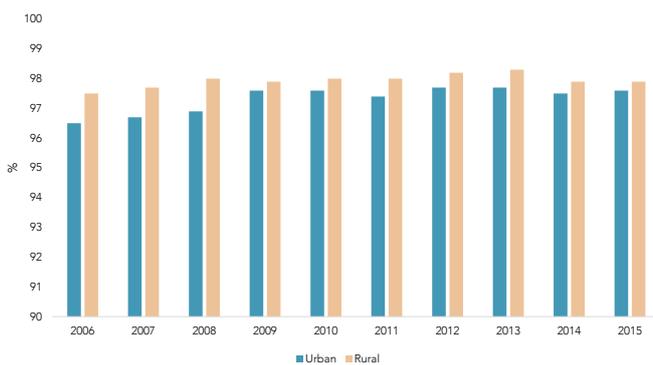
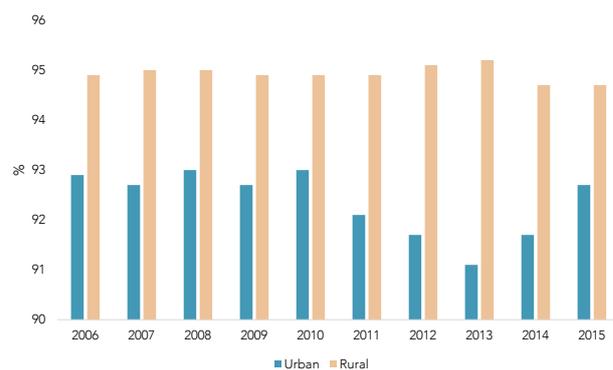
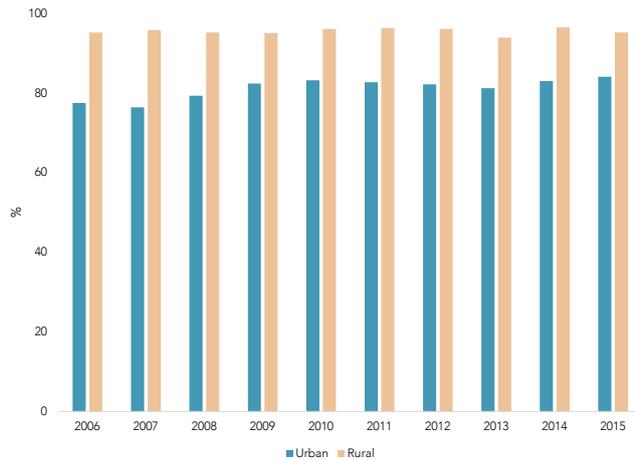


Figure 6.21 Pavement Integrity Index performance, by type of road, 2006–2015



⁵³ “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

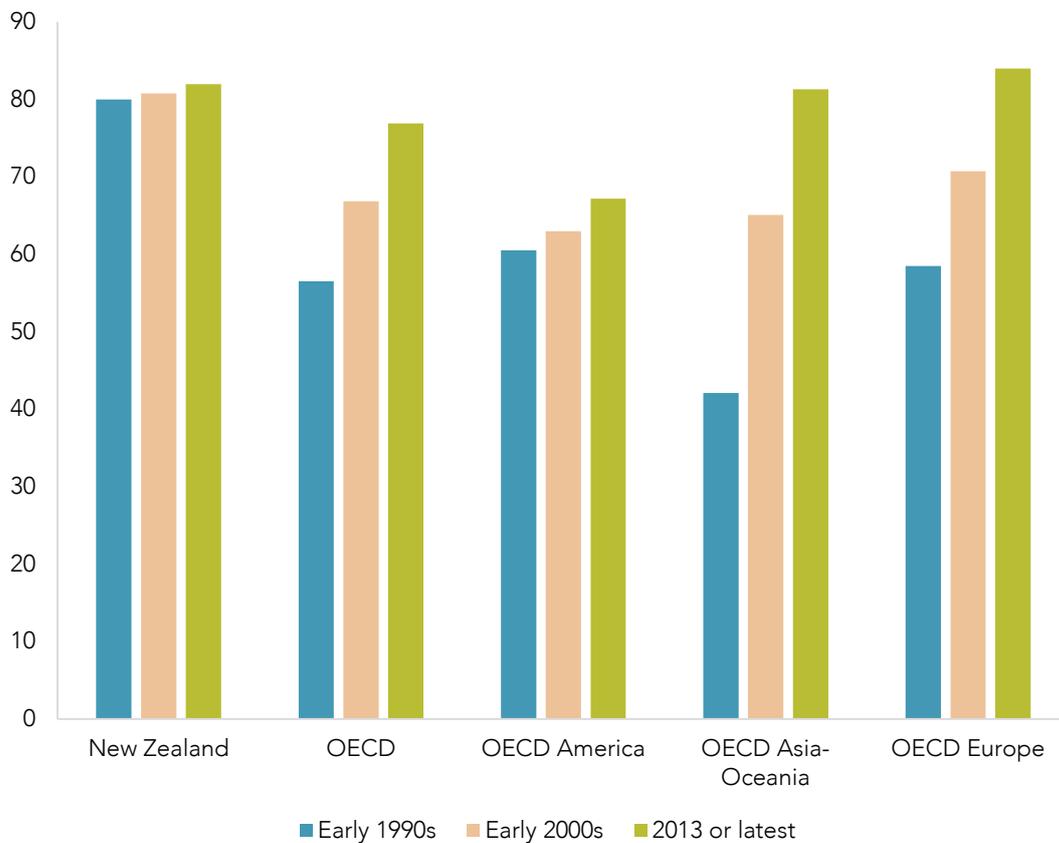


Source: New Zealand Transport Agency.

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 the population connected to a wastewater treatment plant, 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.

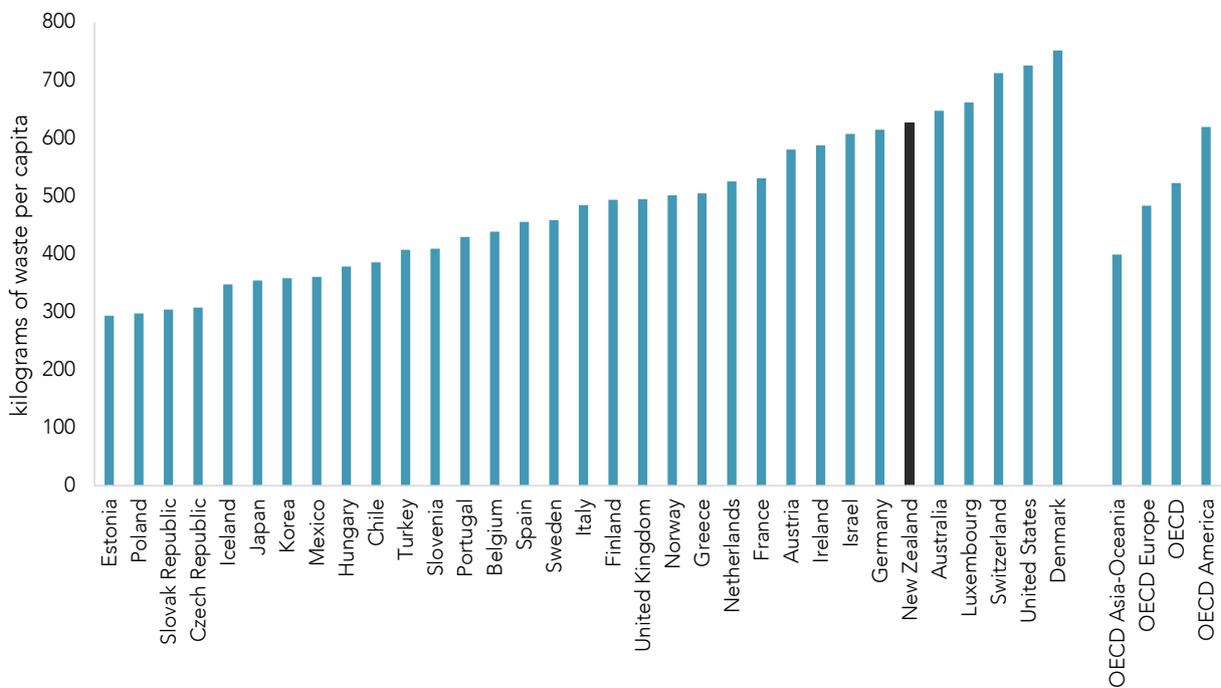
F6.9

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 2013.⁵⁴

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).

6.8 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).

⁵⁴ As only 53 of the 67 (79%) territorial authorities responded to the survey, its results must be treated with some caution.

Table 6.6 Ten-year average renewals expenditure to depreciation, by asset class, as forecast in 2012–2022 long-term plans

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).

6.9 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,⁵⁵ new development capacity cannot be brought on stream without the express permission of councils. 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

⁵⁵ 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 (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. 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. (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. 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

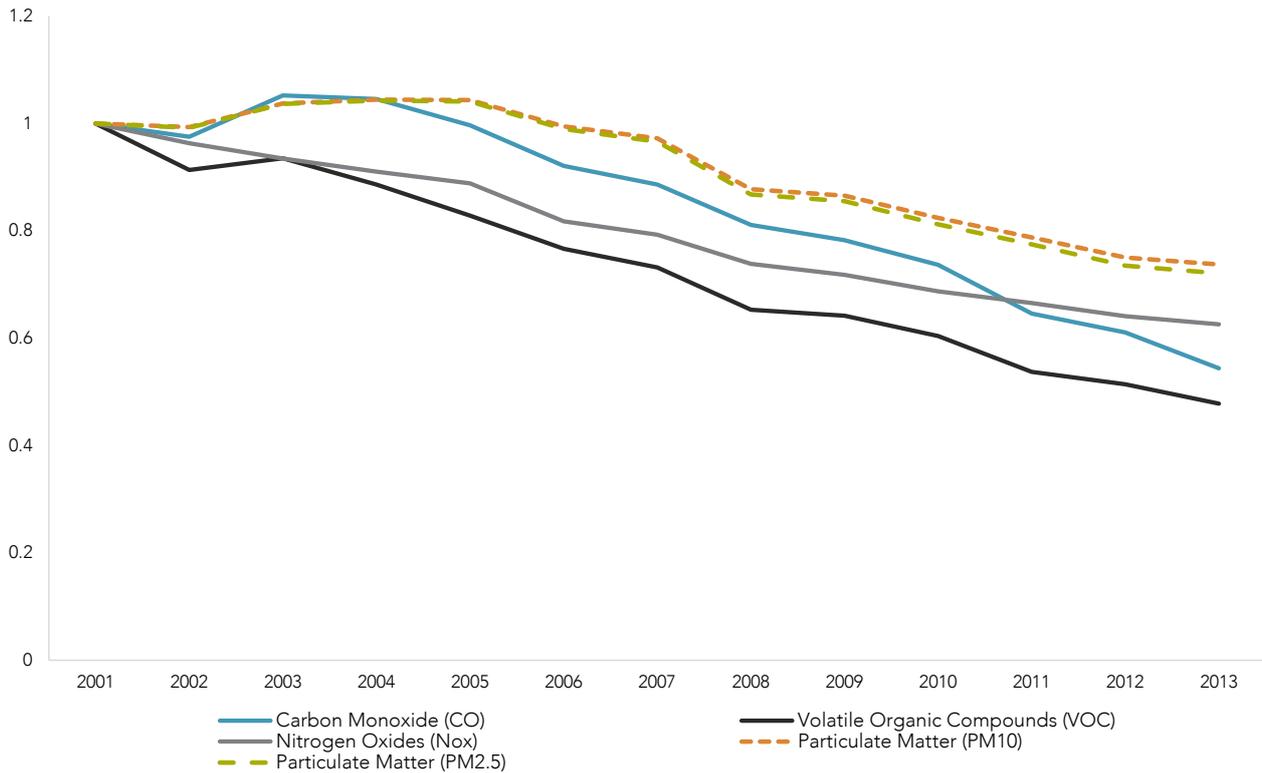
The absence of national standards and local or political resistance has limited the planning system's ability to manage pollution of fresh water or cumulative pollution.

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).⁵⁶

⁵⁶ As measured by vehicle kilometres travelled.

Figure 6.25 Estimated yearly emission index of key pollutants from road transport, 2001–2013

Source: Ministry for the Environment / Statistics New Zealand.

Note:

1. 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. An emissions rule was introduced in 2003, setting minimum standards for vehicles entering New Zealand. Emission standards were tightened in

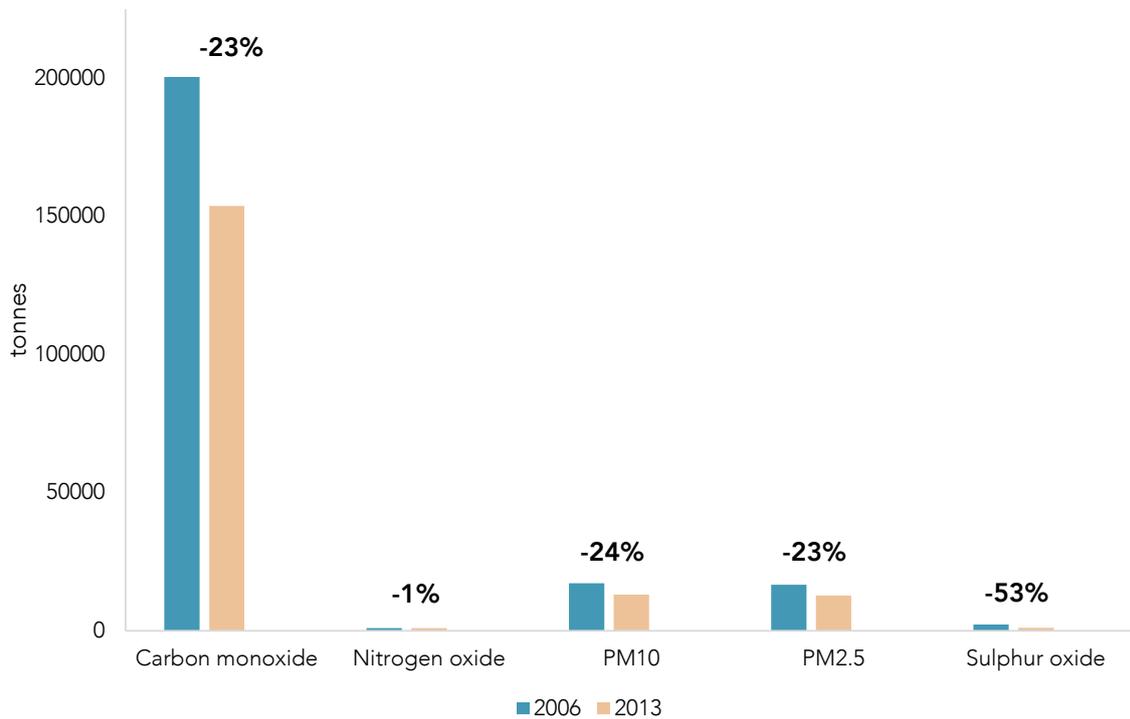
- 2006 (to add a visible smoke check to the Warrant of Fitness and Certificate of Fitness tests for all vehicles, including those already in the fleet),
- 2007 (to update the emissions standards to reflect international practice, tighten standards for used vehicles, and require testing of used vehicles 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.⁵⁷

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 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 Figure 6.28).

⁵⁷ 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.

Figure 6.27 Yearly average population growth for OECD countries, 2004–2013

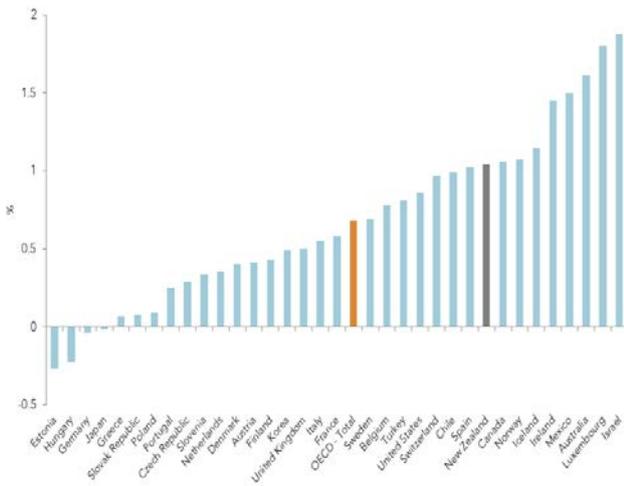
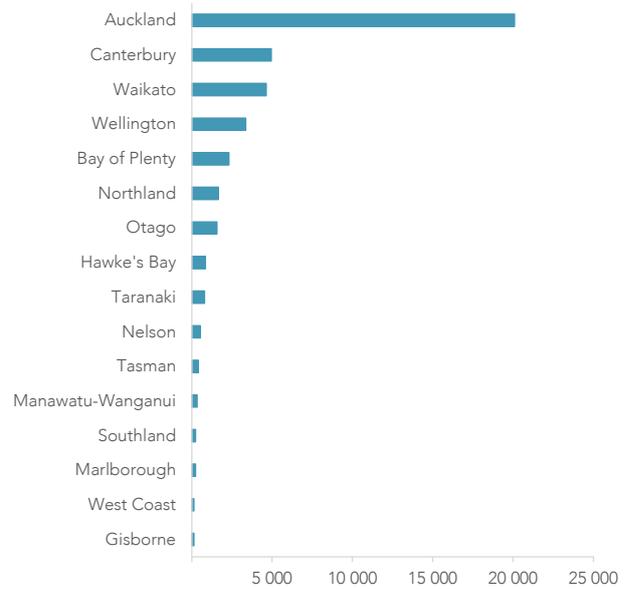


Figure 6.28 Yearly average absolute population growth 2004–2014



Source: Productivity Commission analysis of OECD and Statistics New Zealand 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).

6.10 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 Regulating 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 promote accessibility by residents to jobs and other activities.
- New Zealand's current system has a number of strengths, including placing a premium on speed and approvals for low-risk developments, and relatively enabling zones. However, it also has a number of weaknesses, including undue regulatory burdens, poor use of discretion in some areas, and a failure to provide enough development capacity.
- The system's weaknesses can be attributed to:
 - a status quo bias and risk aversion;
 - blindness to price signals;
 - slow and cumbersome processes for changing land use controls;
 - a limited suite of alternative tools;
 - a lack of clear statutory limits; 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;
 - allow for 'event-based' rezoning, where land use controls are set in anticipation of pre-determined triggers and activated once those triggers are reached;
 - focus urban notification requirements and appeal rights on those directly affected, or highly likely to be directly affected, by a proposed development or Plan change; and
 - enable targeted infrastructure or service investments in areas facing significant change, to help offset any amenity losses.
- A permanent Independent Hearings Panel should be established to consider and review new Plans, Plan variations and private Plan changes across the country.
- Consultation requirements under a future urban planning system should:
 - give councils flexibility to select the most appropriate and effective tools for the issue at hand;
 - allow councils to only notify affected parties of Plan changes that are specific to a particular site;
 - encourage participation by people affected, or likely to be affected, by a decision; and
 - encourage the active 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.

7.1 Introduction

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 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;
- discusses options for a future urban planning system; and
- poses some further questions for public feedback.

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. Chapter 9 discusses issues related to infrastructure provision, funding and finance.

7.2 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. These chapters lay the groundwork for thinking about what a future urban planning system should exhibit or deliver:

- openness to change and growth;
- sufficient development capacity to meet demand from households and businesses; and
- accessibility by residents to jobs and other activities.

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 levels of 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 residential 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.⁵⁸ High commercial and industrial land prices can restrict the ability of productive firms to expand, or locate closer to suppliers, employees, customers and markets.

Accessibility by 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 can reduce access to employment for some segments of the community. Although answers to this problem lie mainly with the planning and provision of infrastructure and services such as roading and public transport, land use

⁵⁸ Bertaud (2014) argues that the "absolute limit" of the "spatial extent of a labor market" is an hour's commute (one way) (p. 9).

regulation can contribute by minimising barriers to development in established suburbs and areas close to existing transport networks.

Taken together, these three objectives or features imply that land use regulation should:

- avoid prescriptive requirements, except where these are necessary to manage significant negative externalities;
- 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;
- 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.

7.3 How does current practice stack up?

The New Zealand planning system has been subject to numerous analyses, including by the Commission (NZPC, 2012a, 2013, 2015a). This section summarises some key findings from these reports and introduces some new findings, to assess how well current land use regulatory practices meet the goals and features for a desirable urban planning system outlined above.

The New Zealand planning system has strengths compared to planning approaches in other countries, including a comparatively low use of discretion and relatively enabling zones. However, the current planning system also imposes undue regulatory burdens and prescription, has made poor use of discretion in some areas, and has done a poor job of ensuring adequate supplies of development capacity.

Strengths in New Zealand's planning systems

When measured against other planning systems, New Zealand's system exhibits strengths: a premium on speed and approval for lower-risk developments; and comparatively enabling zones. Any future system needs to keep these strengths.

New Zealand's system puts a premium on speed and approvals for lower-risk developments, reflecting the focus of central government monitoring processes and successive legislative amendments. The overwhelming majority of land use and subdivision resource consents are not notified (Table 7.1), and are processed within statutory timeframes (Table 7.2).

Table 7.1 Percentage of processed land use and subdivision resource consent applications that are notified, 1997/98–2014/15

	Subdivision		Land use	
	Publicly notified	Limited notified	Publicly notified	Limited notified
2014/15	1%	1%	2%	1%
2012/13	2%	2%	1%	2%
2010/11	2%	2%	2%	2%
2007/08	3%	1%	2%	2%
2005/06	3%	1%	2%	1%
2003/04	3%	1%	3%	1%
2001/02	5%		3%	
1999/00	4%		3%	
1998/99	3%		3%	
1997/98	3%		4%	

Source: MfE, 2014a, 2016d.

Table 7.2 Average times to process non-notified land use and subdivision resource consent applications, 2014/15

	Statutory days			Working days	
	Mean	Median	RMA statutory deadline	Mean	Median
Land use	16	15	20	30	19
Subdivision	18	17	20	40	22

Source: MfE, 2016e.

Note:

1. 'Statutory days' are defined as working days minus days waiting for information or payment

The overwhelming majority (99.8% in 2014/15) of resource consent applications are also approved, and refusal rates have been consistently below 1% for the past 15 years (MfE, 2014a, 2016f). Decision times and approval rates compare favourably with those in England⁵⁹ and are on similar levels to those in many Australian states and territories.

Zones in New Zealand are less restrictive and exclusionary than in many American systems.⁶⁰ Hirt (2014) notes that zoning rules in many US jurisdictions shifted in the mid-20th century from a more flexible hierarchical model (under which mixed uses were allowed) to a flat model (where land use classes became exclusive). Under a flat model, "residential uses in commercial or industrial districts were banned" (p. 39). Even now, American systems "still have an unusually high level of legally mandated separation of residential from other land uses and an unusually radical way of legally guarding the single-family home" (2014, p.180). According to Hall (2014), this strict separation of uses was designed to protect residential property values in desirable neighbourhoods and exclude minority groups. New Zealand zones are not as rigid, due to the ability to seek resource consents for uses not envisaged in the original plan and to the tradition in New Zealand of not strictly separating uses. Zoning in New Zealand has

allowed compatible activities to be grouped together and to be subject to particular controls to retain compatibility, secure amenity outcomes etc. That is the New Zealand concept of zoning which has little in common with the American concepts of zoning. (Associate Professor Caroline Miller, sub. 50, p. 6)

Weaknesses in New Zealand's planning systems

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 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).

⁵⁹ In England, councils are expected to make decisions on "minor" developments within 8 weeks, or within 13 weeks for "major" applications. In the year ended March 2016, 75% of decisions on minor applications were made within the 8-week deadline (or another agreed timeframe), and 81% of major applications were made within the 13-week timeframe. Overall, 88% of applications were granted (Department for Communities and Local Government, 2016).

⁶⁰ Zoning systems differ considerably in the United States, as planning is largely a municipal responsibility.

- 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 (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 which 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 minimum 3.5 metre floor-to-ceiling standard for the ground floor developments in its Pedestrian Core zones (2012, p. 405).
- The Proposed Auckland Unitary Plan, 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” (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” (2015, p. 60).⁶¹

F7.1

The planning system shows considerable evidence of unnecessary, excessive and poorly-targeted land use regulations.

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

⁶¹ Decision 11.

designed to inhibit flexibility without such justifications. Two common examples are activity centres policies and zone restrictions that target specific types of business.

Centres policies aim to direct activity to specific areas

Centre 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 7.1). 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 7.1 Wellington City Council centres hierarchy



Source: Adapted from Wellington City Council (2015).

A range of goals or objectives are cited for centre 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).

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 7.1).

Box 7.1 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, and 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, 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” (p. 175).

F7.2

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)

In one high-profile case,⁶² 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.

F7.3

In trying to protect existing city and town centres, some New Zealand urban local authorities have sought to reduce retail and commercial competition from other locations.

Such restrictions could be justified if they delivered clear and significant benefits, but such benefits are not obvious. As outlined in Box 7.1, 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)

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). 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 are business-specific zone restrictions. Examples of such detailed restrictions are noted in Box 7.2.

⁶² *Waikato Tainui Te Kauhanganui Inc. v Hamilton City Council* HC HAM CIV2009-419-1712, 3 June 2010.

Box 7.2 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 Proposed Auckland Unitary Plan for the Marina and Minor Port zones.

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 7.3).

Table 7.3 Commercial and industrial zones in selected operative and proposed District Plans

District Plan	Commercial and industrial zones	
Proposed Auckland Unitary Plan (as notified)	<ul style="list-style-type: none"> • Metro Centre Zone • Town Centre Zone • Local Centre Zone • Neighbourhood Centre Zone • Mixed Use Zone 	<ul style="list-style-type: none"> • General Business Zone • Business Park Zone • Heavy Industry Zone • Light Industry Zone • Special Purpose – Airport Zone
Proposed Hamilton District Plan	<ul style="list-style-type: none"> • Commercial Fringe • Major Event Facilities • Sub-regional Centre • Large Format Retail • Suburban Centre • Neighbourhood Centre • Central City Zone 	<ul style="list-style-type: none"> • Knowledge Zone • Industrial Zone • Ruakura Logistics Zone • Ruakura Industrial Park Zone • Te Rapa North Industrial Zone • Rototuna Town Centre Zone
Operative Tauranga City Plan	<ul style="list-style-type: none"> • City Centre Zone • Commercial Zone • Tauriko Commercial Zone • Wairakei Town Centre Zone • Wairakei Neighbourhood Centre Zone 	<ul style="list-style-type: none"> • Industry Zone • Port Industry Zone • Tauriko Industry Zone • Papamoa East Employment Zone
Operative Palmerston North City District Plan	<ul style="list-style-type: none"> • Inner Business Zone • Outer Business Zone • Local Business Zone 	<ul style="list-style-type: none"> • Fringe Business Zone • Industrial Zone • North East Industrial Zone
Operative Christchurch City District Plan	<ul style="list-style-type: none"> • 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) 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Business 1 (Central Business District) • Business 2 (Suburban Shopping and Business) • Business 3 (Specialist Commercial) • Business 4 (Neighbourhood Shop) • Business 5 (Rural Service) 	<ul style="list-style-type: none"> • 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:

1. 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.

F7.4

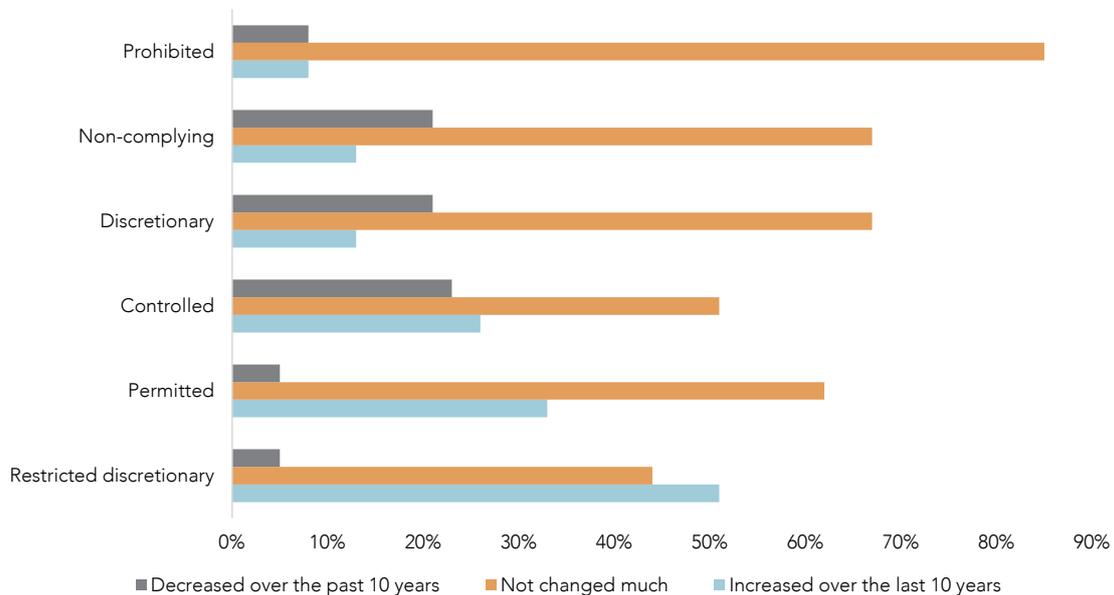
A number of councils apply very detailed controls on the types and sizes of businesses that can operate in particular zones. These controls are unlikely to be ideal, not least because such rules can take a long time to change and inevitably lag developments on the ground.

Poor use of discretion

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.

Survey data present a mixed picture on the levels of discretion provided for in council Plans over the past 10 years. Respondents to a survey of local authorities reported an increase in the use of “permitted” activity classifications, and a net reduction in the use of “discretionary” and “non-complying” classifications in their Plans (Figure 7.2). At the same time, the use of “restricted discretionary” classifications (where councils can exercise discretion only on issues explicitly identified in their Plan) increased significantly. Even so, just under half (49%) of respondents said that the number of assessment criteria used for restricted discretionary activities had increased over the past 10 years. Only 13% said that the number of assessment criteria in their Plans had decreased.

Figure 7.2 Council responses to questions on changes in the use of different activity classifications in their RMA Plans over the past 10 years



Source: Colmar Brunton, 2016.

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 7.3).

Box 7.3 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.⁶³ 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 (although one submitter argued that it was possible to conduct “objective design assessment”⁶⁴). Some degree of discretion and variability is therefore 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 7.4).

Box 7.4 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 SI Ltd were 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.

⁶³ Some 23% of council respondents to a Commission survey reported they used urban design panels.

⁶⁴ Duncan Rothwell, sub. 38, p. 2.

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)

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)

F7.5

Council requirements on some developments to undergo urban design assessments are leading 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.

Failure to ensure adequate supplies of development capacity

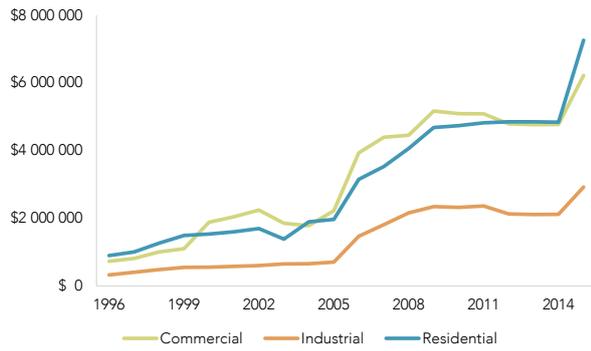
Chapter 6 found that the planning system as a whole had failed to deliver adequate supplies of residential development capacity, contributing to rising land and house prices (especially in fast-growing urban areas). Further investigation suggests that the planning system has struggled to ensure adequate 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 above. Judging by the price trends for urban land in recent years, this focus on industrial land supply has been misplaced. While industrial land prices in major New Zealand cities have increased over the past 20 years, the scale of increase has been dwarfed by rises in the price of commercial land (Figure 7.3). Given these large price differentials, it is hardly surprising that industrial-zoned land in many cities has been used for commercial and residential purposes.

F7.6

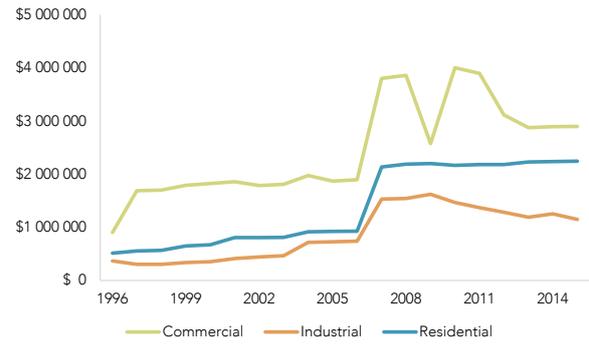
The planning system has struggled to provide adequate supplies of development capacity for residential and non-residential uses. A number of councils have tried to protect industrial-zoned land supplies, while the price of residential and commercial land has increased at much faster rates.

Figure 7.3 Nominal per-hectare prices of land in major New Zealand cities, by type, 1996–2014

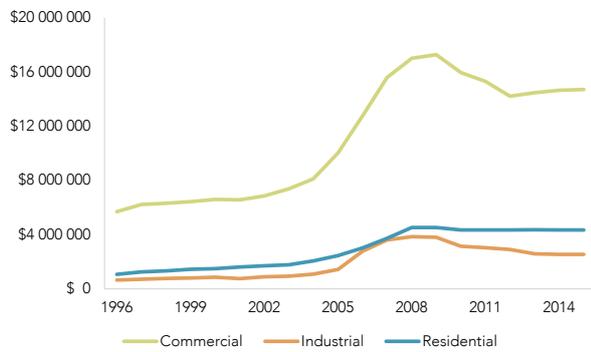
Auckland



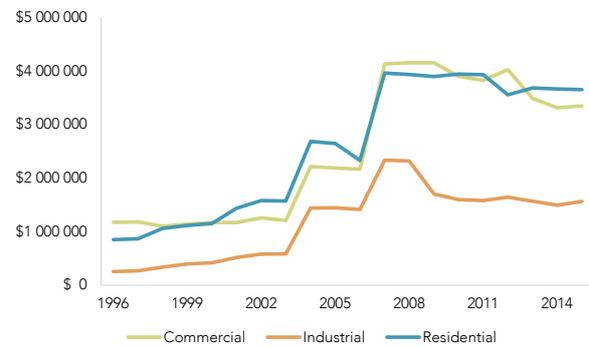
Hamilton



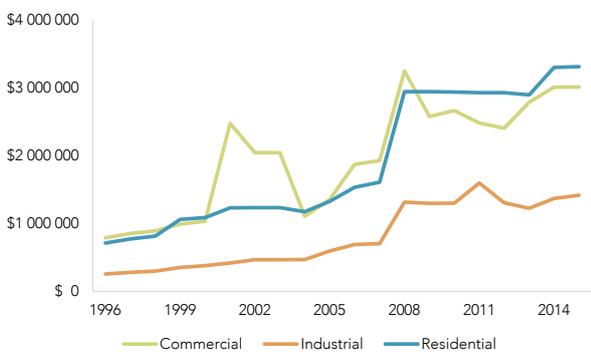
Wellington



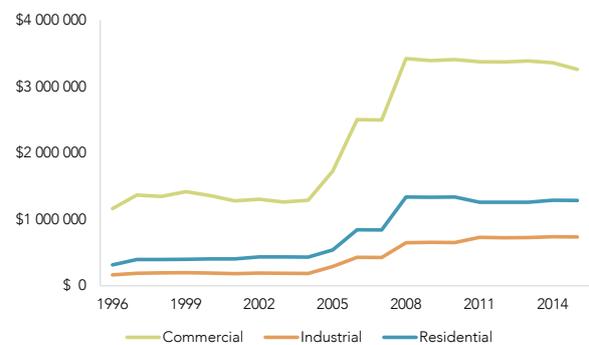
Tauranga



Christchurch



Dunedin



Source: Productivity Commission analysis of Quotable Value data

7.4 What explains current practice?

The explanations for the regulatory practices and behaviours discussed above are varied. Some are inherent in the nature of planning and local democracy, while others are specific to New Zealand’s legislative and institutional arrangements.

Aversion to risk and status quo bias

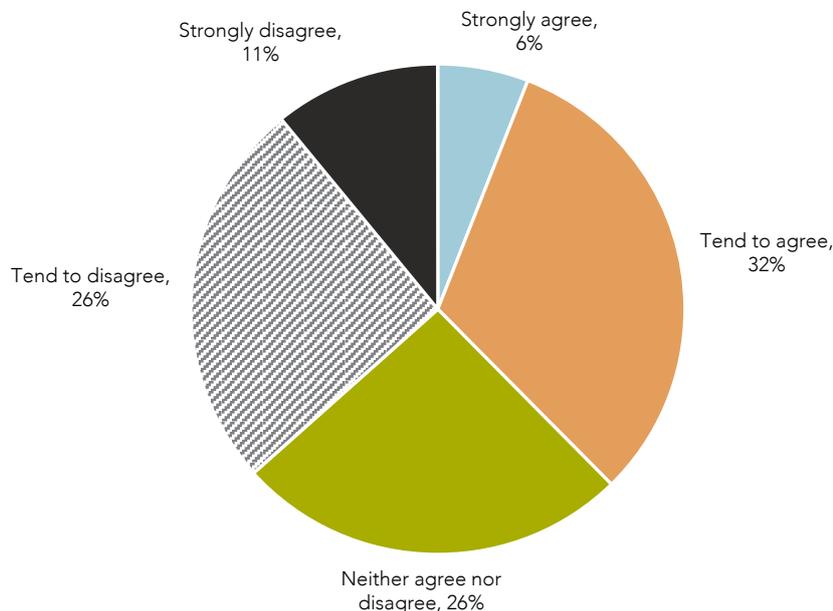
The way the current planning system operates has an inherent status quo bias and conservatism. This is result of the political economy of planning, and how the RMA has been interpreted.

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;⁶⁵
- affinity for the existing amenities of their neighbourhoods; and
- a desire not to bear the additional rate costs required to pay for new infrastructure. (NZPC, 2015a).

A significant share (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 7.4 Survey responses to the statement “local interest groups drive planning decisions”



Source: Colmar Brunton, 2016.

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; 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).

According to a number of submitters and commentators, a second contributor to risk aversion and status quo bias is the way in which 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 consider that the implementation of the RMA has been biased against the positive effects that may result from development. Catherine Scheffer said:

⁶⁵ 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).

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 area's 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)

F7.7

The planning system has an inherent status quo bias and risk aversion, 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;
- the pressure placed on councils not to set rules and policies that enable development; and
- an overemphasis in the implementation of the RMA on managing or avoiding adverse effects, which does not sit well with the dynamic nature of urban environments.

Blindness to price signals

The planning system pays little attention to important price information, such as changes in land prices (NZPC, 2015a). Councils are 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 tend to rely on population projections, which are infrequent and often

inaccurate. The blindness to price signals means that the planning system is slow to respond to growth pressures, tends to undersupply development capacity, lacks an important check on its activities, and can 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).

F7.8

The current planning system is too often blind to price signals, leading to poor responsiveness, and undersupply of development capacity, and misdirection of effort.

Slow processes for changing land use controls

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 an NPS or NES) require public consultation, and can take considerable time to complete. According to 2014/15 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.

One result of these long processes is that changes to land use rules needed to enable development can lag related decisions on the provision of transport and water infrastructure, which are made using the more flexible LGA / LTMA provisions.

F7.9

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 can take considerable time to complete.

A dearth of, or unwillingness to use, other policy tools

As noted earlier, 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 have 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 that the restrictions on tolling and congestion charges be lifted. (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 the reluctance of some councils 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. (section 24(h), RMA)

F7.10

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.

Lack of clear limits

The planning system lacks clear limits. This reflects the wide scope of the purposes and definitions of both the RMA and LGA, and some unhelpful central government guidance. The lack of limits provides opportunities 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 Chapter 5, 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, the floor-to-ceiling height rules referenced above 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.

Similar 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. Some court decisions have given these arguments credence, as an appendix to the section 32 report prepared for the Proposed Auckland Unitary Plan 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 disabling 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 concurred 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.

The broad definition of "environment" and "sustainable management", the range of others issues that must be considered or given effect to in Part 2 of the RMA, and the 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 or local government action 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).

In addition, some central government guidance has encouraged local authorities to take an expansive view of their 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 to 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)

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. 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).

F7.11

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.

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. A number of parties, 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. The fact these concerns continue to be raised, despite repeated amendments to legislation aimed at improving performance, suggests some deeper, structural drivers of behaviour exist.

One cause of poor performance is gaps in workforce capability, as discussed in Chapter 11. 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 national policy statements 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 national policy statements, this is unlikely on its own to raise the quality of regulatory analysis or decision making.

The main check on the regulatory decisions of local authorities in the current system is the Environment Court. 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), and a number of groups the Commission met with over the course of this inquiry also made these points. As the Palmerston North City Council

commented, the Environment Court “holds people to account should they seek to abuse the urban planning system” (sub. 24, p. 3).

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 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.

The IHPs established for the Proposed Auckland Unitary Plan and Christchurch Replacement District Plan have provided an alternative, reviewing entire plans and drawing in expertise from across the community. However, the Panels 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.

F7.12

Current institutional arrangements do not provide the level of scrutiny over land use regulation that they could. While the Environment Court plays an important role as a check on local authority regulation, it only has the opportunity to review those rules or provisions that have been appealed. As a result, only a limited proportion of a District Plan’s rules are subject to thorough scrutiny.

7.5 Options for a future planning system

A high-performing future planning system will need to deal with the problems and underlying drivers discussed above. In thinking about the details of a future system, the Commission considered a number of alternatives, including options where higher-level government takes on a larger role in setting land use rules (as occurs in many Australian states, and Japan), and options where some decision rights about land use were devolved down to individual property owners. Alternatives were assessed against:

- the desirable characteristics outlined in section 7.2 (openness to growth, provision of sufficient development capacity, and promotion of mobility);
- the goal expressed in Chapter 8 of ensuring urban land-use activities fit within a clearly defined biophysical envelope; and
- design criteria of system flexibility (ie, the ability to adapt to changing goals, values and priorities over time) and minimising the sum of decision and error costs.

Greater involvement by central government in setting local land use rules (eg, through standardised zones and “development envelopes”) is not recommended, because:

- it is likely to lack responsiveness and flexibility;
- it may not provide sufficient development capacity; and
- central agencies will not have the information needed to appropriately reflect local conditions (NZPC, 2015a).

Devolution of decision rights to individuals could provide greater flexibility, but may present challenges to both the promotion of mobility and fitting land-use activities within a biophysical envelope. Difficulties in aligning land use and transport decisions could challenge the promotion of mobility. As for the biophysical envelope, the transfer of decision rights could make it harder for authorities to monitor or control some land use choices.

Based on the problems identified above, the Commission has identified seven main features that a future planning system should have, if it is to deliver land use regulation that is more efficient and effective and which better reflects the dynamic nature of cities and the needs of their residents. These seven features are:

- clear priorities;
- price information as a major driver of planning decisions;
- faster processes for changing land use controls;
- more focused notification and more representative consultation;
- more immediate checks on regulatory decision making;
- targeted infrastructure investment for communities facing change; and
- more engaged and better-informed central government.

Clear priorities

The current definitions, purposes and roles given to councils under the LGA and RMA serve neither the natural nor built environment very well. They give little guidance to councils about the importance of accommodating growth and change and supporting resident mobility, little sense of relative priorities, and insufficient defences against proposed rules or plan changes that unduly restrict development capacity or divert councils towards other objectives. Future planning legislation should clearly prioritise 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. The key elements of these recent actions – clearer roles for councils and clear responsibilities to 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. On the former issue, Simon Upton and others have pointed to the definition of “environment” – and in particular paragraph (d) of the definition⁶⁶ – as a key source of difficulty with the RMA:

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)

The arguments advanced for centres policies, and accepted in part by the courts, seem to bear out the concerns of Upton et al. A different definition will be needed if a future planning system is to be open to growth and change.

On the issue of growth and change, governments can prioritise the mobility and accessibility of cities through the Government Policy Statement (GPS) on Land Transport process. 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

⁶⁶ “(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.”

- “[a] land transport system that provides appropriate transport choices” (New Zealand Government, 2015, pp. 17 & 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 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.

Prioritising 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.

R7.1

Future urban planning legislation should clearly prioritise responding to growth pressures, providing land use flexibility, and supporting the ability of residents to easily move through their city.

The Commission noted the views expressed in several submissions 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. After all, one of the original rationales for urban planning was resolving public health and hygiene problems created by people living closely together. However, as noted above 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, which may not be the most efficient and effective arrangement and can distract councils from providing sufficient development capacity to meet demand. Making these social, environmental or economic objectives formal priorities or responsibilities of the planning system – such as by including them in planning legislation – would most likely add to inefficiencies and the lack of focus.

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). To the extent that councils could play a more active role in resolving social and other problems is desired, both central and local government should work through this issue by issue.

Price information as a major driver of planning decisions

A future planning system needs to make land and house price information a central tool of council monitoring and plan development processes. Population forecasts mainly drive the current planning processes of councils. These processes are time based, in that new development capacity is often released according to a pre-determined schedule. While this process offers relative certainty to infrastructure

providers, developers and landowners, it is inflexible in the face of changing demand. This inflexibility leads to a disconnect between the demand for development capacity, and the supply response (NZPC, 2015a).

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. The Commission also discussed other ways that price information could be used in urban planning processes, including as:

- a tool for measuring and monitoring the adequacy of the supply of development capacity; and
- a mechanism for assessing the relative supplies of different types of capacity (eg, residential, commercial and industrial) (NZPC, 2015a).

Price information is dynamic, reflecting changes in individual and business preferences and the relative state of demand and supply. Price information also provides much more up-to-date data than population forecasts (which are a data source 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.

R7.2

Information about land price 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.

Faster processes for changing land use controls

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 rents.

The current requirements for changing land use controls have two main problems. First, the processes are too prescriptive and rigid. Councils have little ability to customise consultation requirements to suit the particular issue at hand. Requiring submissions and further submissions from the general public in all cases, regardless of the size and scale of the proposed changes, is excessive. The Commission has previously recommended that councils should be given the option of only notifying directly affected parties for Plan changes that are specific to particular sites, and the Resource Legislation Amendment Bill currently before Parliament would allow this.

Second, decisions on land use controls are taken separately from those on related infrastructure decisions. On one hand, this can be viewed as reasonable – decisions which affect private property should arguably be subject to more scrutiny than those about expenditure on public assets. On the other hand, substantially different processes and timeframes between the various consultation processes unhelpfully delay development, can create unnecessary duplication and discourage integrated decision making.

A future planning system needs to strike a better balance between ensuring affected parties are adequately consulted on rule changes, and allowing rules to change more promptly and in alignment with infrastructure decisions. The Commission has previously considered one type of change that would increase the responsiveness of rule-making system: a provision for councils to set future rules in anticipation of change. This would allow councils to be activated in response to pre-determined events (eg, land values passing a certain level, the installation of certain infrastructure or expansion of roading capacity) (NZPC, 2015a). David Mead of Hill Young Cooper outlines how such a system could work with residential activities:

As land values rise then development density should increase to compensate for the higher values (the land area per unit of housing should reduce to ensure housing remains relatively affordable). Zoning could be based on some sort of land value bands, and as areas rise in value, then the zoning would

switch from one band to another (a bit like as incomes rise, tax rates increase). Published in advance, and calculated on an area-wide basis, the land value bands would signal to residents what may happen.

For example, in a very simple way:

Land value per m ² (area median)	Permitted development	Discretionary development
Up to \$500 per m ²	Stand alone houses on sections of more than 400m ²	Two storey stand alone houses on sections of 300m ² or duplexes on 400m ² sections
Between \$500 and \$1000 per m ²	Stand alone houses on sections of 300m ² or duplexes on 400m ² sections	Three storey terrace / row houses with 150m ² per unit
Between \$1000 and \$1,500m ²	Terrace / row houses with 150m ² per unit	Terraces, Low rise apartments (up to 4 storeys) – no density
Over \$1,500m ²	Terraces, Low rise apartments (up to 4 storeys)	Mid rise apartments (4 to 6 storeys) - no density

Regular monitoring of land values would be necessary and they would need to be mapped. As areas change in land value from one band to another, then the zoning adjusts automatically – no need for a zone change. There could be some sort of warning given of likely change when land values get close to the ceiling of a band; that is, before they trip over into a new band. (sub. 6, pp. 10–11)

Similar arrangements could be used to allow industrial land to take on more commercial activities (or vice versa) in response to changes in the price differential between the two types of zones.

As Plans cannot predict all future preferences, some form of additional review process would be needed to allow the system to accommodate new demands.

R7.3

A future planning system should allow for more responsive rezoning, in which land use controls can be set in anticipation of predetermined and objective triggers and activated once those triggers are reached.

Another option to consider is a common standard or single approval process, through which decisions on new land use controls could be made in line with decisions on transport and water infrastructure provisions. Consultation requirements for preparing Regional Land Transport Plans under the LTMA currently use the same principles (Box 5.6) and processes available under the LGA.

In its Draft Report on *Using land for housing*, 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). However, the proposed introduction of clear priorities discussed above, and the proposed new permanent independent hearing panel outlined below, may be sufficient to deal with these concerns.

Q7.1

Would it be worth moving to common consultation and decision-making processes and principles for decisions on land use rules, transport and infrastructure provision? How could such processes and principles be designed to reflect both:

- the interest of the general public in participating in decisions about local authority expenditure and revenue; and
- the particular interest of property owners and other parties affected by changes to land use controls?

Do the consultation and decision-making processes and principles in the Local Government Act adequately reflect these interests?

More focused notification and more representative consultation

Current planning law was founded on the principle of “open public participation with no restrictions on standing” (Gow, 2014, p. 10). This has been implemented through wide rights of appeal (although these have narrowed over time), a presumption that the public can participate in Plan making and on many consent decisions, and 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. The extensive appeal rights available under the current system allow both people and organisations not directly affected by a planning matter to hold up decisions through court action, contributing to risk-averse behaviour by councils. In addition, the prescriptive approach to consultation taken in the RMA paradoxically leads to unrepresentative outcomes. A future urban planning system would operate more effectively and efficiently if appeal rights were confined to affected parties and consultation requirements focused more on outcomes than process.

Notification

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” (section 95A, RMA). As already discussed, the definition of “environment” in the RMA is open-ended. 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:

A council cannot take into account positive effects from the proposal when considering whether the effects will be minor. It can, however, have regard to any mitigating factors that would eliminate any cause for concern about the possibility of adverse effects, such as extra noise being nullified by additional sound proofing. This can include the consideration of prospective conditions of consent to mitigate effects of the activity which are inherent in the application....

When assessing whether an activity will have or is likely to have adverse effects that are more than minor, regard needs to be had to the following:

- the cumulative nature of any effect over time, or in combination with other effects
- the probability of occurrence
- temporary effects, including adverse effects associated with construction work
- the scale and consequences of the effect (high potential impact?)
- the duration of the effect
- the permitted baseline (refer to the section later in this guidance note)
- the frequency or timing of any effect
- whether the effect relates to a s6 or s7 matter
- the area affected (eg, is it an effect on neighbours or the wider environment?)
- the sensitivity of surrounding uses to that effect

- reverse sensitivity issues
- whether the effect is to be mitigated or avoided by a condition contained in the application or offered by the applicant in the application, which the applicant has agreed to. (QP, n.d.)

Although 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), it has become clear through successive inquiries that the threat of notification weighs heavily on developers, and may discourage innovation. The possibility of delays, additional costs, and the risk of vexatious interventions, can lead developers to take more conservative approaches or undertake smaller developments than would be ideal. EMA Northern argued that consultation and objection rights

are currently weighted too much towards an ability to interfere from a distance. Objectors to development often have no immediate relationship to that development and their current ability to have input into consultation should be curtailed or given less weight. Examples abound of relitigation of consents or massive delays as individuals, lobby groups and even councils revisit decisions based on political considerations. (sub. 49, p. 5)

As Auckland Council noted in its submission to the *Using land for housing* issues paper, decisions on whether or not to notify can be a very time-consuming part of the resource consent application process:

Council estimates that as much as 30-40 per cent of the time spent on processing an average application is devoted to this assessment, which, to a large extent, duplicates similar considerations associated with the substantive assessment of the proposal. Apart from being confronted with the time, effort and cost of making this determination, applicants are also faced with the uncertainty of outcome. (Auckland Council, *Using land for housing* sub. 71, p. 21)

A primary aim of the planning system is to manage negative externalities. Rather than inviting the general public to comment on proposed urban developments – and potentially creating “chilling effects” – a future planning system should focus notification requirements on those directly affected, or highly likely to be directly affected, by a proposed development. One way to do this would be to make limited notification the standard approach, with opportunities to use public notification only in exceptional cases. People wishing to appeal consent decisions would also need to demonstrate that the proposed development would affect them materially.

R7.4

A future planning system should focus urban notification requirements (and any associated appeal rights) on those directly affected, or highly likely to be directly affected, by a proposed development. This would better align the planning system with the fundamental purpose of managing negative externalities.

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). Before this, when a district scheme was notified under the Town and Country Planning Act, “the public could object to it although the party objecting had to prove that they were affected to a greater degree than the public at large” (Miller, 2011, p. 12). 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. It was also noted that implementing narrower standing rules could be cumbersome and time-consuming:

At the practical level, it appears...that present practice often is to hear the party's full argument and then to consider eligibility. In these cases, no time is saved and costs have been incurred, suggesting that the subsequent exercise of deliberating on *eligibility* is a further waste of time. (Fookes, 1988, p. 17)

Whether wider participation has led to better decisions is potentially empirically testable, but the current insufficient data means such testing is impossible. Some have been critical of wider participation. Miller (2011) argues:

Although other countries provide for consultation as part of their planning processes, few do it to the extent that is embedded in the New Zealand system. Unfortunately, the very open nature of participation appears to have been interpreted as instituting some form of citizens' control. It doesn't. All it means is that people's views can be expressed and will be considered; it does not mean that they will necessarily be used or in fact influence the outcome of any plan or planning decision... Consultation often does not provide answers, just more questions, while allowing any opposition to solidify and organise itself. (p. 193)

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).

Of course, the public should continue to have the opportunity to participate in plan making. Plans necessarily involve trade-offs between competing values and goals, and such political decisions are appropriately subject to public scrutiny. However, the operation of the planning system would be improved if greater focus and limits were introduced into some participation and consultation processes.

First, any appeal rights on Plans should be limited to people or organisations directly affected by any proposed plan provisions or rules. The case for a right to challenge a council's land use regulation is strongest for those whose property, livelihood or wellbeing is impaired in some way by the decision (Legislation Advisory Committee, 2001). This is recognised in section 85 of the RMA, which allows people with an interest in land to challenge provisions in Plans (or proposed provisions) that "would render that interest in land incapable of reasonable use" (section 85(2)). Allowing anyone who made a submission on a Plan to appeal council decisions (as is currently the case) introduces uncertainty and delay for unclear benefits. If the objective is to ensure that councils follow proper decision-making processes, judicial review already provides a more than adequate check.

R7.5

Any appeal rights on Plans in a future system should be limited to people or organisations directly affected by proposed plan provisions or rules.

Second, 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.

- Regardless of the size or complexity of the issue under consideration, councils are required to seek and respond to two sets of submissions.
- Regulations require submissions to be made in a prescribed, written form.
- The requirements place no onus on councils to ensure that the interests of all potentially affected parties are taken into consideration.

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). Those who do not have the time or capability to make written submissions are underrepresented.

Consultation requirements under a future planning system should:

- give councils flexibility to select the most appropriate consultation tool for the issue at hand;

- allow councils to only notify affected parties of Plan changes that are specific to a particular site (NZPC, 2015a);
- 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.

R7.6

Consultation requirements under a future planning system should:

- give councils flexibility to select the most appropriate tool for the issue at hand;
- allow councils to notify only affected parties of Plan changes that are specific to a particular site;
- 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.

More immediate checks on regulatory decision making

A number of the changes proposed in this report should contribute to more efficient and effective land use regulation. On their own, however, these are unlikely to be enough. More thorough and upfront decision review mechanisms are also needed. Such checks would also reduce the need for later merit appeals and so provide greater certainty for both councils and residents about the stability of land use rules.

One alternative arrangement discussed in the past is making council hearings on Plan reviews and changes a more formal, semi-judicial process, with evidence provided with submissions and some opportunity to cross-examine or question witnesses and submitters. In return, merit appeal rights would be removed on final council decisions (LGNZ, 2011). Such an approach would have the benefit of greater speed than existing processes. However, the Commission was not convinced that such an approach would bring the desired degree of rigour and expertise to bear on proposed plan provisions or rules.

The Auckland and Christchurch IHPs provide a model for the future planning system, with some modifications. Aspects of the Auckland and Christchurch IHPs that should be carried forward into a future system include:

- upfront, expert review of proposed plans, informed by public submissions;
- review panels that include significant expertise and experience, including people with legal, economic and planning skills and capacity to dedicate a large amount of time to plan processes;
- a focus on removing excessive regulation – the statement of expectations for the Christchurch Panel includes a goal of significantly reducing “reliance on resource consent processes”, “the number, extent, and prescriptiveness of development controls and design standards in the rules, in order to encourage innovation and choice” and “the requirements for notification and written approval” (Schedule 4, Canterbury Earthquake (Christchurch Replacement District Plan) Order 2014).

As noted above, the current IHPs have a limited life and will not consider future Plan changes. It would be worthwhile establishing a standing review panel that could consider new Plans, Plan variations and private Plan changes. 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.

To assure confidence from councils and the public in its impartiality, the panel should have formal independence from central government and would need to be led by someone with extensive expertise and mana (such as a former or current judge, as is the case with the Auckland and Christchurch IHPs). Formal independence of the panel would also align with the Commission's earlier advice on regulatory institutions. That advice found that independence from political control was 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).

Two questions immediately arise with the concept of a standing review panel:

1. Should councils have the ability to decline a panel's recommendations?
2. Should all plan changes have to go through the panel for review?

Under the Auckland and Christchurch IHPs, the councils retain the right to accept or decline the recommendations of the IHPs. Where a council accepts a recommendation, appeal rights are limited to points of law. Where a council rejects a recommendation, a submitter can appeal a provision on its merits to the Environment Court. This arrangement balances local democracy with incentives for better-quality and more certain land use regulation. The Commission considers that this balance is appropriate and should be carried over into any future system.

R7.7

A permanent Independent Hearings Panel should be established to consider and review new Plans, Plan variations and private Plan changes across the country. As with the Auckland and Christchurch IHPs:

- councils should retain the rights to accept or reject recommendations from the permanent Independent Hearings Panel; and
- once a council accepts a recommendation from the permanent Independent Hearings Panel, appeal rights should be limited to points of law.

The permanent IHP could be located in the court system, or a separate body serviced by a government department (such as MfE or the Ministry for Business, Innovation and Employment). Although some of the functions currently carried out by the Environment Court would be taken over by the IHP, the Court would continue to play an important role, including hearing appeals where a council rejected IHP recommendations, where directly affected parties or applicants wished to challenge resource consent decisions or conditions, and where decisions of national importance were "called in". The Environment Court would also continue to have roles and functions under other statutes.⁶⁷

Over the course of this and earlier inquiries, the Commission has heard from a number of local authorities who have managed to make plan changes operative without resort to the courts, by working closely with affected parties. On one hand, requiring such changes to go through the IHP could add unnecessary delay and costs. On the other hand, allowing councils not to use the IHP would limit the panel's ability to raise the overall quality of land use controls. One way through would be for local authorities to retain the right to choose whether or not to use the IHP for plan changes, but to leave in place the ability of submitters or applicants to merit appeal plan changes not reviewed by the IHP. Councils – or applicants – could then make decisions about the relative costs and benefits of not seeking an external review.

⁶⁷ 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.

Q7.2

Should all Plan changes have to go before the permanent Independent Hearings Panel for review, or should councils have the ability to choose?

Targeted infrastructure investment 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.

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 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, expanded green space etc). In Brisbane, once the improvements are approved by the City Council, they are then formally incorporated into the City Plan.

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 and Annual Plans) and sometimes duplicative consultative processes. A future planning system should make this process easier. This could mean:

- more formally linking, or integrating, land use and infrastructure plans; and/or
- councils putting aside funding each year to support increased infrastructure and service needs associated with plan changes.

Another way of funding targeted services or infrastructure would be to auction rights to develop beyond the standard thresholds set for the zone. For example, developers wishing to construct a seven-storey housing complex in a zone with a two-storey height limit would need to bid for the rights to do so. The revenue generated from the auction could then be used within the affected community (eg, for services, infrastructure or financial compensation). The Commission has previously reviewed the use of localised value capture mechanisms to generate financing for public projects, and noted that local value capture, when used for specific projects, might encourage denser development of built-up areas and is suited for “large, one-off projects that are likely to be episodic” (NZPC, 2015a).

Any auction system and associated development rights would need to be limited and carefully designed to avoid undesirable outcomes, such as ensuring that any larger developments authorised through the process were sufficiently spaced apart to minimise amenity impacts. However, it would have the benefits of generating additional revenue and could encourage local authorities and nearby residents to look more favourably on development. The idea of selling development rights is discussed further in Chapter 10.

R7.8

A future planning system should enable councils to provide targeted infrastructure or services investment (eg, the expansion of green spaces or upgrades to existing community facilities) for areas facing significant change, to help offset any amenity losses.

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 discussed 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 operation of planning systems. These roles include:

- setting goals or principles that must be reflected in local plans;
- requiring higher-level government checks and approval before local plans can become operational; and
- requiring local decision makers to use specified zones or land use controls.

Central government in New Zealand has a range of powers under current law to steer and intervene in the planning system. However, to change local behaviour, central government needs to actually use its powers. As discussed in Chapter 5, central government had until recently largely withdrawn from exercising its existing powers to influence local plans. Recent involvement in plan-making processes has focused mainly on those areas already facing significant housing shortfalls (Auckland and Christchurch), rather than working to avoid or pre-empt future urban problems.⁶⁸

Central government currently lacks the capability and systems needed to support well-informed and timely intervention in plan-making processes, or effective engagement with local authorities on planning issues:

- Central government's monitoring systems over the planning system vary in their depth and detail. They also do not currently provide enough up-to-date information to allow for well-targeted and timely intervention over local land use regulations. For example, land price trends across territorial authorities are not regularly monitored. Doing so could let central government identify trouble spots.
- There is no clear leader or contact point within central government on planning issues, meaning that local authorities can face difficulties obtaining a coherent central government view. Central government agencies have coordinated over the preparation of submissions to the Proposed Auckland Unitary Plan and Christchurch Replacement District Plan, but in both cases this was an ad hoc initiative, rather than a regular and established process.
- Unlike higher-level governments in other jurisdictions, central government in New Zealand lacks a significant planning capability of its own. This limits central government's ability to understand local planning provisions and to engage meaningfully with councils over the impact and suitability of their proposed land use rules and policies. 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 7.5).

⁶⁸ 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 Corporation New Zealand) also regularly submit on District Plans. At a policy level, the Ministry for the Environment has submitted on the specific issue of genetically modified organisms in the case of the Hastings, Far North and Whangarei District Plans (MfE, personal communication). 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).

Figure 7.5 Local authority responses to the statements...

“The system promotes communication and engagement between central and local government”



“Feedback from central government on how councils implement the RMA is constructive and helpful”



“Oversight of the system by central government is constructive and adds value”



- Strongly agree
- Tend to agree
- Neither agree nor disagree
- Tend to disagree
- Strongly disagree

Source: Colmar Brunton, 2016.

Note:

1. some figures may not add to 100% due to rounding

F7.13

Central government lacks the capability and systems needed to support timely and well-informed intervention on issues of local land use regulation, or effective engagement with local authorities on planning issues.

The problems of weak central government capability and poor central-local relationships are not specific to planning. 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 locally-managed regulatory regimes 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. (NZPC, 2013, p. 7)

These recommendations apply equally to planning. Central government agencies have responsibilities under their regulatory stewardship mandate (Box 5.5) that they are currently not fulfilling. Due to the lack of capability and information, central government has had to rely on costly, time-consuming and sometimes blunt options, such as National Policy Statements or legislative overrides.

A more productive relationship between central and local government on land use regulation is possible and desirable. By signalling its national interests in planning early and more clearly and establishing protocols

and processes to work through the implications of these national interests with local authorities, central government will be better-placed to avoid serious problems – and social costs – emerging later on.

R7.9

Central government should develop processes to more clearly signal the national interest in planning, and have protocols to work through the implications of these national interests with local authorities. It should also monitor the overall performance of the planning system in meeting national goals (ie, flexibility, sufficient development capacity and accessibility).

Central government will continue to need intervention powers in a future planning system, such as those currently available through the LGA and RMA. As noted in Chapter 5, central government’s current powers include the ability to provide national guidance through National Policy Statements and National Environmental Standards, to direct councils to review existing Plans or prepare a new Plan, and the ability to appoint Crown review teams, observers, managers or Commissioners to councils.

As will be discussed in Chapter 8, the Commission is proposing that NPSs and NESs be replaced with a new mechanism. This change raises the question of what, if anything, should replace these tools. The Commission considers that central government will need three main intervention powers under a future planning system. These are the ability to:

- override local plans in a limited set of circumstances,
- co-ordinate or require common land use regulatory approaches to specific issues, and
- direct council infrastructure units or providers where the ‘price trigger’ land release mechanism has been activated.

An “override” power would allow central government to respond quickly and in a more targeted manner to pressing situations (eg, the “price trigger” being exceeded) than is possible using current tools.⁶⁹ The power to co-ordinate land use approaches would preserve opportunities to standardise land use rules where this created broader benefits (eg, around the installation and maintenance of utilities, such as gas, water, electricity and telecommunications infrastructure).

To ensure their appropriate use, legislation should control these powers:

- Where the Minister intended to use the power as an “override”, they would be required to table a statement in Parliament, explaining the intervention and its rationale and outlining how any resulting costs would fall between central and local government.
- Where the Minister 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).

Central government will also need to direct council infrastructure units or CCOs to increase their supply, where differentials between the price of developable and undevelopable land exceed a pre-determined threshold. This mechanism was described in detail in the Commission’s *Using Land for Housing* report as a key tool for breaking expectations of continued land price inflation and incentives to ‘landbank’ (NZPC, 2015a). In order to provide a credible commitment to bring land prices down by increasing the supply of development capacity, the ‘price trigger’ would need to be backed up by powers to ensure that the underpinning supply of infrastructure is bought on stream in a timely manner.

Ideally, this second new power would never have to be used. Local authorities would be given a specified period within which to respond to the price trigger with new development capacity. However, where insufficient action is taken by councils, central government needs to have the tools handy to ensure enough

⁶⁹ Under the RMA, central government can only direct councils to prepare new Plans or review existing Plans; it has no ability to control content. While central government can influence the content of plans through National Environmental Standards, these take time to prepare and implement.

capacity is provided to meet demand. To avoid creating the opportunity for ‘moral hazard’, whereby councils avoid taking steps to increase the supply of infrastructure to force central government action, any expenditure or debts incurred by a council or CCO during the period under which it was directed by central government would remain the responsibility of the council or CCO to pay.

R7.10

In a future planning system, central government should have the power to

- override local plans in a limited set of circumstances,
- co-ordinate or require common land use approaches to specific issues, and
- direct council infrastructure units or CCOs to increase their supply, where the differential between the price of developable and undevelopable land exceeds a pre-determined threshold.

7.6 How to encourage better use of regulatory discretion?

Many of the features proposed for a future planning system should help discourage poor use of regulatory discretion discussed in section 7.3. However, the Commission was unclear whether they were sufficient, or whether additional steps were needed. The discussion below outlines some other changes that could be made to the planning system to promote reasonable use of discretion, and seeks public feedback on them.

Q7.3

Would the features proposed for the built environment in a future planning system (eg, clearer legislative purposes, narrower appeal rights, greater oversight of land use regulation) be sufficient to discourage poor use of regulatory discretion?

One option would be to increase the financial penalties on councils applying unreasonable resource consent conditions. Under current law, developers and landowners facing unreasonable conditions in their resource consents can appeal these decisions to the Environment Court. The Commission was told of numerous examples where the Court had overturned such conditions. Under the RMA, the Court can also award to a party “the costs and expenses (including witness expenses) incurred by the other party that the court considers reasonable” (section 285(1)). However, these generally relate only to the costs and expenses incurred in taking legal action and the Court typically awards 25% to 33% of costs claimed, unless special circumstances merit a different level of award. Under a future planning system, the Court could be required or encouraged to award a higher proportion of costs for successful appeals against unreasonable resource consent conditions. However, this could introduce inconsistencies and unfairness into the Court’s treatment of different types of appellants.

Q7.4

Would allowing or requiring the Environment Court to award a higher proportion of costs for successful appeals against unreasonable resource consent conditions be sufficient to encourage better behaviour by councils? What would be the disadvantages of this approach?

An alternative way into the issue would be to require councils to pursue their aesthetic objectives for private property through financial, rather than regulatory, tools. Under such an approach, improving the visual amenity of private property would be considered a public good, which the council would pay for, as it does for other types of public goods (eg, infrastructure). A Council would set aside funds in its Annual Plan and negotiate with private property owners about changes to its developments that would enhance visual amenity. An analogy for this approach are policies about a local authority’s heritage places, through which many urban councils in New Zealand offer grants, loans and rates relief for selected development work that protects or enhances buildings with high historic value.

The merits of this option are that:

- requiring councils to pay for visual amenity changes to private property would lead local authorities to prioritise their efforts on the most important areas;
- councils would bear some of the costs of their actions, which would encourage more proportionate intervention; and
- incentive-based approaches can be more effective than regulation in promoting positive outcomes (APC, 2006).

Both the financial penalties and incentive-based option could be difficult to implement, as they both raise questions about where the boundary between “reasonable” and “unreasonable” land use controls lies. This could create uncertainty for councils and property owners, and require considerable effort by the courts to clarify boundaries. It may also discourage some property owners from taking any visual amenity actions of their own.

A purely financial / incentive-based approach may also not be sufficiently strong or large enough to change the behaviour of private property owners, especially where the development in question is large and the council contribution would make up a relatively small part of the total costs. A variant would be to continue to allow councils to exercise discretion around aesthetic conditions attached to resource consents, but require them to pay part, or all, of the associated costs.

Q7.5

Would it be worthwhile requiring councils to pay for some, or all, costs associated with their visual amenity objectives for private property owners? Should councils only rely on financial tools for visual amenity objectives, or should they be combined with regulatory powers?

7.7 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 quality issues have 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 status quo bias;
- 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. The following chapters consider these matters in more detail.

8 Urban planning and the natural environment

Key points

- When introduced, the Resource Management Act 1991 (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). Parliament did not address these fundamental tensions before the Act became law. As a result, philosophical tensions at the core of the RMA remain.
- Failure to provide clarity around the purpose of the RMA has contributed to:
 - Interpretations of the statute that seem inconsistent with the reported intent of the Act;
 - Inconsistency in how councils administer the law;
 - Reduced accountability for public decision makers who lack clear benchmarks against which their performance can be assessed; and
 - Regulatory creep as councils bring an ever-increasing scope of issues under the banner of “sustainable management”.
- The current system is weak at differentiating between important and less-important environmental issues (ie, prioritising environmental objectives) and provides limited guidance when assessing trade-offs between conflicting objectives.
- A future planning framework would:
 - be guided by an overarching Government Policy Statement (GPS) on environmental sustainability that would set the environmental limits within which development could occur. The GPS would also establish clear priorities resulting in more congruent, transparent and clear national direction.
 - encourage integrated responses to climate change (adaptation and mitigation) based on sound evidence and robust principles;
 - be based on a multi-level governance structure in which central and local governments and communities are seen as “co-stewards” in protecting New Zealand’s natural environment;
 - address cumulative effects by developing institutions that support adaptive management techniques and improved scientific information; and
 - use of the full suite of policy options, including market-based instruments.
- There is a clear role for urban planning in assisting communities to cope with actual or expected changes in climate conditions. The role of urban planning in mitigating New Zealand’s GHG emission is less straight forward. Generalisations about the relationship between population density and greenhouse gas emissions should be treated with caution. There is a need for a greater understanding of the link between greenhouse gas emissions, urban form and local socio-economic circumstances in New Zealand’s urban areas.
- Effective interaction between central and local government is vital for achieving good environmental outcomes.

8.1 Introduction

Urban areas produce economic and social benefits that spring from the concentration of people and firms in urban areas (Chapter 2). Yet, with increased concentration of people and activity comes increased pressure on the natural environment – notably through the creation of negative spillovers such as pollution, congestion and noise (Chapter 4). In addition to obvious health impacts, a low-quality natural environment can discourage new businesses and skilled workers from establishing in urban areas.

The challenge for government is to design and operate a system of urban planning that efficiently manages negative spillovers while not imposing costs that substantially undermine the economic and social benefits of urban living.

This is a difficult task. People often have very different views on the value or importance to place on specific aspects of the urban environment – particularly when this involves protecting one aspect of the environment at the expense of other social objectives (such as employment or affordable housing). Perspectives differ, and fundamental tensions between priorities are inevitable. In the face of this tension, clear decision-making processes, good governance and strong leadership are vital for achieving society's environmental objectives.

This report defines the physical urban environment as consisting of both the *natural environment* and the *built environment*. The natural environment includes ecological systems and natural resources such as water bodies, air, soils and species biodiversity. The physical *built* environment includes manmade features such as the urban townscape, sporting ovals, playgrounds, historic structures, and other areas in the public realm.

The links between these two aspects of the urban environment are strong. For example, the configuration of roads can influence the level of congestion, which has subsequent impacts on the level of air pollution. Similarly, the presence of beautiful natural landscapes can influence demand to build houses in certain areas (such as Queenstown). Grinlinton (2015) notes:

The surroundings of people include social elements and these are often so integrated with our physical and biological surroundings that social interactions inevitably affect, and are affected by, those natural surroundings. (p. 3)

Yet the differences between the built and natural aspects of the urban environment are obvious. In particular, human systems (such as cities) occur *within the broader context of ecological systems*. Indeed, at a basic level, ecological systems enable the creation and enjoyment of the built environment (for example, through the provision of ecosystem services such as drinkable water and breathable air).

The natural and built environments also vary in their ability to be scientifically assessed. Often, the quality of the natural environment can be assessed against quantifiable measures such as the level of particulate matter in the air or nitrogen levels in waterways (Chapter 6). In contrast, assessment of the cultural, social or aesthetic amenity of the built environment requires personal judgement.

This chapter focuses on the role of urban planning in controlling negative spillovers that detract from people's enjoyment of the natural environment. Chapter 7 discusses issues associated with the built environment.

8.2 The natural environment in urban areas

Discussions of environmental protection often evoke images of rural landscapes, wilderness areas and national parks. Yet the quality of the natural environment in urban areas plays a major role in the liveability of cities – most notably through the provision of ecosystem services (Roberts et al., 2015)⁷⁰. For example:

- urban air quality impacts human health and the enjoyment of urban experiences;
- rivers and water bodies provide drinking water, act as natural pollution filters and provide recreational opportunities;

⁷⁰ Four broad categories of ecosystem services are "provision services" (eg, food and raw materials), "regulation services" (eg, climate regulation, erosion prevention), "habitat services" (eg, nursery services for species) and "culture and amenity services" (eg, spiritual experiences, recreation opportunities).

- forests and greenbelts serve as watersheds, habitats, carbon sinks, leisure amenities and tourist destinations;
- wetlands filter and process waste and provide breeding areas for fisheries and birds; and
- sand dunes and mangroves protect cities from storm surges and prevent erosion and siltation.

Like all ecosystems, urban ecosystems are composed of biological components (eg, plants and animals) and physical components (eg, water, air and topography). These components interact with each other to produce ecosystem services such as those noted above. In urban ecosystems, interactions are influenced by human populations, the demographic and socio-economic characteristics of human populations and the structures humans create. So, in addition to natural components (eg, air and water) the physical components of urban ecosystems include buildings, transport networks, modified surfaces (eg, car parks, roofs, and open spaces) and infrastructure (eg, stormwater drains). Pickett (2016) notes that the physical components of urban ecosystems also include energy use and the import, transformation and export of materials and that

[s]uch energy and material transformations involve not only beneficial products (such as transportation and housing) but also pollution, wastes, and excess heat. Urban ecosystems are often warmer than other ecosystems that surround them, have less infiltration of rainwater into the local soil, and show higher rates and amounts of surface runoff after rain and storms. Heavy metals, calcium dust, particulates, and human-made organic compounds (e.g., fertilizers, pesticides, and contaminants from pharmaceutical and personal care products) are also concentrated in cities. (p. 1)

The efficient management of the natural environment requires an appreciation of interactions between the different components of the natural system, and of how decisions that affect one component of the system influence other parts of the system. That is, efficient management requires an appreciation that the urban environment is part of a larger, complex, natural system. Reliable data and good science are key ingredients to developing such an appreciation.

For some aspects of the natural environment these interactions will be relatively well understood. For example, the amenity of an outstanding natural landscape may decline in proportion with each house built on a hillside. For other components of the natural environment, the interaction will be more complex and the outcomes less predictable. For example, a decline in water quality may set off complex reactions within an ecosystem, resulting in damage that is seemingly far removed from the initial incident that caused the decline in water quality.

F8.1

Efficient management of the natural environment in urban areas requires an understanding of links between the different components of the natural system, and of how decisions that affect one component of the system influence other parts of the system. This requires specialist scientific knowledge supported by reliable data.

8.3 Shortfalls in the existing system

Unresolved tension at the foundation of the RMA

Much of the efficacy of the structure of the RMA hangs on the foundations set down in Part 2 of the Act. Yet over the past 20 years, debate and analysis of the meaning of Part 2 has absorbed extraordinary amounts of public and private resources.⁷¹ In particular, the debate over the meaning and implications of “sustainable management” (section 5), about how to interpret “matters of national importance” (s. 6), and “other matters” (section 7) has been considerable.

Ambiguity about the RMA’s purpose and differing expectations about how it operates reflect unresolved tensions at the foundation of the RMA. Memon and Gleeson (1995) note that the RMA had two main groups of supporters with contradictory agendas – economic reformers (who wanted less planning and regulation

⁷¹ Over the years, this Part of the Act has been amended more than a dozen times and has been a central theme in numerous government reports and inquiries.

and greater freedom over land use) and environmentalists (who wanted stronger protection of the natural environment).

These tensions were not addressed when the Resource Management Bill progressed through Parliament. Major parties appear to have adopted a strategy of “constructive ambiguity”.⁷² 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 to the issue. Such an approach is common in (international) environmental negotiations, and was understandable given that the dogged pursuit of clarity may have jeopardised progression of the Bill.

Yet in practice, implementation did not bring clarity and successive governments have failed to work through the inherent conflicts and trade-offs within the RMA. As a result, the courts have been left to resolve ambiguity.

Miller (2015) notes, the concept of sustainable management has “failed to provide a philosophical foundation for the RMA or to reflect the interconnected reality of the world”(p. 2).

F8.2

Philosophical tensions are at the core of the Resource Management Act. Successive governments have failed to find a way to efficiently represent different perspectives and reconcile these tensions.

Competing interests are at the core of the debate

While sustainability, sustainable development and sustainable management are popular mantras in current New Zealand policy, there is little clarity or consistency in how these terms are used. This is not simply a semantic issue. How sustainability is conceptualised has a significant impact on what the system is trying to “sustain”, and consequently, on the design of institutions aimed at achieving “sustainable outcomes”.

Academic literature contains countless definitions of sustainable development.⁷³ While most academics agree that the concept has economic, social and environmental dimensions, fewer agree on the weighting that society should place on each of these dimensions.⁷⁴ This weighting is at the core of the problems with the current system.

The capital stock model provides a useful conceptual framework for discussing different views on sustainable development and the tension between competing views. The model puts forward three notional forms of capital: *natural (or environmental) capital*, *economic capital* and *social capital* (World Bank, 1997). The world’s total capital stock is the sum of these three types of capital (Box 8.1).

Thinking about the world’s total capital allows us to identify two broad interpretations of sustainable development – *strong sustainability* and *weak sustainability* (World Bank, 1997; World Commission on Environment and Development, 1987).

- *Strong sustainability* emphasises the need to maintain the existing stock of natural capital at current levels. Central to this interpretation of sustainability is that natural capital is unique and cannot be substituted by other forms of capital. Consequently, only economic growth that does not reduce the level of natural capital is “sustainable” (Tietenberg & Lewis, 2009).
- *Weak sustainability* emphasises that only the total capital stock is important for future generations – not the composition of the stock. Consumption of natural capital can therefore occur as long as reductions in natural capital are “compensated” by increases in economic or social capital. Under a weak version of sustainable development, for example, fish stocks could be depleted if revenue is used in ways that

⁷² 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).

⁷³ The term “sustainable development” came to prominence after it was used in the much-cited report *Our Common Future* – often called the Brundtland Report (World Commission on Environment and Development, 1987).

⁷⁴ These definitions focus on the notion that earlier generations should be free to pursue their own wellbeing as long as doing so does not diminish the wellbeing of future generations.

improve social or economic capital. Using revenue this way helps to maintain the overall level of social wellbeing (Hartwick, 1978a, 1978b).

Loukola and Kyllonen (2005) argue that what separates these conceptions of sustainability is anthropocentrism and ecocentrism:

The more we demand sustainability for the sake of nature itself and not because of the effects it has to human (present or future) well-being, the closer we are [to] the ecocentric or 'value of nature', conception of sustainability. (p. 5)

In practice, most OECD countries have adopted a position on sustainable development that is somewhere between these two approaches – often referred to in the literature as “environmental sustainability” or “sensible sustainability” (Uno & Bartelmus, 2013). This approach recognises that some level of substitution is possible *within the ecological limits of natural systems*. That is, environmental capital can be used as long as the *flow* of ecosystem service is not compromised. Environmental sustainability recognises that while substitution of some types of natural capital can occur, some aspects of nature are indispensable. The loss of these aspects would lead to an irreversible decline in the wellbeing of society. This recognition is why we have fishing quotas, timber harvesting quotas, and air and water quality standards.

Box 8.1 The capital stock model – types of capital

Natural capital is the stock of assets that the earth provides. These include fossil fuels, soils, forests, rivers, the atmosphere, minerals, and biodiversity. Natural capital provides a flow of ecosystem services such as air and water filtration that, at the basic level, support all life.

Economic capital (or “manmade capital”) includes the means of production (such as factories, machinery, tools, and buildings) as well as the level of human skills and knowledge.

Social capital is a slightly more abstract concept, and includes aspects such as the level of social cohesion, trust, family relationships, equality and the maintenance of social and cultural traditions.

Sir Geoffrey Palmer and Simon Upton, the architects of the RMA, were clear in their Parliamentary speeches on the Resource Management Bill that the fundamental aim of the Act would be to provide environmental bottom lines that must not be compromised (Chapter 5). Upton (1995) notes the intent of the RMA was to give environmental objectives “pre-eminence” over all other objectives.

Only sustainable outcomes were to be acceptable – in other words, whatever the trade-offs in the circumstances of the case, the **highest level of trade-off in favour of sustainability had already been made in legislation in advance**. (p. 21, emphasis added)

Upton goes on to say:

[W]hatever section 5(2) says about economic and social activities, the matters set out in sub-paragraphs (a), (b) and (c) must be secure. They cannot be traded off. They constitute a non-negotiable bottom line. Unless it is a bottom line, sustainable management ceases to be a fixed point or pre-eminent principle and sinks back into being a mealy-mouthed manifesto whose meaning is whatever decision makers on the day want it to be. (Upton, 1995, p. 40)

Early court decisions appeared to favour this interpretation. Yet, the courts have gradually adopted the “overall broad judgement” approach in the exercise of policymaking, planning and consent functions. This suggests that no matter the intent of the drafters, in practice the decisions reflect an approach to sustainability that is at the “weaker” end of the sustainability spectrum. This interpretation is enabled by the limited use of National Environmental Standards.

Sustainability and sustainable development are core principles of New Zealand’s planning system (the RMA, the LGA, and the Building Act all have sustainability requirements). Yet the philosophical lens through which actors in the system should interpret these concepts has never been clear.

F8.3

Sustainability and sustainable development are core principles of New Zealand's planning system. Yet the philosophical lens through which actors in the system should interpret these concepts has never been clear.

In the context of urban planning, failure to provide clarity around the purpose of the RMA has resulted in:

- interpretations of the statute that seem inconsistent with the reported intent of the Act (Upton, 1995; G. Palmer, 2013b);
- inconsistency in how councils administer the law (NZPC, 2013);
- reduced accountability for public decisions makers who lack clear benchmarks against which their performance can be assessed (NZPC, 2013); and
- regulatory creep as councils interpret an ever-increasing scope of issues under the banner of "sustainable management" (NZPC, 2013, 2015a).

Some commentators hold contrary views, believing these problems stem from a failure of central and local government to implement the RMA as Parliament intended. This view has some validity. Yet the lack of philosophical clarity cannot be dismissed as simply an "implementation problem". Rather, the problem runs to the very core of the RMA's design. The observations of Owens and Cowell (2002) on the UK planning system seem relevant to New Zealand:

[W]hile sustainability found its way quite rapidly into formal statements of policy at all levels, significant discrepancies emerged between rhetoric and aspiration on the one hand and practice and implementation on the other. Such a shortfall, we contend, cannot simply be interpreted as an 'implementation gap' – a natural time lag in the application of new but broadly consensual principles. Rather, it reflects a struggle to interpret sustainability in which the process of definition – and not just 'implementation' – becomes integral to the politics of landuse change. (p. 13)

Without a clear purpose, obtained through a transparent and inclusive process, any future statutory framework that seeks "sustainable" outcomes will inevitably encounter the practical difficulties experienced with the RMA.

F8.4

Failure to provide clarity around the purpose of the RMA has resulted in:

- interpretations of the statute that seem inconsistent with the reported intent of the Act;
- inconsistency in how councils administer the law;
- reduced accountability for public decision makers who lack clear benchmarks against which their performance can be assessed;
- regulatory creep as councils bring an ever-increasing scope of issues under the banner of "sustainable management"; and
- a loss of focus in urban areas on maintaining the integrity of ecosystem services.

Cumulative effects remain a key weakness

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 resource 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, Hill Young Cooper note 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:

- there are often time lags between the spillover occurring and the impact of the spillover becoming apparent (eg, nitrogen can take many decades to leach into waterways);
- effects arise from multiple isolated incidents making monitoring of individual impacts impractical;
- the capacity of the natural environment to absorb the effect – or society’s ability to tolerate it – is often unknown or difficult to know *ex ante* (before the event);
- in some instances the line between an acceptable and unacceptable level of impact is unclear. For example, one house may not detract from the visual amenity of a natural vista. Yet as the number of houses increases, a point will come where the visual amenity of the vista is impacted. The point at which this occurs is essentially a subjective judgement.

These difficulties reflect the complex nature of interactions between socio-economic and ecological systems, 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)

While it is generally agreed that the planning system is not coping well with managing cumulative effects, the underlying problems with the current system, and therefore possible solutions, are more difficult to pin down.

Several commentators note that the interrelated components of natural systems make those systems ill-suited to regulation that focuses on mitigating the effects of individual consent applications (Peart, 2007; Oram, 2007).

One concern is that the system is prone to “plan creep”. This occurs when an applicant seeks approval for a small project with the intent of later applying for an extension to the project. At that later date, they argue that the new proposal is consistent with the “existing environment” (ie, it will only have “minor effects” and so should proceed). Even if the original applicant did not intend to expand their project, the fact that they are granted a consent can make it easier for others to obtain similar consents (ie, it is difficult for councils to deny a consent on the basis of cumulative effects). Other criticisms of the current approach to managing cumulative effects are that planning processes are too slow to respond to unexpected changes in environmental or socio-economic conditions and that the system places too much emphasis on scientific certainty and therefore is not sufficiently precautionary (Milne, 2008a).

Whether these issues reflect a problem with *system design* or with *system implementation* is a matter of debate.

For example, Milne (2008b) argues that problems with managing cumulative effects do not reflect legislative problems. Rather, they are the result of councils not identifying the potential for cumulative effects to arise and failing to establish firm “bottom lines” that cannot be crossed. Milne (2008b) attributes these failures to:

- the time lag between identifying a problem and establishing the cause of the problem;
- uncertainty about the cause of particular environmental effects;
- reluctance by some politicians to place constraints on land use that would limit economic development;
- the time lag between a council deciding to act and environmental limits becoming operational; and
- proposed limits not being upheld in the Environment Court because of a lack of good science or other uncertainties.

While implementation is undoubtedly part of the story, some more fundamental issues have also contributed to difficulties in managing cumulative effects. These issues 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 good 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.

Box 8.2 **Types of uncertainty that can impact how the natural environment is managed**

Four main types of uncertainty are used to characterise the influence of uncertainty on the natural environment.

- *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 are often a result of management decisions.
- *Partial observability* refers to a planner’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).

Prioritisation of environmental issues is unclear

One persistent criticism of the RMA is that it provides limited guidance on how to differentiate important from less-important environmental issues. For example, while section 6 of the RMA sets out matters of national importance and section 7 sets out “other matters” to have “particular regard to”, little guidance is available on the importance that councils should give to items *within* the lists. Further, the RMA creates a duty to avoid, remedy or mitigate *any* adverse effect on the environment.

Given the RMA’s broad definition of the environment, there seems little to encourage the prioritisation of effort and resources into areas of high value to the *natural* environment – a point noted by the PCE (2014):

In my view, one problem with the Resource Management Act is that it does not encourage prioritisation. The Assessment of Environmental Effects that is required as part of an application for a resource consent must perforce include all the environmental effects that can be identified. All are to be avoided, remedied or mitigated – regardless of their importance. Moreover, the most tangible and measurable ‘effects’ can dominate decision-making, because quantification tends to signal both importance and certainty. (p. 1)

The system is not generating good information

As noted previously, efficient management of the natural environment requires an appreciation of the different components of the natural system, and of how decisions that affect one component of the system influence other parts of the system. Obtaining this appreciation requires both sound environmental data and qualified and capable staff to interpret and collect data.

Inquiry participants have suggested that the current system is not generating the level of information and analysis required for good decision making. The Ministry for the Environment (MfE, 2014d) makes this point well 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)

The Property Council of New Zealand submission notes:

Local government must collect robust quantitative and qualitative data, analysis, and monitoring information to use when developing policies and decisions that affect urban development. For objectivity purposes, we support the data collection and interpretation being undertaken by a third party. This information needs to be dynamic and reflect changing trends and analysis in the housing and commercial markets, such as supply data, demand growth, public land holdings, and the location of infrastructure and areas of constraint. This data must also be the basis of policy formulation. (sub. 31, p. 15)

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 long-term changes in the urban environment and for understanding whether existing legislative frameworks are achieving their stated objectives. The issue of data is discussed further below in the context of monitoring and oversight of the regulatory system.

Insufficient monitoring of environmental outcomes

Monitoring the health of the natural environment is vital to evaluate whether existing regulatory regimes are leading to the desired outcomes. New Zealand’s planning system – in particular the RMA - has been the subject of numerous evaluations and reviews. These include:

- about 20 amendments to the RMA;
- at least four Technical Advisory Group reports; and
- 11 national surveys (between 1995 and 2014) that monitored local government’s implementation of the RMA.

Yet despite all this activity, little emphasis has been placed on:

- understanding whether the RMA is achieving good environmental outcomes; and
- assessing 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)

Yet the state of the environment reports in 1997 and 2007 were criticised for being inaccurate and having limited geographic coverage (PCE, 2010). So, for the first 20 years of the RMA, it seems central government had little oversight of whether the Act was actually achieving good environmental outcomes. The submission by Sir Geoffrey Palmer and Dr Roger Blakeley offers some reasons for the lack of monitoring.

The reasons for inadequate subsequent examination of laws passed are as follows:

- it costs money to conduct research, and such expenditures are outranked by other priorities;
- such investigations can be complex: that is a disincentive to undertake them;
- public concern often does not emerge strongly enough to secure attention, due to the lack of influence of those who are adversely affected;
- enforcement is frequently expensive and policy-makers would rather not know whether the law is being followed;
- the increased complexity of many of the problems modern legislation deals with make it easy to get it wrong;
- those who fashion legislation, particularly ministers, would rather not know that it has not turned out as they would have wished or as they said it would;
- political ideology drives much legislation, rather than rigorous empirical analysis, so the incentives to find out how it worked are reduced;
- the law may be too complicated, unclear, or inaccessible to those whose behaviour it desired to alter;
- laws become out-of-date and do not reflect current mores, but the politics of altering them is so difficult it is not attempted. (sub. 7, p. 12)

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 have a joint responsibility 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.

While this is a step forward from the inconsistent reporting of the past two decades, questions remain around how to link the evaluation of the data to monitoring the effectiveness of the planning system – at both the local and central government level. Data are only valuable to the extent that they inform good decision making. 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 that are directly impacted by the human behavior regulated under the planning system. These indicators then become not only a signal of environmental health; they also become the basis around which the performance of the current system can be reviewed.

F8.5

The Environmental Reporting Act 2015 is a significant step forward in the development of sound environmental data. However, it is unclear how the data collected will link with monitoring the effectiveness of land use regulation.

The government has also taken steps to make agencies more accountable for the regulations they administer. Amendments to the State Sector Act (1988) in 2013 formalised obligations on departments to effectively monitor and evaluate their existing stock of regulation. Under section 32 of the State Sector Act, chief executives of departments are “responsible to the appropriate Minister for...the stewardship of the legislation administered by the department or departmental agency” (NZPC, 2014b). Cabinet has issued a set of initial expectations for regulatory stewardship, spelling out the obligations in more detail. These include an expectation to:

- monitor, and thoroughly assess the performance and condition of their regulatory regimes to ensure they are 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 improvement in the design and operation of those regimes; and
- ensure that where regulatory functions are undertaken outside departments, appropriate monitoring and accountability arrangements are maintained, which reflect the above expectations (New Zealand Treasury, 2015a).

Again, while these measures are a step forward, in practice they have done little to broaden performance measures beyond the speed at which consents are granted. As one submitter notes:

Previous review 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)

Poor oversight appears to be a systemic issue across New Zealand’s regulatory system. In its inquiry into *Regulatory Institutions and Practice* (2014b) the Commission found that oversight of regulators commonly involves extensive reporting against measures that give little indication of whether desired regulatory outcomes were being achieved. The Commission also found that central government often lacked the specialist skills necessary to effectively monitor regulator performance and that few agencies adopted a risk-based approach to monitoring. These findings are applicable to the monitoring of regulatory outcomes in urban areas.

F8.6

Recent steps to strengthen central government oversight of the Resource Management Act have focused predominately on process indicators (such as the time taken to process consents) rather than the environmental outcomes of planning decisions.

8.4 Features of a future planning system

This section asks the question “what are the essential features of the ideal framework for managing the natural environment in urban areas?” The section draws on the above discussion and the Commission’s previous work in the area of regulatory design, implementation and review. In keeping with the inquiry’s

terms of reference, this section is “directional rather than detailed” and should be viewed in the context of the reforms laid out in Chapter 13. Taking these recommendations forward requires sound public consultation, good policy design and rigorous implementation analysis.

When addressing natural environmental issues, a future urban planning system would:

- be guided by an overarching Government Policy Statement (GPS) on environmental sustainability;
- encourage integrated responses to climate change (adaptation and mitigation) based on sound evidence and robust principles;
- be based on a multi-level governance structure in which central and local governments and communities are seen as “co-stewards” in protecting New Zealand’s natural environment;
- address cumulative effects through the development of institutions that support adaptive management techniques and improved scientific information; and
- use the full suite of policy options, including market-based instruments.

Government Policy Statement on environmental sustainability

Despite the legislative emphasis placed on sustainability, New Zealand does not have an authoritative policy that sets out the country’s long-term visions and direction for environmental sustainability. As the Briefing to the Incoming Government noted:

Central government has multiple interests and roles in any environmental issue, but is often not clear (or strategic) about the high-level outcomes it is seeking or the role it is exercising. This lack of clarity about outcomes can contribute to deferral of difficult but necessary decisions and failure to prioritise issues or problems, which tends to magnify problems over time. (MfE, 2008, p. 3)

To rectify this lack of clarity, a future planning framework would include an overarching Government Policy Statement (GPS) on environmental sustainability. The GPS would establish environmental goals that were quantifiable and measureable and against which progress would be monitored and reported on. The GPS would replace existing National Policy Statements and National Environmental Standards with the view to creating more congruent, transparent and clearer national direction.

In addition to creating clear limits within which development can occur, the GPS would also:

- promote strong links between District Plans and Regional Plans and the overarching national priorities for environment management;
- establish principles to help decision makers prioritise environmental issues when faced with conflicting priorities or scarce resources (Box 8.3);
- assist in creating a clear link between national environmental priorities and the collection and use of environmental data;
- establish clear expectations around the roles and responsibilities of central and local government on key issues such as climate change mitigation and adaptation; and
- provide a strong philosophical foundation for discussions of sustainable development.

The end goal would be to have the GPS on environmental sustainability embedded in all levels of government decision making – promoting consistent decisions using clear principles. Central government would need to revisit the GPS periodically (say every five years) to ensure that it remained current and reflected the latest scientific thinking.

Box 8.3 Criteria to assist prioritised environmental effects

The Parliamentary Commissioner for the Environment has suggested five criteria that can help prioritise environmental issues. These criteria are paraphrased in the questions below.

- Is the damage to the environment irreversible?
- Is the damage to the environment cumulative?
- Is the damage to the environment large in scale or pervasive?
- Is the damage to the environment increasing or accelerating?
- Is there a threshold beyond which the system “tips” into an unrecoverable state?

Source: Adapted from PCE (2014).

The development of the GPS would be difficult and would require the government to initiate a national conversation involving major stakeholders and experts. Such conversations are inevitably normative, and involve a “moral dialogue” and judgements around how we “ought” to live and the relationship we “ought to have” with nature and other human beings. Neuman (2005) aptly notes “[a]s with all moral arguments, there is a danger, for it is but a small step from dialogue to dogma” (p. 17).

Strong leadership would be needed to ensure that the GPS did not fall into this trap and that the complexities of implementing sustainable development are navigated (Box 8.4). One option is for legislation to specify that central government must seek advice from an independent panel of scientific experts. The government could be required to table the advice in Parliament along with reasons for not accepting any of the recommendations put forward by the panel. For example, the government may believe a recommendation would impose disproportionate costs on the community. The Commission is seeking views on the process that could be used to develop a GPS.

Q8.1

What should be the process for developing a Government Policy Statement (GPS) on Environmental Sustainability? What challenges would developing a GPS present? How could these challenges be overcome?

Box 8.4 Difficulties in implementing sustainable development

Bosselmann (2014) notes four core characteristics of sustainability that add to the complexity of implementation.

- **Sustainable development is intergenerational.** While implementing sustainable development requires short-term action, these actions must focus on generating long-term intergenerational outcomes. Unforeseen technologies and changes in the social, economic or ecological processes can change what is perceived as sustainable.
- **Sustainable development covers processes that take place over a range of spatial scales.** Actions that may be sustainable at one geographic level may not be at sustainable at another. Further, actions to promote sustainable development in one location can simply shift “unsustainable activities” to other locations.
- **Sustainable development requires integrating diverse policy, professional and political perspectives.** While issues may be widely acknowledged, views often differ on the underlying cause of the problems and on the best response. Further, addressing sustainable development often means confronting faults within existing institutions. For example, in *High Country Rosehip*

Orchards Ltd v MacKenzie District Council [2011] the court noted:

[S]hort term thinking may be encouraged by the fact that representatives seeking election gain no votes from future generations despite the latter having reasonably foreseeable needs for natural and physical resources. (NZEnvC 387, para 462)

- **Sustainable development is open to multiple (contested) interpretations** (eg, strong and weak sustainable development). Multiple interpretations point to the fact that sustainable development is ultimately a subjective, political and normative concept. Interpretations often diverge when trade-offs result (implicitly or explicitly) in the transfer of wealth from one group, or generation, to another.

R8.1

A future planning system should include a Government Policy Statement (GPS) on environmental sustainability. The GPS should:

- set out a long-term vision and direction for environmental sustainability;
- establish quantifiable and measureable goals against which progress would be monitored and reported on; and
- establish principles to help decision makers prioritise environmental issues when faced with conflicting priorities or scarce resources.

An adaptive approach to cumulative effects

Developing a more effective approach to the management of cumulative effects is a priority for any future planning system. This will require institutional changes, advances in scientific knowledge and improvements in workforce capability. Decision makers will also need to accept the limitations of their knowledge. In some instances, this will require a change in planning mindset (Chapter 12).

Not only do complex natural systems respond in unpredictable ways, but decision making occurs in a dynamic socio-cultural, economic and political system that is complex and often uncertain. So any future planning system must provide opportunities for incremental learning and adaptation of environmental management strategies.

Two alternative approaches to addressing cumulative effects are “predict and control” (PC) and “adaptive management” (AM). These approaches are based on two different philosophies. The key difference is that 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 of the system becomes known). In this way, AM aims to balance the need for immediate action against the realisation that management can be improved in the future (Westgate, Liken & Lindenmayer, 2013). In contrast, the PC approach assumes that government can predict future impacts and devise strategies to manage the predicted impacts.

The RMA uses a PC philosophy. 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. This approach works well when parties know, or can predict, effects with some certainty. However, when the effects are uncertain the PC approach falls down (Becher, 2014). That is, the PC approach has difficulty coping with situations in which some aspects are uncertain, such as:

- the number of individual incidents of an effect;
- where the effects are occurring;
- the size of each incidence of the effect; and
- the interactions between individual incidents.

Difficulties applying PC 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 and environmental management cannot be decoupled. Flexible institutions that take account of different sources of uncertainty are required. These institutions would need to be supported by good science, to support system-wide modelling of specific environmental stressors and risks.

To be effective, institutional resistance to acknowledging the presence of uncertainty will need to be overcome, as will the inherently risk averse cultures of government bodies (Chapter 12). 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)

Clearly, AM will not be required for every new project. Indeed, in some cases AM would be of little or no benefit. So, institutions must provide decision makers with the flexibility to ask four key questions:

- Is there substantial uncertainty about the negative spillovers generated from a land use?
- Is there substantial uncertainty about the effectiveness of strategies to manage the spillovers?
- Is it realistic that more information will become available in the future to reduce the uncertainty?
- Is it realistic that future information will change the way that the spillover is managed?

The Commission is interested in hearing the views of stakeholders on the use of AM in a future urban planning framework.

Q8.2

Would a greater emphasis on adaptive management assist in managing cumulative environmental effects in urban areas? What are the obstacles to using adaptive management? How could adaptive management work in practice?

An integrated and evidence-based response to climate change

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 policies 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 both these policy areas (eg, sub.3, sub.7, sub.9, sub. 20, sub. 21 and sub. 32).

Urban planning and adapting to climate change

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)⁷⁵

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, but too much rain may cause harm from flooding.

The necessity to adapt to climate change generally arises from the likelihood of extreme (rather than average) events (ie, events outside the coping range of communities). In some respects, the strategies to adapt to climate change are well-known to councils and can be accounted for under the current system. 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 8.5). Factors affecting the vulnerability of coastal areas to flooding include the elevation of the land, the presence of natural and built defenses (eg, sand dunes, built sea walls, and tidal barriers), and the design and capacity of stormwater pipes.

Box 8.5 Predicted 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.
- **Wind:** Changing circulation patterns in the atmosphere are projected to result in more intense and prolonged westerly winds – particularly in the winter. This will increase the power of waves, leading to an increased risk of storm surges.⁷⁶
- **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

⁷⁵ 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).

⁷⁶ 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).

In addition to increased frequency of flooding, rising sea levels are projected to increase coastal erosion⁷⁷ and salt water intrusion into groundwater tables. The risk of these problems will depend on the characteristics of the local area in question and on the ability of the areas 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.⁷⁸ Rather, action is required at different points in the planning system. This includes those actions noted below.

- **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 (PCE, 2015). Inconsistent approaches not only undermine good planning, but also run the serious risk of distorting land markets – particularly in coastal areas. Central government leadership in this area is crucial.
- **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 pay particular attention to lifting community understanding of the science underpinning policy options, and the relative costs, benefits and risks of alternative courses of action.
- **Developing an understanding of the costs of adaptation and prioritising vulnerable areas.** Adapting to climate change requires the use of society's scarce resources – including taxes and rates revenue. It is imperative that governments spend these resources wisely, as money spent on adaptation is money *not spent* on other social and environmental goals. Adaptation plans should prioritise people, places and infrastructure that are most vulnerable to climate impacts.

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. Such collaboration will be needed to (for example):
 - identify knowledge gaps and strategies to fill these gaps;
 - develop standardised methodologies, datasets and assumptions for assessing the impacts of climate change;
 - develop a common understanding of national adaptation priorities;
 - develop strategies to lift capability in the area of climate change adaptation and planning – both within councils and within central government agencies.

The complexities of the social, ecological and economic systems impacted by climate change mean top-down approaches are unlikely to succeed. Although central government leadership is needed for some topics (such as standardised data), local leadership is needed for others (such as raising community awareness).

⁷⁷ Due to larger, more intense waves hitting the shoreline.

⁷⁸ The principles draw on the work of Scheraga and Grambsch (1998), Füssel and Klein (2004), UNDP (2010), The United States Environmental Protection Agency (2014) and the PCE (2015).

- **Considering the effects of climate change in the context of multiple stressors.** Many areas vulnerable to the impact of climate change are already under stress from other factors (such as development or coastal erosion). In planning for adaptation, governments must consider:
 - the interdependence between current stresses;
 - the stresses on an area under current climatic conditions; and
 - how climate change may accelerate or ameliorate these stresses.
- **Assessing who is best placed to manage the risks posed by climate change.** Managing the risks posed by climate change is not solely the responsibility of central and local government. The private sector also needs to evaluate the risks that climate change poses for individuals, businesses and households, and to take the necessary action. The insurance industry will be an important contributor to these discussions. There are important questions around how much risk the private sector should be “allowed” to bear and how much the government should regulate to prevent damage to private property.
- **Monitoring the performance of adaptation plans 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 the functioning of local ecological systems, there is still much to learn; unexpected responses in the natural environment are likely. Such is the nature of complex ecological systems. This points to the need for adaptation plans to be responsive to new information and technology. However, care is needed to ensure that plans do not become overly responsive to short-term shifts in politics.

F8.7

The core functions of urban planning will play an important role in adapting to climate change. This role will need to be reflected in any future planning system.

F8.8

Adapting to a changing climate will require more than simply strengthening planning legislation. Improvements in other parts of the planning system will be required, including:

- standardising the methods, data and assumptions used as the basis for developing adaptation strategies;
- improving understanding of the costs and benefits of alternative adaptation strategies (both within local and central government and within affected communities);
- identifying people, places and infrastructure that are most vulnerable to the impacts of climate change and prioritise them accordingly; and
- improving understanding of the interaction between existing stresses on the environment and the impacts of climate change.

Urban planning, greenhouse gas emissions and sustainability

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 (Box 8.6).

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). As such, responsibility for mitigation policies currently rests with central government (Chapter 6).

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 little 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 the movement of emissions from local areas with strict emissions standards to areas with more lenient standards.
- As a general principle policy making responsibility should be allocated to the level of government where the electorate has the most interest (and ability) to hold the regulator accountable for the policies made. In the case GHG emission effective accountability is more likely when policies and standards are set at the national level.

A summary of the principles for allocating regulatory roles is provided in Figure 3.1.

Box 8.6 **New Zealand's Greenhouse Gas Reduction Targets**

The Government has four national targets for reducing New Zealand's GHG emissions. These cover both the medium term and long term:

- a provisional post-2020 target of 30% below 2005 GHG emissions levels by 2030;
- an unconditional target of 5% below 1990 GHG emissions levels by 2020;
- a long-term target of 50% below 1990 GHG emissions levels by 2050; and
- a conditional target range of 10% to 20% below 1990 GHG emissions levels by 2020, if there is a comprehensive global agreement.

The Government has tabled the post-2020 target with the United Nations. This target will remain provisional until the ratification of a new international agreement. The target is equivalent to 11% below 1990 levels by 2030.

Some local authorities have set their own targets for reducing GHG emissions. For example: Wellington City Council has a target of reducing GHG emissions by 80% below 2001 levels by 2050, and Auckland Council has a target of a 40% reduction below 1990 levels by 2040.

Source: MfE, n.d.; Auckland Council, 2012; Wellington City Council, 2016.

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. 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 that there are now close to 150 empirical studies ("conducted with rigour", p. 21) that investigating the relationship between urban development patterns and individual and household travel. For example:

- Newman and Kenworthy (1989) famously illustrated that higher-density cities around the world generate lower rates of car use and higher rates of public transport use.
- Kenworthy and Laube (1999) found that transportation fuel consumption per capita declines by one-half to two-thirds as urban densities rise from 4 to 12 people an acre (1.6 to 4.8 people a hectare).
- Newman and Kenworthy (2006) found that above an urban density threshold of 35 people and jobs per hectare, automobile dependence is significantly reduced. They suggest that below the threshold the physical constraints of distance and time make private automobiles the usual mode of transport.

- Norman, MacLean and Kennedy (2006) conducted a comparison of energy use and GHG emission associated with high-density and low-density residential developments in Toronto, Canada. The study looked at *direct* and *indirect* energy use and GHG emissions (ie, a life-cycle analysis approach).⁷⁹ The study found that on a per capita basis, low-density development was more energy and GHG intensive (by a factor of 2-2.5) than high-density suburban development.

Many of these studies draw similar policy conclusions from their results. Kenworthy (2003) provides a good example:

The results point clearly to the energy and greenhouse conservation potential of compact, mixed land use cities, with extensive transit systems operating on a backbone of rail. Compact land uses can be combined with attractive environments for walking and cycling, which will save further energy and CO₂ emissions. Strict limitations on freeway construction and parking in the central area of cities will assist in creating less auto-dependent cities with lower built in energy demand and less greenhouse emissions from passenger transport. Attempting to get rid of congestion through freeway building and other means, rather than building up the non-auto modes to help people avoid congestion, will not save energy or reduce CO₂ emissions but will increase these factors in cities, and result in other negative environmental impacts. (p. 26)

Yet, Doherty, Nakanishi, Bai and Meyers (2009) warn care is needed when comparing results of studies, as “the concept of density in urban environments is plagued by a plethora of definitions that vary depending on purpose” (p. 3). They note that confusion arises partly because density can refer to either dwellings or people per unit area, and most calculations of people per unit area are based on an assumed average number of people in each dwelling.

Further, numerous studies find little evidence to support the assertion that increasing urban density necessarily reduces GHG emissions or leads to more environmentally friendly patterns of behaviour.

- Breheny, Gordon and Archer (1998) found a weak link between densities and transportation energy use. They concluded: “This [research] project casts doubt on the orthodoxy that increasing building densities will necessarily reduce travel in towns and cities” (p. 4).
- Crane’s (2000) review of research on the connection between urban form and travel behaviour found mixed, and conceivably contradictory, findings. He attributes this variation to methodological differences used by researchers.
- Mees (2009) argues that Newman and Kenworthy’s findings are flawed because of inconsistencies in how urban density was calculated for each city. Mees repeats Newman and Kenworthy’s research using what he considers is a more accurate and consistent definition of urban areas. Mees finds that density does not have the magnitude of impact on transport patterns that Newman and Kenworthy state.

Other researchers highlight that density is just one of many factors impacting travel behaviour. These authors stress the importance of local context in determining travel patterns and warn against using simple density-emissions heuristics as the basis of planning decisions.

- Hall’s (2001) review of relevant empirical studies found that “the research results are not consistent; indeed they are confusing” (p. 102). He found the study’s conclusions to be equivocal and suggested, “[t]ravel is much more strongly linked to fuel prices and income” than population density (p. 103).
- Boarnet and Crane (2001) review land-use transport interactions and argue that the relationship between land use and travel behaviour is complex, and that simple proxies like population density can be misleading. For example, in many US cities dense neighbourhoods are commonly low-income areas with low car ownership. So demographic effects need to be separated from the effects of urban form.
- Gray, Gleasons and Burke (2008) argue that “[t]he notion that one aspect of urban form, such as residential density, can influence travel patterns is seductively simple”. They conclude that the

⁷⁹ Households and businesses consume energy (and create emissions) both directly and indirectly. Energy is consumed directly through, for example, heating, transportation, and cooking. Energy is indirectly consumed through the use of goods and services that themselves require energy or create emissions. These indirect emissions are often referred to as “embodied emissions” and “embodied energy use”.

“independent influence [of density] is limited, and hard to untangle from other urban form and structure features which tend to vary together across cities” (p. 3). Important features (and studies) noted include:

- the spacing of employment and service centres (Mindali, Ravel & Salomon, 2004; Holden & Norland, 2005);
- dwelling size and design (Oliphant, 2003; Pears, 2005; Rickwood, Glazebrook & Searle, 2008);
- local land-use mix (Cervero & Kockelman, 1997); and
- neighbourhood design and street layout (Handy, Cao & Mokhtarian, 2006).

Other commentators questioned whether compact cities are indeed more sustainable (broadly defined) than lower-density alternatives. In particular, some researchers believe that those advocating high-density policies overlook the socio-economic consequences of the policies they advocate. 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)

To be clear, none of these studies argue against the need for governments to take action on climate change. On the contrary, the authors are often at pains to emphasise the importance of reducing GHG emissions. This is presumably because they fear being labelled “climate change deniers” or having their motives called into questions.

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 Commission concludes that while there is evidence supporting the link between urban density and transport-related GHG emissions, other factors such as local demographics, income levels, land use mix and the layout of streets also have a major impact on travel behaviour (and GHG emissions). When seeking measures to reduce GHG emissions, governments should temper their enthusiasm for higher-density urban areas with a strong understanding of how higher density is likely to interact with other socio-economic and spatial factors that contribute to travel patterns and GHG emissions.

Local government has long advocated the view that “local circumstances matter”. And, that a “one-size-fits-all” policy prescription cannot possibly cover the myriad of different local conditions. The Commission supports this view and believes the same logic applies when considering the impact of density on GHG emission (ie, local context is important).

Clearly, New Zealand needs to reduce its transport-related GHG emissions to meet its international commitments (Box 8.6). The crucial question is: What is the most cost-effective combination of policies that will achieve this objective? A secondary important question is: Where does urban planning sit in this combination of policies?

There is a dearth of New Zealand-specific research on these questions. To promote well-informed urban growth strategies, rigorous empirical analysis is needed into:

- the role that local factors (eg, density, and land-use mix) play in shaping urban GHG emissions in New Zealand;
- the potential magnitude of GHG reductions that are possible through urban planning policies; and
- the cost of reducing emissions through urban planning policies relative to other policy measures (eg, “carbon pricing” and energy efficiency).

In addition to assisting better decision making, this research is important for building public support and confidence in strategies aimed at reducing GHG emissions – particularly strategies involving land use regulation.

F8.9

Evidence shows that increasing residential density can reduce vehicle use in some situations. But also it shows that local factors (other than density) are at least as important in influencing travel behaviour.

F8.10

Evidence on the proposition that higher-density cities in New Zealand are more environmentally sustainable is ambiguous at best.

R8.2

Before attempting to use urban planning as a means of reducing GHG emissions in New Zealand, a more robust empirical research base should be developed reflecting New Zealand circumstances. Specifically, research should aim to improve the government’s understanding of local factors that shape urban GHG emissions in New Zealand, and the extent to which urban planning can influence these factors.

Improved interaction between central and local government

The urban environment is one component of a much larger, complex natural system. While many urban spillovers have localised effects, many others have regional, national or even international impacts. Added to this, information on how best to manage spillovers is unevenly distributed throughout the system. For example, while sea level rise may cause localised damage, information on how best to predict sea level rise sits at the national and international level.

In such a setting, effective interaction between central and local government is vital. The Commission has previously noted that effective interaction requires a mutual understanding that both spheres of government ultimately exist to improve the wellbeing of New Zealanders, and that the actions of the other sphere can heavily influence their success in achieving this objective (NZPC, 2013).

A future planning system should have a more collegial interaction between central and local government. The system would encourage:

- the coordination of environmental planning undertaken at the local and national level;
- the spread of information through the system and the sharing of expertise and knowledge;
- both central and local government to provide input (formally or informally) into each other’s policy making processes;
- cooperative approaches to addressing potential issues with implementing new legislation or environmental standards; and
- the creation of formal and informal feedback loops to identify environmental problems when they first appear.

When considering reform of New Zealand’s planning system, it is important to consider how an effective relationship between central and local government is best achieved.

The Commission has previously recommended that central and local government work together to develop a protocol containing an agreed set of principles to govern the development of regulations that have implications for the local government sector. The Commission also recommended a series of measures to incentivise both local and central government to adhere to the protocol. These (or similar) measures would be needed for any future planning regime to achieve its full potential.

R8.3

Central and local government should develop an agreed set of principles to govern the development of national regulations that have implications for the local government sector. This should be along the lines of the ‘Partners in Regulation’ protocol recommended in the Commission’s report *Towards Better Local Regulation* (2013).

Making use of the full suite of policy options

Firms and individuals make decisions that damage the environment partly because they do not bear the full cost of their actions – that is, costs spillover to the wider community (Chapter 3). Traditionally, the planning system has managed these spillovers through regulation, monitoring and enforcement – so called “command and control” measures. Yet, there are likely to be instances in which other policy approaches – or a more judicious mix of approaches – can be used to achieve environmental goals more efficiently and effectively.

“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, market forces (rather than governments) act as the coordinating mechanism for multiple, independent actors in the system.⁸⁰

When well designed and implemented, market-based instruments can lower the cost of achieving environmental objectives and create incentives to seek out innovative solutions to environmental problems. Yet relative to other OECD countries, New Zealand makes little use of these instruments (OECD, 2007). Indeed, 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 environmental costs of economic activities” (p 1). Box 8.7 provides a summary of different types of non-market and market-based instruments.

Box 8.7 Market and non-market instruments

Non-market based instruments

- Output-based or performance-based standards – standards that involve setting limits on performance or output (eg, limits on effluent load or concentration).
- Input-based, practice-based or process-based standards – standards that can involve setting limits on input levels, specifying production methods (technology or best management practice requirements), or development and zoning regulations.
- Education, moral suasion – both seek to influence behaviour in ways that improve environmental outcomes by educating those who create spillovers about the benefits of reducing spillovers.

Economic instruments

- Price-based instruments – instruments that attempt to influence environmental performance by pricing negative externalities or subsidising mitigation actions. Two examples are noted below.

⁸⁰ Economic instruments are rarely used in isolation and are generally supported by some form of regulation.

- Environmental charges – charges that link the quantity 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 (eg, tenders or auctions).
- Quantity-based instruments – instruments that involve setting standards for mitigation effort (eg, emissions standards) and allow trade among those providing mitigation (permitting individual underperformance if it is 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 to produce a spillover and then allow parties to trade the permits with each other. A person is then only allowed to exceed a given standard if they buy permits from someone who is under their allowable emissions and so has excess permits.
 - 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 themselves or pay for others to act on their behalf.
- Market barrier elimination instruments – instruments that focus on improving environmental outcomes by increasing public awareness of the environmental attributes of products consumed. Product labelling schemes are perhaps the most widely applied example.

Source: Adapted from MacDonald, Conner & Morrison (2004).

While New Zealand has some innovative examples of market-based mechanisms (such as the Lake Taupo nitrogen cap and trade programme), environmental spillovers in urban areas are generally managed through command and control measures.⁸¹ It is likely that opportunities exist to make more effective use of the full suite of environmental management tools available. For example, Chapter 10 explores the use of congestion charges and water charges. The 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 also be used to internalise a broader set of external costs. However, taxes on fuel consumption are 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).

Other countries use innovative market-based approaches. Many local authorities in France and Germany impose a stormwater tax on landowners to control stormwater runoff 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. Consequently, stormwater picks up pollutants such as chemicals and oils as it flows across these surfaces into the stormwater system, resulting 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. For example, the city of Dresden charges on average €1.04 per m² of impervious surface per 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 (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 “necessary but not sufficient”. Central and local government would 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

⁸¹ The Lake Taupo 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).

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 in question 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:

- limited data on which to base taxes and charges;
- limited experience and capability in the development of economic instruments; and
- the fact that market-based measures can be politically unpopular given that they can entail people paying to do things they previously enjoyed for free (or at a subsidised price).

R8.4

When regulating urban spillovers affecting the natural environment, a future planning system should provide government bodies access to the full suite of policy tools including market-based tools.

What role for tradable development rights?

Tradable development rights (TDRs) are used in various forms around the world. While TDRs can be designed and applied in a number of ways, schemes can be classified into two broad categories depending on whether they are used in conjunction with zoning.

- *Zoning-integrative* TDR schemes operate around a zoning plan that identifies areas to preserve (sending areas) and areas to develop (receiving areas). The government creates development rights and allocates these rights to landowners in *sending* areas. Landowners in *sending* areas then sell these rights to land developers in *receiving* areas. The revenue from the sale compensates landowners in sending areas for zoning decisions that remove their right to develop land (Thorsnes & Simons, 1999). *Zoning-integrative* TDRs are therefore a way to compensate landowners for preserving land. The rationale is that if landowners are not compensated, then they are left to bear all the cost of preservation while society as a whole reaps the benefits.
- *Zoning-alternative* TDRs operate independently from zoning plan rules. The government sets a cap on the amount of development permitted and allocates a corresponding number of TDRs to landowners. Once the government has allocated the TDRs, the market determines the area for development and who will develop the area (Moroni, 2015). Chapter 10 discusses the auctioning of development rights.

TDR schemes in New Zealand fall into the *zoning-integrative* category. That is, the scheme provides a way to compensate landowners who cannot develop their land due to planning regulations. Taking this approach requires care.

- In some instances, landowners may not actually have ever held the property right to develop their land⁸² – information factored into the price of the land when they brought it. The reason for compensating landowners is therefore unclear.

⁸² Property rights are rarely absolute. Rather, formal and informal institutions shape them. Land use regulation both defines and constrains property rights.

- Zoning-integrative TDRs can create an incentive for a landowner to exaggerate their development plans to receive access to compensation. Economists refer to this as “cheap talk” because a landowner can make exaggerated claims at little or no cost to themselves.
- Zoning-integrative TDRs can pass the cost of providing a local public good on to the final owner of the right (ie, costs will be passed on to, for example, homeowners and businesses). This is not necessarily a more equitable way to allocate cost.

In summary, zoning-integrative TDRs are often a mechanism for mustering local support for conservation efforts. While this may be justified in some circumstances, it is important that this objective is transparent to the community.

The Commission will further investigate the use and design of TDRs in its final report.

8.5 Conclusion

The quality of the natural environment in urban areas plays a major role in the liveability of cities – most notably through the provision of ecosystem services. The efficient management of the natural environment in urban areas requires an appreciation of the interactions between the different components of the natural system, and of how decisions that affect one component of the system influence other parts of the system. Reliable data and good science are key ingredients to developing such an appreciation.

New Zealand has no authoritative policy that sets out the country’s long-term vision and direction for environmental sustainability. An overarching Government Policy Statement on environmental sustainability would help to establish long-term goals that were quantifiable and measurable and against which progress could be monitored and reported on. The GPS would set the policy framework within which government could pursue these goals, and it would establish principles to help decision makers prioritise environmental issues. The end goal would be to have the GPS embedded in all levels of government decision making.

A future planning system would need to recognise the growing threat from climate change. The system should encourage an integrated response based on sound evidence and robust principles. In terms of mitigation, governments must temper their enthusiasm for higher-density urban areas with a stronger understanding of how higher density interacts with other socio-economic and spatial factors that contribute to travel patterns and GHG emissions. Research on these questions and that is specific to New Zealand is lacking.

Preparing to adapt to climate change will take more than simply strengthening any planning legislation. Rather, action is required at different points in the system. Central and local government will need to work together to develop standardised methods, data and assumptions for modelling the impact of climate change. Governments will also need to raise community awareness of the need for adaptation and improve their understanding of adaption cost and priorities.

While many urban spillovers are localised, many others have regional, national or even international impacts. In addition, information on how best to manage spillovers is unevenly distributed throughout the system. In such a setting, effective and productive interaction between central and local government is vital.

Developing a better approach to managing cumulative effects is a priority for the future planning system. Achieving such an approach will require institutions that support adaptive management techniques. It will also require institutional changes and improvements in workforce capability.

Traditionally, the planning system has managed environmental spillovers through command and control approaches. Yet there are likely to be instances in which a more judicious mix of policy tools can be used to achieve environmental goals more efficiently and effectively. A future urban planning system would give government bodies responsible for environmental management access to a full range of policy tools.

9 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 can be challenging, particularly 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;
 - appropriately align land use rules with the supply of infrastructure (and vice versa); and
 - provide the full suite of infrastructure assets required (city shaping, structural and follower).
- New Zealand's current planning system has struggled with all three tasks, due to:
 - 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 resolve these problems – particularly greater use of pricing, and changes to the ways in which land use regulation is made.
- In addition to these changes, the supply of infrastructure in future could be improved by:
 - making spatial plans a formal part of the planning hierarchy, to help provide greater security over the future supply of development capacity;
 - making greater use of analytical planning tools which reflect uncertainty and retain flexibility, such as real-options analysis; and
 - creating institutions or formal processes through which major councils and central government can work together to assess major programmes of urban infrastructure with spillover benefits.
- Despite the weaknesses in existing institutional and governance arrangements, the Commission saw 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.
- There is scope for improvement 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.

9.1 Introduction

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 systems are the result of statutory and institutional barriers often associated with legislative fragmentation, political and cultural barriers, financial barriers and analytical barriers; and
- points to legislative, institutional and planning practice changes that would address these barriers to an integrated approach to urban planning.

Chapter 10 discusses financial barriers to the effective and efficient provision of infrastructure, and desirable solutions to these barriers in a future planning system.

9.2 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, highways, local roads, footpaths and cycleways, and public transport;
- water – drinking 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 coverage and internet; and
- social and community infrastructure – eg, public recreation spaces and parks and libraries.

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** comprises a relatively limited number of mainly transport related infrastructure (eg, highways or metro rail), which can fundamentally change the accessibility of urban areas by driving the location decisions of households and firms, facilitating agglomeration, and improving productivity.
- **Structural infrastructure** comprises “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** comprises infrastructure assets that provide services into a suburb or neighbourhood once the development of these areas has been enabled by investment in the city-

shaping and structural infrastructure assets. The purpose of this type of infrastructure is to service the pattern of existing urban environments, which has been established through other means. 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. Rather, their utility comes from the services the assets provide. Improvements in infrastructure offer opportunities to not only improve productivity within the economy, but also help 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 significant 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 the availability 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)

Providing infrastructure for new land development can be an expensive and risky undertaking for councils. 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 takes place are essential elements of an urban planning and development system.

Important characteristics of infrastructure assets

Urban infrastructure has certain economic characteristics that influence the planning and delivery of such assets. Seven typical aspects of infrastructure assets 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 involve considerable expenditure and have long lives. The assets are typically built with spare capacity and investment decisions are based on long-term forecasts, with significant risks involved if the demand for the infrastructure over that period is uncertain. For some infrastructure assets the "payback" period may be relatively 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. In the case of pipelines, for example, as pipeline diameters increase, construction costs increase less than proportionately (eg, as the size of the trench is increased for an underground pipe), 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 the addition of an extra person 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.

- *Path dependent*

Urban infrastructure has a high degree of path-dependent 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 related 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 generally fail to provide such infrastructure if sufficient revenue cannot be generated to cover costs. Even if it is feasible to charge users, marginal costs can be much 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. This all means that public funding is common for some forms of infrastructure. It also means that decisions have to be made about who should bear the costs of infrastructure, and views about what is an equitable allocation of costs often vary.

F9.1**Infrastructure assets:**

- are long-lived;
- are lumpy;
- are highly place specific and inflexible;
- are irreversible;
- are typically part of a network;
- need to be coordinated often; and
- may require public funding.

Providers of infrastructure are exposed to many risks, including that demand may be less than expected and their assets are underused or stranded. This puts a premium on effective planning, procurement, monitoring and funding processes.

9.3 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
- provide the full suite of infrastructure assets required (“city-shaping”, structural and follower).

The current planning system has struggled to deliver these.

Insufficiently responsive supply

Infrastructure supply, and by association development capacity, has struggled to keep pace with demand in New Zealand’s faster-growing cities. The effects of this lack of responsiveness can be seen in the rapidly rising urban land prices discussed in Chapters 5 and 7. 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:

In this regard Tauranga City Council (TCC) has this year brought forward by 6 years in a number of stages, a key District Arterial Road and infrastructure service corridor in the Wairakei UGA [Urban Growth Area], however there is still concern that the ongoing housing demand in this area may outstrip the delivery of this road and water supply service to Wairakei. This presents considerable risks and uncertainties to us in forward planning our development.

The ultimate development capacity of our land is also constrained by the provision of a grade separated interchange to the Tauranga Eastern Link Motorway which is scheduled to open in August 2015. TCC have the funding responsibility for this \$20m+ interchange which is likely not to be scheduled for construction in the upcoming 2015-25 Long Term Plan until towards the end of that period which will constrain the ongoing growth of the Wairakei Urban Growth Area. (Bluehaven Management, *Using land for housing*, sub. 42, p. 13)

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)

Misaligned land use rules and infrastructure investments

Land use rules do not always align well with the opportunities provided by the availability of infrastructure, and infrastructure is not always in place to support new zoning provisions.

- The New Zealand Council for Infrastructure Development (NZCID) (2016a) notes that the land use controls in the Proposed Auckland Unitary Plan fail to maximise the development potential created by the inner-city rail network:

[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 unserved 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)

- A review of the Auckland Regional Growth Strategy noted that progress towards more intensive development was being hindered by
 - infrastructure constraints in some areas planned for growth, financial contributions barriers in other areas, and by the difficulty of amalgamating sites in key areas. Plan changes to allow intensification are slow in areas prime for redevelopment. (Regional Growth Forum, 2007, p. 57)
- In Tauranga’s east, land rezoned for housing has not been supported by access to nearby roads (Box 9.1).

Box 9.1 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

- supporting regional employment and economic growth (NZTA, 2015).

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 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 July 2016, TCC reported to the Commission that they are continuing to work through the issue with NZTA, and are currently discussing potential cost sharing arrangements.

Source: NZPC (2015a); pers. comm. (n.d).

These issues are not unique to New Zealand. 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 the lack of public transport infrastructure and services. 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.

Limited tools to support city-shaping infrastructure

Local authorities have limited tools available to support city-shaping infrastructure. This type of infrastructure can play an important part in 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 9.2).

Box 9.2 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 CBD. Projections suggested that by 1985 these two stations would not be able 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 maintain accessibility to of 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 10); 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 land use 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 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.

F9.2

The current infrastructure planning and provision systems are insufficiently responsive, do not always align infrastructure supply and land use rules, and lack tools for the provision of city-shaping assets.

9.4 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 followed by various agencies 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 instruments that might lead to more integration. For example, as discussed in Chapter 10, 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.
- **Financial barriers:** These barriers arise from planning agencies facing budget constraints or limitations on the flexibility in how they can collect or use revenue associated with integrated planning.
- **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 10 discusses financial barriers, while Chapters 7, 8 and 11 discuss 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 and investment processes. Interaction occurs at a number of points, but without an explicit and coherent system-wide framework to guide these interactions towards common goals (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) without providing for a single legislative purpose for the system as a whole, and relying on three separate decision-making processes.

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 there are weak requirements for decisions to support those taken in other processes.

This leads to duplicate consultation processes and creates uncertainty about the likelihood and timing of new development capacity being made available (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, “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 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 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 (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 accordance with the National Land Transport Programme, which, 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. As Newman, Bachelors & Chapman. (2005) observe, current legislative arrangements mean that

[t]here is no binding requirement for integration between transport planning (and delivery) and land use planning...Integration only occurs if agencies choose to...[Integration occurs] only through the best intentions of agencies/councils, not through good policy requirements. (p. 14)

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 state highway development can be at odds with the priority of boosting land supply for housing in terms of:

- funding from an overall fixed budget; and
- tension between GPS priorities for both the state highway network and access to and from new housing developments.

Institutional and governance arrangements for water discourage responsiveness

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 estimated that in 2011 more than 2 250 separate water supplies existed and around 350 wastewater treatment facilities (Water New Zealand, 2011). 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 contribute to low responsiveness, including:

- 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).

F9.3

Institutional and governance arrangements for “three waters” infrastructure act against responsive supply.

No formal mechanisms to resolve debates over large-scale infrastructure

There is no established process 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 either partly or fully fund them and organise their procurement.

9.5 Responses

Other Commission recommendations will lead to improvements

A number of Commission recommendations in this and earlier inquiries will help resolve some of the problems discussed in section 0.

- The “price trigger” mechanism discussed in *Using land for housing*, and the supporting new powers for central government discussed in Chapter 7, will encourage local authorities to respond to demand for development capacity in a timely manner.
- Clearer legislative purposes, which prioritise the supply of sufficient development capacity and mobility, will help to give greater weight to the alignment of land use regulation and transport infrastructure investments. They will also give local authorities a greater ability to reject private Plan changes that would act against these priorities.
- The narrowing of appeal rights and new consultation requirements for planning regulation should help to reduce some of the delays currently involved in changing land use rules. “Event-based” rezoning would create the opportunity for land use rules to change quickly in response to the installation of new infrastructure (Chapter 7).
- Funding tools (as discussed in Chapter 10) should help make infrastructure investment a less risky and daunting prospect for local authorities.

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 regional cooperation and understanding;
- more efficient use of existing infrastructure;
- enhanced responsiveness;
- greater certainty; and
- cost savings (NZPC, 2015a).

Second, there are reasons to believe that, when properly designed, spatial plans can help contribute to the greater certainty of future land and infrastructure supply, and to more successful cities.

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 (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 economics, 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).

For the purposes of 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, 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 the city’s development over time, so as to enable councils to act ahead of demand to secure essential corridors (see below);
- understand and reflect the costs, topographical, geographic and engineering challenges of installing new infrastructure; and
- inform the strategies and budgets that each local authority allocates to its infrastructure.

Because of the uncertainty involved in the development of cities, spatial plans would not seek to set or predict in detail where private sector activities or services would locate (eg, they would not attempt to set zones or land use rules). Rather, they would 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 would lay out the bones of the city’s future development, and individual developers, residents and entrepreneurs would fill out the body of the city over time. They could also form the basis for discussions with central government about the need for education and health facilities (eg, hospitals).

Ensuring adequate supply in the future depends on good planning now

In his book, *Planet of Cities*, Angel (2012) stresses the importance of governments developing an agreed vision for a city’s city-shaping infrastructure and for its “trunk” infrastructure that provide the essential corridors for urban development. These infrastructure assets include main roads, the “three waters” assets and public open spaces. Establishing their location many years in advance enables councils to accomplish the important task of securing and reserving these essential corridors and spaces. This can be done by purchasing property or more commonly by placing “designations” on land titles.

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, making it extremely difficult for public authorities 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 (Box 9.3).

Once established and signalled, these infrastructure plans provide a platform for the private and public planning of many other components of city development – residential, community, commercial and industrial. Market forces and decentralised individual decisions ought then to be allowed to play a large role in this “follower” land-use planning.

Box 9.3 Planet of Cities and the Public Works Proposition

Angel (2012) examines how large cities have grown their geographical footprints extremely rapidly in certain periods. He provides guidance for cities that are expanding, and concludes that policies aimed at containing this growth are doomed.

He proposes that in fast-growing cities, necessary land for public streets, infrastructure networks and public open spaces must be planned and secured well before development begins. Rather than relying on market forces, he stresses that local authorities should signal early on where growth will take place. To ensure a sufficient supply of land is planned for, local authorities are advised to develop realistic and robust forecasts to determine the amount of land needed to be converted to urban use over a 20–30 year period. He notes:

[O]ur fervent hopes that the private sector can ensure an efficient, let alone an equitable or sustainable, development of the metropolitan fringe by relying entirely on free market transactions are entirely misplaced... To be of any use to those who inhabit and thrive in cities, private goods - such as serviced plots of land for homes and businesses – need these underlying public goods (such as arterial roads and water and sewer systems) to be installed in a well-planned and timely manner. (pp. 61 & 62)

Angel draws on examples of effective as well as weak planning approaches in international cities to illustrate the importance of early planning for future urban development. For example, in Bangkok and São Paulo, the lack of open space and an arterial road network, the presence of acute traffic congestion and an inability to treat sewage, arose from an inadequate allocation of land for public works. In contrast, Toronto has maintained an effective public transport system, and reduced automobile dependency by laying out well in advance a comprehensive and compact grid plan for arterial roads.

Source: Angel (2012).

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 has 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 objectives of spatial plans are not clearly reflected in the service and budget plans of local authorities. 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 the overall integrated vision, the actual making of the trade-offs, which takes place at the regulatory-plan-making stage, remains difficult and controversial. In addition, because only the RMA plans involve a right of appeal against councils’ decision, a disconnect often arises between the vision articulated in spatial plans and the compromised reality outlined in district or unitary plans under the RMA. Such disconnects have been particularly evident in Auckland, where commitments to a denser urban form in

the Auckland Plan were placed at risk of not being given effect in the Proposed Auckland Unitary Plan (Box 9.4 and Chapter 4).

Box 9.4 **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 Council has identified that its unitary plan will be the key tool for implementing the targets and objectives of the Auckland Plan.

The Auckland Plan promotes 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 sets 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 that are 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 provides general direction as to where Auckland’s new housing might be located, it is silent on how the Auckland Council will ensure sufficient development capacity, or “ready to go” land, exists for housing in the locations identified. The Plan left that level of detail to the Unitary Plan.

The Auckland Plan provides for intensification plans to be developed in consultation with local communities, taking into account their aspirations for the area. The final plans reflecting these consultations would then appear in the final Auckland Unitary Plan. However, the development of the Proposed Auckland Unitary Plan has seen a number of inner-city communities (in desirable areas to live and work) expressing strong opposition to any form of intensification. This led to the Auckland Council retreating from some of its proposals, which would have up-zoned parts of the eastern and central Auckland suburbs (as well as parts of South Auckland) to allow for the building of more, mostly two-storey, townhouses and apartments.

The Auckland Independent Hearings Panel recommended a number of changes to the notified Unitary Plan 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. At the time of publication, Auckland Council was considering the Independent Hearings Panel’s recommendations.

Many of the changes to the planning regulatory system outlined in Chapter 7 will help to deal with the problems of translating longer-term spatial plans into land use regulation. These changes include, for example, more flexible consultation processes, reduced access to appeals, the introduction of a permanent independent hearings panel, and clearer statutory purposes. To remove any doubt about the status of spatial plans, such plans should be made a formal part of the planning hierarchy and have clear and strong legislative weight in regulatory, budgeting and land transport processes.

R9.1

Spatial plans should be a standard and mandatory part of the planning hierarchy in a future system. Spatial plans should be tightly defined and focus on issues closely related to land use, in particular the provision of water and transport infrastructure and community facilities (eg, green space, reserves, conservation areas, and libraries), protection of high value ecological sites, and natural hazard management.

Making spatial plans a formal and mandatory part of a future planning system risks adding to the system's overall cost and complexity. Given the focus of spatial plans on infrastructure and transport planning, there would seem to be opportunities to partially or fully replace the infrastructure strategy requirements of the LGA and RLTP requirements of the LTMA. Introducing a spatial planning requirements also creates the potential to remove Regional Policy Statements.

Q9.1

Which components of the current planning system could spatial plans replace? Where would the greatest benefits lie in formalising spatial plans?

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. In particular, a spatial plan 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 because of the need to secure the connected land corridors that are essential to their network function.

Decisions about land use and infrastructure require difficult choices among alternative options. For example:

- Should a route be a normal 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?

Making these choices requires applying an appropriate analytical tool, which should support an integrated approach to decision making.

The decision tool of choice among economists and policymakers for this task is cost–benefit analysis (CBA) because it provides a rational means of weighing up the social costs and benefits of each of 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, 2015) 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 analysis has limitations. Not all of these limitations are easily addressed.

One of the easier problems to address is to avoid a fragmented analysis, which can happen if the scope of the analysis 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 difficult issue to address when using CBA in an urban planning context is that it has difficulty accounting for complex feedback loops and system-wide effects. CBA is inherently a partial approach, which 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 likely to be an issue for larger projects, and particularly 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. General equilibrium models, however, assume a given set of economic relationships and so may not capture the effects of city-shaping infrastructure that has the capacities to restructure urban economies. Such capacities include, for example, 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 does not build in the flexibility to modify decisions as more information comes to hand. 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. A complementary decision tool – real-options analysis – emphasises the value of preserving options to make later decisions when better information will be available. A current decision under this approach could well be to invest in actively acquiring better information and delay the substantive decision until that information is available.

Real-options analysis is suited to the characteristic of cities and their growth (as emphasised in Chapters 2 and 4): cities are complex, adaptive, systems that are best left as far as possible to evolve organically in line with individual households and businesses making and realising their own plans. A need exists to make provision (decades earlier) for future infrastructure networks almost certainly needed as a city grows. 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. Box 9.5 explains the potential use of real-options analysis for planning urban infrastructure.

Box 9.5 **Real-options analysis: the value of waiting and retaining flexibility**

Real-options analysis aims to encourage decision makers to consider uncertainty during the development and analysis of options, and to incorporate flexibility in the investment decision-making process. This helps planners reduce the risk of a worse-than-expected outcome and take advantage of upside opportunities as they emerge. Real-options analysis is conceptually simple and useful adaptive investment-management tool well suited to coping with the dynamic and uncertain evolution of cities (Chapter 2).

A transport example is a road that serves a port whose fortunes may or may not improve as ship sizes increase. A decision maker could decide to build or not build an improved access road to the port, and later regret having either a “white elephant” or serious congestion. A real-options approach points to an action that best preserves the choice to a later date when more information is available. This might mean preparing to build the road (eg, planning, securing a designation on the required land, and obtaining resource consents), but delaying the actual construction decision until demand information becomes firmer. In the meantime the decision maker could make small investments at chokepoints if needed.

Further examples of decisions where real-options analysis can help are:

- the optimal time to invest in infrastructure capacity or land development;
- research and development, and related learning;
- large versus gradual/scalable/modular capacity expansions;
- investments that have multiple stages, creating continue/modify/delay/abandon options;
- the temporary suspension of operations (or mothballing);
- the timing of asset replacement;
- the design or delay of investment to take advantage of possible new technology; and
- the decision of whether to secure or preserve an easement for a future road, railway or public open space.

Real-options analysis deals with uncertainty by preserving the option to construct something that turns out to be needed, while avoiding most of the cost of constructing something that turns out to be a “white elephant”. It maintains the upside while managing the downside. It works by building flexibility into the investment decision-making process so that changing course is possible as new information comes in.

Source: Ministry of Transport (2016).

F9.4

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 tools will require local authorities to raise their capability. In Chapter 7, the Commission concluded that central government needed to take a more active and engaged role in the operation of the planning system in future. This includes providing advice and support to councils in carrying out their statutory roles. 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 to conduct real options analysis in the development of land use plans.

R9.2

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 to conduct real-options analysis in the development of land use plans.

9.6 Can the institutional arrangements within which water services are provided be improved?

The problems with the institutional arrangements for water services outlined above raise the question of whether alternative arrangements exist that could be introduced to improve responsiveness. 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 delays and inadequate provision. These private sector infrastructure services operate under a different set of institutional and governance arrangements.

There are different institutional arrangements for providers of urban infrastructure

The main reason that a significant proportion of infrastructure assets are owned and provided publicly is that they are natural monopolies. In contrast, 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 the 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 phone departments into competitive and monopoly components. The competitive components (telecommunications service providers and electricity retailers) operate in the general marketplace, and are disciplined by the ability of customers to change provider if they are dissatisfied.

The monopoly components (the transmission and distribution networks) are regulated in a different manner. 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 kept and that 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 both the infrastructure and services for energy and telecommunications 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 urban services⁸³ were \$14.3m and the costs of maintaining a competitive electricity market were \$71.1m.⁸⁴ The justification for these costs lies in the benefit to customers from having a choice of suppliers (at least for the non-network parts of the service). 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 could be possible to reorganise the delivery of water services to provide greater commercial discipline or transparency. In New Zealand, the water industry body Water New Zealand has outlined a vision for water reform, which would include:

- consolidating the sector into fewer providers;
- establishing an economic water regulator;
- retaining public ownership, 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 make different arrangements for water services with this objective in mind. 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 remains the owner of the water assets. Most

⁸³ Expenditure for electricity lines services, telecommunication and natural gas pipelines (Commerce Commission, 2015).

⁸⁴ 2014/15 total expenditure for the Electricity Authority.

countries that follow this model have also created regulatory agencies that supervise the quality of water services and can intervene to resolve conflicts and to respond to unforeseen circumstances.

The issue 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 (such as has been created for electricity) 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).

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 disposal of wastewater have strong, positive externalities, for both people (public health) and 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.

With water supply in New Zealand still fragmented and delivered by councils, and the design features of competitive urban water markets unclear, the Commission does not see merit in proposing ambitious reform for urban water services.

F9.5

Fragmented and small-scale water networks in New Zealand, the uncertain net benefits of mergers, and the high costs of setting up alternative institutions mean that the Commission does not see merit in proposing large-scale structural reform for urban water services. However, there is considerable scope for improved performance in the delivery of water services.

Improvements can be gained through more modest actions

There is, however, considerable scope for improved performance in the delivery of water services. The Commission continues to support more 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 standards, 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.

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 10, including PPPs and joint arrangements with other councils to achieve scale and efficiency.

9.7 Making provision for city-shaping projects

As discussed above, few mechanisms within the existing planning system easily identify, assess and agree on large city-shaping projects. Such projects are typically transport-related, since transport and land use are fundamentally linked to one another. 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 such projects 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 both funding and 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 0. To illustrate this, Table 9.1 lists the functions and responsibilities in relation to urban transport infrastructure in the Wellington region.

Table 9.1 Responsibility for land transport functions in Wellington

Function	Primary Responsibility	Comments
Strategic planning	Regional	The Regional Land Transport Plan is prepared by the Regional Transport Committee, which is made up of representatives from Greater Wellington Regional Council (GWRC), territorial authorities, and the NZTA.
Public transport services	Regional	Planning and procurement of bus, rail and ferry services is undertaken by GWRC. Rail services are provided under contract by Transdev, and bus and ferry services are under contract to private providers.
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. Other public transport infrastructure (such as bus stops) is located within the road reserve, and is the responsibility of territorial authorities.
State highways	National (NZTA)	The NZTA operates Wellington's motorways and state highways as part of the state highway network.
Local roads	Territorial	All roads other than state highways are the responsibility of territorial authorities.
Walking and cycling	Territorial	Most walking and cycling infrastructure is the responsibility of territorial authorities.
Travel demand management	Regional and Territorial	GWRC plans, promotes and provides training for travel planning programmes, while territorial authorities are responsible for implementation.

Source: CityScope (2014).

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 ones 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 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.⁸⁵ 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).

⁸⁵ Members of the collaboration are: the New Zealand Transport Agency, Auckland Transport, KiwiRail and the Upper North Island Strategic Alliance (UNISA: Northland, Waikato and Bay of Plenty Regional Councils; and Whangarei, Auckland, Hamilton and Tauranga City Councils).

F9.6

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.

The emergence of a partnership between central and local government on city-shaping projects

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 very rapid increase in population and historical underinvestment 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 and congestion worsening (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. 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 recognises Auckland will need 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 the development of Auckland's transport system that delivers the best possible outcomes for Auckland and New Zealand.
- ATAP sets 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 Auckland's transport system should develop. This includes testing whether better returns from transport investment are achievable.
- The parties broadly agree to test whether better returns from transport investment are achievable in the medium- and long-term. In particular, they agree to test against the objectives, which are 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). Box 10.2 in Chapter 10 briefly describes the contents of these reports. A final report is expected in August 2016, but the Terms of Reference envisage further joint work to implement an aligned strategic approach.

ATAP is a promising institutional innovation to enable the council of a major city and central government to work together when a major programme of urban infrastructure has national spillover benefits.

F9.7

The Auckland Transport Alignment Project is a promising institutional innovation to enable the council of a major city and central government to work together and consider a central funding contribution when a major programme of urban infrastructure has national spillover benefits.

R9.3

A future planning system should include institutions or formal processes through which councils and central government can work together to assess major programmes of urban infrastructure investment with wider spillover benefits.

9.8 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) appropriately; and
- provide the full suite of infrastructure assets required (city-shaping, structural and “follower”).

New Zealand’s current system has struggled with all three tasks.

The key sources of these problems are legislative arrangements that do not 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 as noted in Chapter 7) will help to resolve some of these problems. But the Commission sees the case for additional changes to help improve the performance of both the planning and provision of infrastructure.

The first change is to give well-conceived spatial plans greater legal status in LGA and RMA plans and policies. This is because spatial plans help to enable:

- a high-level overview and coordination among those responsible for supplying the various different sorts of infrastructure;
- those responsible for ensuring sufficient land for residential and business expansion; and
- many other public and private parties with an interest in city growth and development.

Spatial plans are an important means to work through the process of making difficult trade-offs. With greater status, compromises reached will be less vulnerable than now to being unpicked at later stages. Such plans should be developed with more sophisticated analytical tools that take into account 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 did not see merit in proposing ambitious reform for urban water services. Scope exists however 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 10.

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 out of their normal budgets. If these investments have wider benefits, as they sometimes will, then a partnership approach with central government is called for. The ATAP provides a promising governance model for these situations, and it could become a more formal part of a future planning system.

10 Infrastructure: funding & 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 local authorities may face problems recovering these costs.
- Efficient funding would enable infrastructure owners to cover the full costs from users and beneficiaries. This would require infrastructure providers to consider peak load pricing, connection charges and marginal cost of pricing.
- Financial, legislative and political economy barriers are impeding the operation of efficient funding in New Zealand.
 - Councils argue that “growth does not pay for growth”, and available evidence suggests that infrastructure projects can fail to pay for themselves. Councils also face “demand risk”, where development fails to occur at the rate assumed when the project commenced.
 - 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 limits the supply of infrastructure and constrains revenue sources.
- Some of these issues can be resolved by removing legislative barriers to pricing, making greater use of targeted rates to cover the costs of community infrastructure, and allowing councils to levy targeted rates based on land value uplift. Demand risk is best managed through the design, sizing and staging of infrastructure delivery.
- Political barriers to infrastructure supply and charging could be partly addressed by creating a legislative expectation that councils should recover the capital and operating costs of new infrastructure from beneficiaries. Because of the technical issues involved in charging for some types of infrastructure, such an expectation would need to be subject to a practicality caveat.
- The Commission is interested in receiving evidence about the merits of exploring more far-reaching funding options, such as replacing or augmenting the rating system. One potentially desirable funding tool is the sale of development rights. This approach also has the potential to regulate intensity (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.
- 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 achieving this.
- A key part of procurement is selecting an appropriate delivery model. Local authorities should be open to using a wider range of delivery models than the in-house or traditional outsourcing of construction that 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 provide institutions that give councils the capability to use a wide range of innovative procurement models, such as PPPs. The current expectation to consider PPPs for significant infrastructure projects could be extended to cover locally funded council works.

10.1 Introduction

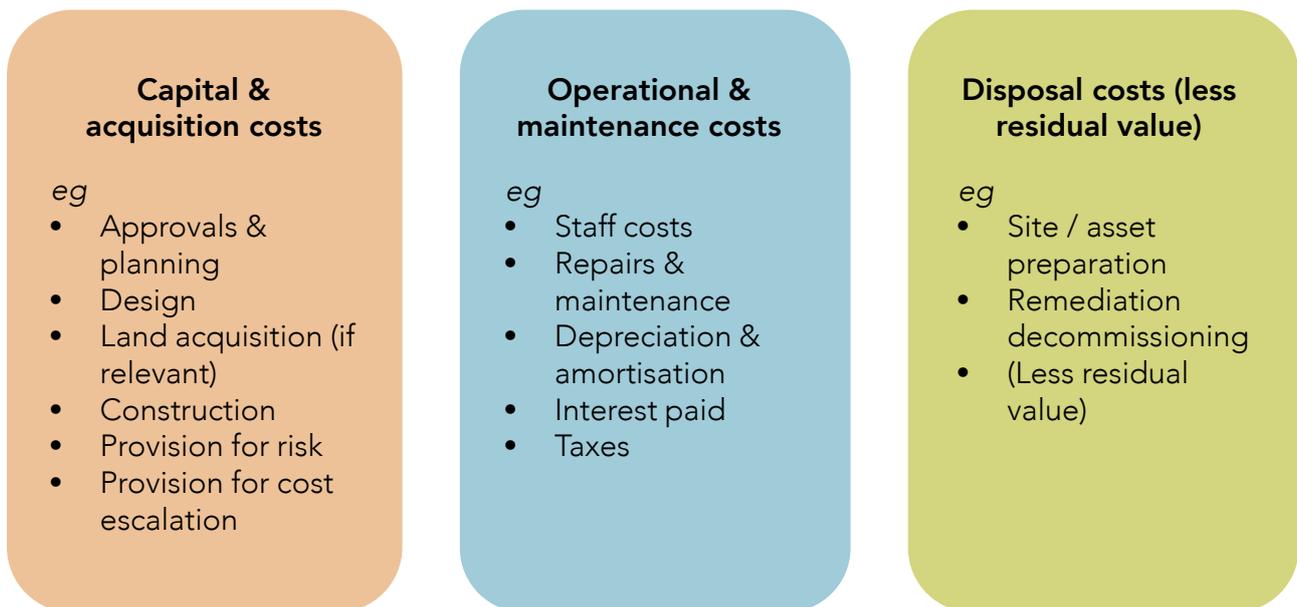
As noted in Chapter 9, the planning and provision of infrastructure can be one of the most challenging tasks that local authorities face. Key reasons why local governments often find the timely delivery of infrastructure challenging is the expenditure involved, and difficulties recovering costs. This chapter explores the nature of these financial challenges, and considers policy responses. It also explores opportunities to gain better quality and more affordable infrastructure through different procurement practices.

10.2 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 10.1).

Figure 10.1 Whole-of-life costs for public works



Source: Adapted from Department of Finance, 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 between projects

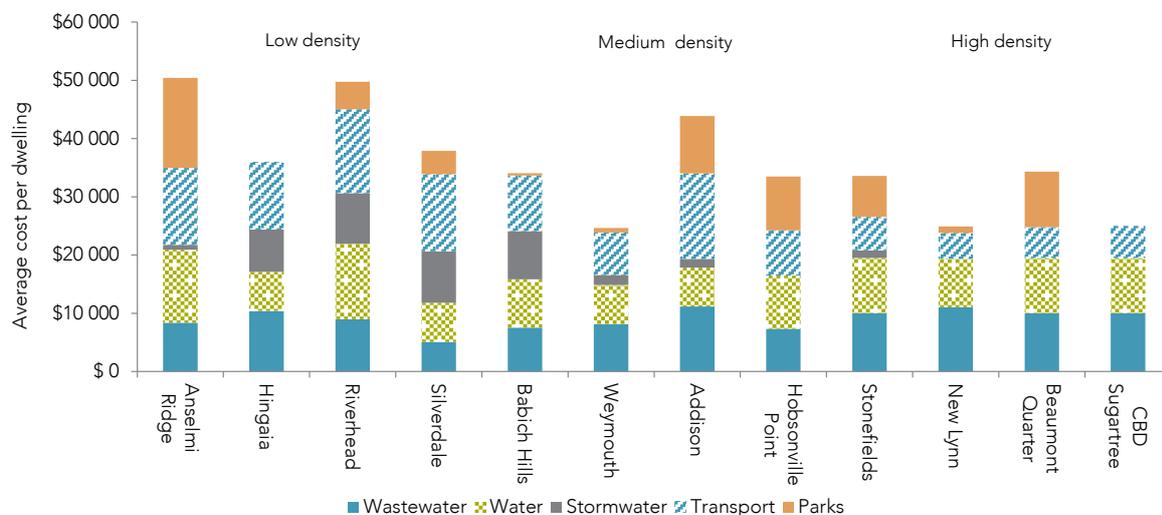
Developers of new greenfield or infill sites usually provide local infrastructure within a subdivision, while councils provide extensions to trunk infrastructure. The costs that councils incur to provide trunk infrastructure can be large. For example, recently published research into the cost of infrastructure 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 lot. 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, 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, leads 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 10.2 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 per dwelling; that the “three waters” is the largest cost item in all areas, but that transport costs vary more between areas.

Figure 10.2 Infrastructure costs in Auckland by development density, 2015



Source: Centre for International Economics, 2015.

10.3 Efficient funding

Any organisation selling goods or services to consumers has to decide the sale price. Market forces drive the decision of many businesses. Prices send consumers important information about the value of the resources they use, and businesses information about when to invest in new plant and machinery.

However, urban infrastructure services are not like most businesses. As discussed in Chapter 9, urban infrastructure has important characteristics that makes it different from services provided in “competitive” markets. While private enterprises provide some urban infrastructure services in a competitive setting (eg, electricity and telecommunications), central and local government provide many others – notably the “three waters” and transport infrastructure. In the absence of competition, government must decide the price at which it will provide these infrastructure services.

Ideally, governments will set prices that encourage the efficient use of existing infrastructure and encourage timely investments in additional infrastructure capacity. A future planning system would therefore allow councils to recover the full cost of infrastructure from users. In this context, “full costs” covers three broad cost types – operating costs (including maintenance), capital costs and spillover costs. It would also cover the cost of natural resources (eg, water) where infrastructure services provide resources for final consumption.

When faced with the full cost of infrastructure services, users have an incentive to economise on use. 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 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. Over the long term, recovering full costs creates incentives to invest in more and more efficient ways to use infrastructure services (eg, new water-saving technologies). Similarly, pressure to keep costs low encourages infrastructure providers to make efficient investment decisions and to look continually for ways to provide services more efficiently.

An efficient infrastructure funding system would involve consideration of three important issues (Harris & Tate, 2002).

- **Peak loading prices:** Demand during peak periods commonly drives the need to invest in additional infrastructure capacity. As noted, charging more during peak periods can reduce demand during these periods. This can delay the need for further investment in infrastructure capacity and reduce underuse during off-peak periods.
- **Connection charges:** Where new developments require an extension of local infrastructure, beneficiaries should bear the cost of installing the new infrastructure. When beneficiaries face installation costs, they will automatically consider these costs when deciding where to locate. However, where existing ratepayers bear the costs of connection, developers and buyers of the newly developed property find locating away from the existing network artificially cheap. This can bias development investment towards the expansion of urban areas and away from land already serviced by network infrastructure.
- **Marginal costs of infrastructure use:** Utilities should aim to set prices that approximate the marginal cost of infrastructure services (ie, the cost of producing an additional unit of infrastructure services). Setting prices at marginal cost means that infrastructure users face costs that approximate the actual cost they impose on infrastructure providers and on society (ie, operating, capital and spillover costs). This is important because prices provide information to consumers about the value of services they use. The further prices are from marginal cost, the more misleading is this information. For example, in the case of urban water infrastructure, prices set below marginal cost can encourage (or at least not *discourage*) inefficient water uses (such as washing a car with the hose running).

Importantly, when users pay less than full cost, some degree of cross subsidisation must be occurring – someone eventually pays the costs, somewhere in the system. For example, when councils charge a flat fee for unlimited access to wastewater treatment, high-volume users are subsidised by low-volume users. As such, the notion of ‘free’ infrastructure services is a misnomer.

Designing prices to approximate marginal cost is a difficult and highly technical task. The most efficient pricing structure will vary according to the characteristics of the infrastructure and of infrastructure users (eg, a user’s responsiveness to changes in prices). Consequently, there are many options for structuring infrastructure prices (Box 10.1).

Box 10.1 Short-run or long-run marginal cost pricing?

Economists distinguish between *short-run* and *long-run* marginal costs. Short-run marginal costs (SRMC) can be thought of as the cost of supplying an additional unit of service, holding the physical capacity of infrastructure constant. In contrast, long-run marginal costs (LRMC) do not hold infrastructure capacity constant and assume that all costs of production vary. Over time (and on average) SRMC and LRMC will converge.

The key distinction between pricing based on SRMC and LRMC arises when demand reaches the physical supply capacity of infrastructure. Under a pricing system based on SRMC, the price of accessing infrastructure services fluctuates to reflect the cost of congestion within the system – increasing as demand nears the full capacity of the infrastructure and falling during periods of low demand and as consumers adjust their consumption in response to high prices.

Whether it is best to use SRMC or LRMC as the basis for prices depends on the circumstances and the asset in question. LRMC includes the *expected long-term costs of infrastructure investment*. These costs are factored into the prices of infrastructure services. Because consumers face the cost of contributing to future infrastructure investment, they have an incentive to manage their demand over the medium-to-long term.

In contrast, SRMC provides signals to manage *near term* capacity constraints. SRMC can fluctuate significantly – from very high prices when demand is reaching the capacity of the infrastructure, to near zero when demand is very low and few people are using the asset. Importantly, when prices are low, councils have little incentive to undertake efficient investment over time.

Infrastructure prices can be structured in various ways. Common approaches include:

- two or multi-part tariffs: a fixed charge to cover the expected capital cost of the infrastructure, and a volumetric charge to cover marginal costs; and
- Ramsey pricing: prices to cover capital costs, which are set in inverse proportion to the price responsiveness of a group of infrastructure users. The aim is to cover costs in a way that least distorts decisions about consumption (APC, 2007).

F10.1

An efficient infrastructure funding system would consider three important issues: peak load pricing, connection charges and marginal cost pricing.

Other considerations

Other considerations include equity, public goods, and practicality and ease of administration.

- **Equity:** The economically efficient pricing of infrastructure services may not lead to a distribution of services that society considers equitable. While recovering full cost from users is “fairer” in that only those who benefit from infrastructure 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. This is essentially a value judgement that the community expresses through the political process. Where such a judgement is made, it is appropriate that the community at large bear some of the costs of providing infrastructure services. In such circumstances, councils must decide how to achieve minimum standards at least cost. This should be done via an open and transparent process, 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 may have public good characteristics. As discussed in Chapter 4, 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. An example might be a sporting oval or playground. While not “pure” public goods, marginal cost pricing for these services is impractical and therefore requires other sources of funding, typically taxes or rates.
- **Practicality and administrative ease:** Marginal cost pricing requires a way of measuring the level of services consumers use – typically through some form of metering. The cost and practicality of monitoring service is often raised as an obstacle to more efficient pricing of infrastructure services. Yet advances in technology are reducing the cost of monitoring service use and providing opportunities for the development of sophisticated pricing mechanisms. For instance, rapid advances in transport and communications technology have created opportunities for variable road pricing (Box 10.2). Even so, the potential for marginal cost pricing requires weighing up the benefits and cost of each case.

10.4 What tools are currently available to councils to fund infrastructure?

This chapter focuses primarily on funding tools – that is; the “sources of money available to pay for a project or service” (LGNZ, 2015, p. 44), but it is worth noting that the provision of infrastructure relies on both funding and financing tools. “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 debt, to ensure that it has the cash on hand to pay the necessary bills, and then recover the relevant costs through *funding* tools (such as development contributions or user charges). As LGNZ (2015) notes, a “funding source or sources must be present to support financing arrangements” (p. 44).

Local authorities currently have a number of tools through which to recover the costs of infrastructure.

- **Development contributions:** Charges levied to recover the portion of new infrastructure that is related to growth. Development contributions can be charged for capital costs associated with reserves, network infrastructure (water, wastewater, stormwater, roads and other transport), and community infrastructure such as neighbourhood halls, playgrounds and public toilets. They can be charged when a resource consent, building consent or service connection is granted and are typically paid by land owners or property developers.
- **Financial contributions:** Charges set under the RMA which provide councils with a method to avoid, remedy and 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 targeted rates that volumetrically charge for drinking water. This rate may be calculated as either a fixed charge per unit of water consumed or supplied, or according to a scale of charges. Such charges can help recover operating costs.
- **Targeted rates:** The Local Government (Rating) Act 2002 allows councils to set targeted rates to fund activities 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 the value of property and are used for services that benefit the local community. They are often used to meet interest costs associated with debt incurred to finance new infrastructure assets.

As an alternative to councils providing trunk infrastructure themselves and recovering costs through development contributions, developers can 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 maintenance and depreciation costs.⁸⁶

As discussed in Chapter 5, local authorities receive substantial financial support from central government to help meet land transport capital and operating expenses through 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” (English & Smith, 2016). The contestable fund will be open to applications from the 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 would be expected to repay the funds or buy the infrastructure assets, once houses have been built and development contributions paid.

10.5 Barriers to efficient funding

A number of barriers can or do prevent the introduction of efficient funding for infrastructure. Broadly grouped, the main barriers are:

- financial;
- legislative; and
- political economy.

⁸⁶ Councils also incur operating expenses for assets vested in them within subdivisions or created as part of a resource consent condition.

Financial barriers

Some councils say they have inadequate incentives to fund new infrastructure

Some councils told the Commission's *Urban Land for Housing* inquiry that they hold back from investing in infrastructure, or at least take a cautious approach to investing, because they believe that "growth does not pay for itself" and are concerned about imposing additional cost burdens on existing residents (eg, through higher general rates bills). In response to a 2015 New Zealand Institute of Economic Research (NZIER) survey, councils in high-growth areas cited infrastructure costs and council budget constraints as significant influencers on the rate of residential development (Figure 10.3 and Figure 10.4).

Figure 10.3 How important is the cost of new infrastructure in influencing the rate of residential development?

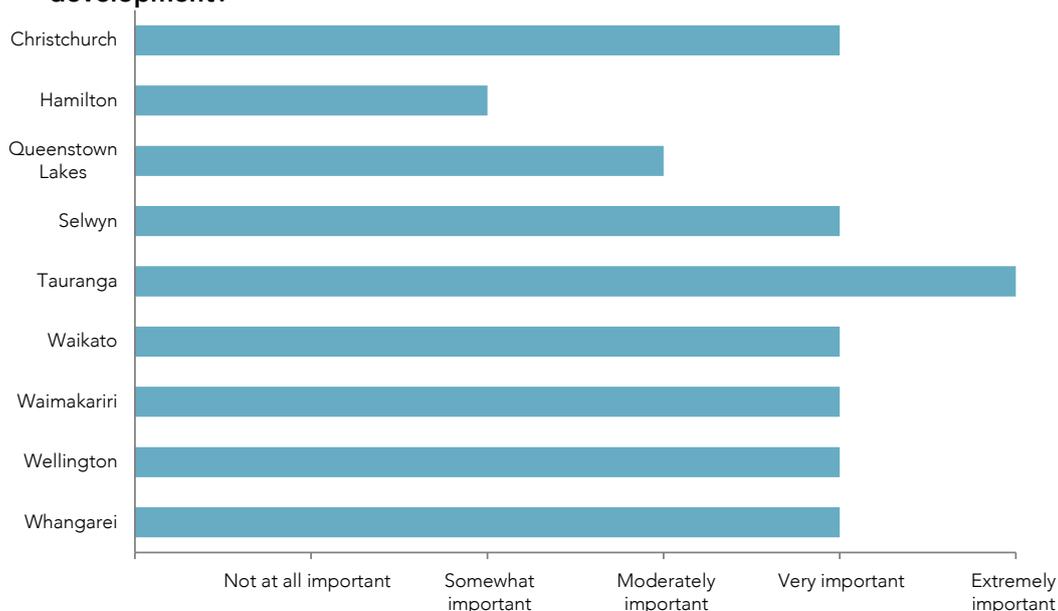
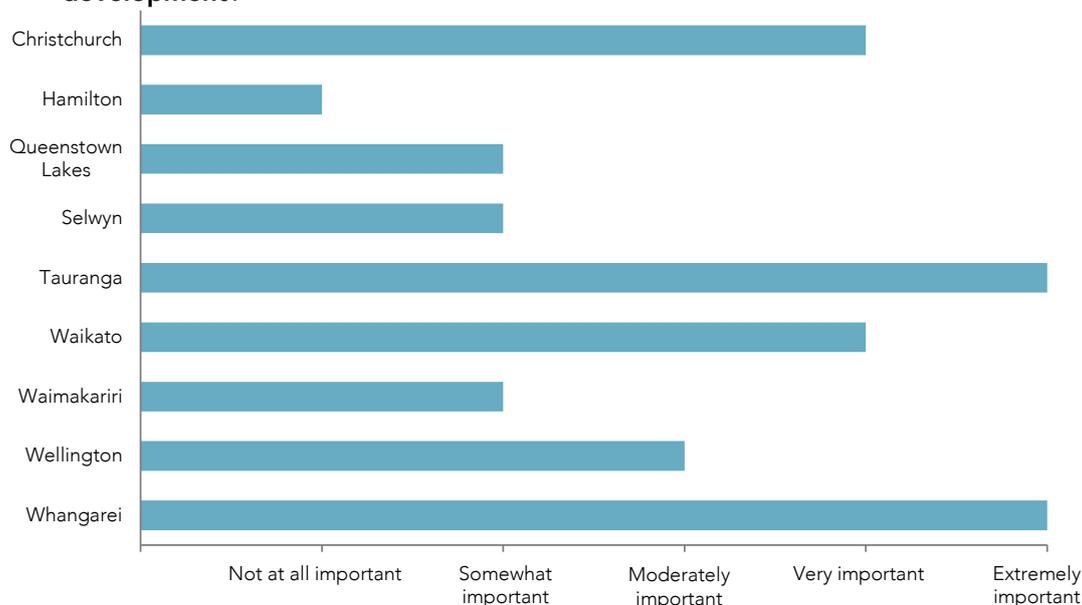


Figure 10.4 How important are city budget constraints in influencing the rate of residential development?



Source: NZIER, 2015.

Note:

1. These figures show responses regarding the development of standalone dwellings.

Submissions to the current inquiry exhibited similar concerns:

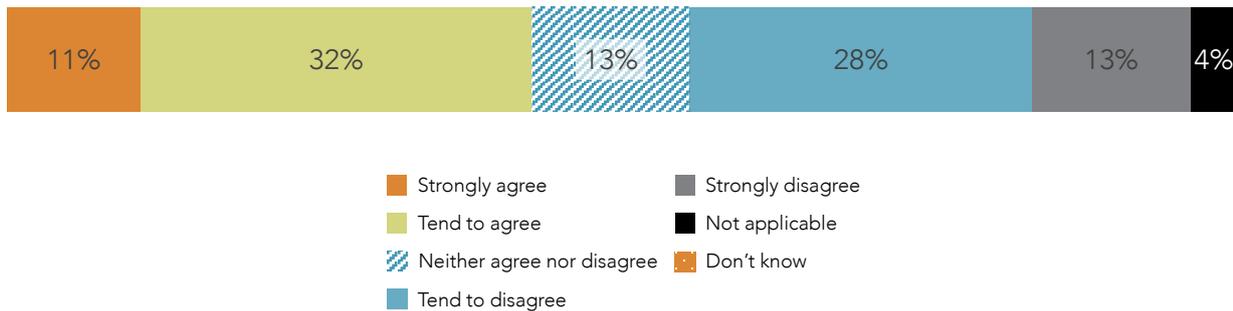
Different house building and infrastructure models need to be explored, particularly in the context of delivering physical (road, rail, utilities, etc.) and community infrastructure (such as affordable housing,

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 (URBED, 2014); and it is unlikely this figure is met by the main beneficiary.) Such a burden on Government and New Zealanders is considered particularly unfair in the context of some landowners benefiting through the significant uplift in land values brought about by planning 'up zoning', and speculation. (Duncan Rothwell, sub. 38, p. 5)

Of the councils that responded, 43% agreed that the inability to fund infrastructure is often a significant barrier (Figure 10.5).

Figure 10.5 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:

1. because of rounding, totals may not sum to 100%.

Available evidence suggests a funding shortfall

A key question is whether the additional revenue that councils receive from new developments can cover their additional costs – so that growth can happen without any significant extra financial burden on existing ratepayers. To the extent that the *net present value* (NPV) of the flow of additional revenues that a council receives from a new development over time outweighs the costs of providing services to it, the council will have a stronger incentive to invest in infrastructure.

A recent study provides useful insights into the financial incentive of councils to provide infrastructure for new developments. The Ministry of Business, Innovation and Employment commissioned Morrison Low (2016) to examine the extent to which "growth councils" are better or worse off as a result of investing in the infrastructure required to support commercial and residential growth within the district. Following is a summary of the report.

The study relies primarily on publicly available information from nine councils that are currently experiencing high levels of population growth (Auckland Council, Hamilton City Council, Selwyn District Council, Tauranga City Council, Queenstown Lakes District Council, Waikato District Council, Waimakariri District Council, Waipa District Council, and Western Bay of Plenty District Council).

The study develops a financial model that includes the growth-related costs (including capital expenditure, financing costs and operating costs) associated with water supply, wastewater, stormwater, roading and transportation – net of NZTA subsidies, parks, reserves, and public facilities. The financial modelling makes high-level assumptions about various revenues and costs. For example, it assumes that the full amount of capital infrastructure related to growth is recovered by development contributions.

The financial model calculates the NPV for growth for each council across a range of discount rates, methods, and recovery periods. For each council, the total NPV has been calculated, and divided by the estimated number of cumulative growth dwellings at the end of the relevant period to determine an NPV for each additional growth property. The results indicate that the cost of growth-related infrastructure is

generally not fully recovered over a council's 10-year planning period (except for Waikato District Council and Waipa District Council) but that five of the nine councils face some net benefit of growth over 25 years (Table 10.1).

Table 10.1 Net present value of infrastructure investment for local councils, 2016

Council	10-year NPV per property	25-year NPV per property
Auckland Council	(\$803)	\$9 327
Hamilton City Council	(\$33 710)	\$5 827
Selwyn District Council	(\$13 348)	(\$15 586)
Tauranga City Council	(\$18 780)	\$2 886
Queenstown Lakes District Council	(\$8 795)	(\$4 725)
Waikato District Council	\$1 335	\$14 078
Waimakariri District Council	(\$6 798)	(\$158)
Waipa District Council	\$99	\$3 704
Western Bay of Plenty District Council	(\$7 923)	(\$2 214)

Source: Morrison Low, 2016.

Notes:

1. The model excludes Watercare's capital costs and contributions for Auckland Council.

Sensitivity testing demonstrates that the model is highly sensitive to changes in the projected rate of growth. Morrison Low concludes that "further work should be carried out to test, validate, and minimise the number of assumptions used in the model, and improve the reliability of the findings" (Morrison Low, 2016, p. 2). The Commission is considering whether it will undertake further work on this issue between now and the final report. However, there does seem to be some support for the reasons that councils give to explain their reluctance to fund growth in infrastructure for new developments.

F10.2

Financial modelling provides some support for arguments made by councils that it can take a long time to recover the costs of new infrastructure.

Q10.1

Is there other evidence that either supports or challenges the view that "growth does not pay for growth"?

What accounts for this funding shortfall? Three main candidates are demand risks, legislative restrictions on some funding tools, and political economy barriers. These candidates are discussed below.

Demand risks

The ability of councils to recover costs can be undermined by financial risks.

- The rates of demand growth factored into development contribution calculations are by no means certain. Meanwhile, the lumpy nature of urban infrastructure extension may lock councils into investment in particular facilities regardless of a diminished revenue stream to fund the works in question.
- 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 find themselves facing 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:

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)

[A particular barrier] is the cost of that debt (interest) and how to fund it, particularly when actual growth is lower than the planned growth, as happened with the recent GFC. (Western Bay of Plenty District Council, *Using land for housing*, sub. 36, p. 6)

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 be built into their tariffs or tolls.

Legislative barriers

Current legislation limits the ability of local authorities to recoup some infrastructure costs and prevents them from using some funding tools.

- **Development contributions:** Recent amendments have restricted the use of development contributions for other forms of community infrastructure such as libraries, swimming pools, and cemeteries.
- **User charges:** Councils (or their subsidiary infrastructure providers) are not permitted to set targeted rates that volumetrically charge for wastewater. Auckland (where water services are delivered through the Council controlled organisation 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.

Political barriers

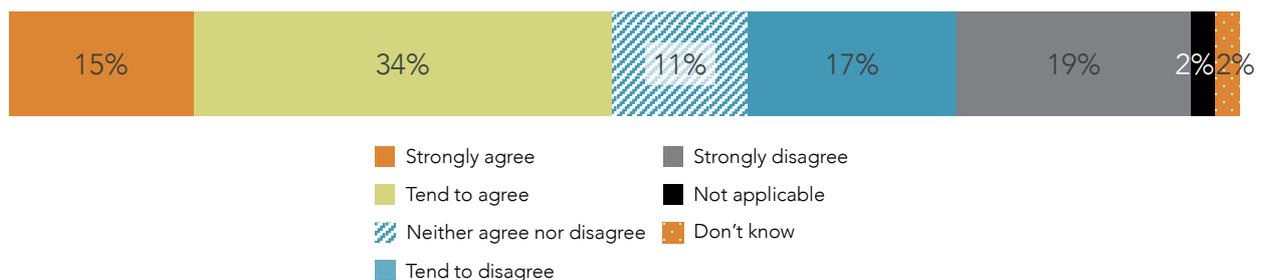
Political factors provide a third set of barriers to an efficient infrastructure system.

Resistance to debt and rates increases

Residents may have reservations about the level of debt required to finance the infrastructure needed to facilitate new development, and/or about the impact of that debt on their rates bills. This is a constraint both on the financing and funding side. Respondents to the Commission’s survey of local authorities confirmed that many saw rates levels as a barrier to the provision of infrastructure (Figure 10.6).

Figure 10.6 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.

Central government has increased the scrutiny placed on 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. One of these benchmarks is debt servicing levels. A local authority is considered to have met this benchmark if the borrowing costs for the year are equal to or less than 10% of its revenue. For high-growth local authorities, the debt servicing threshold is set at 15%.

Both factors 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)

Hamilton City Council's ... debt limits are such that providing infrastructure to new areas of land in advance is not feasible. (Future Proof, *Using land for housing*, sub. 39, p. 7)

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)

Resistance to full pricing of infrastructure

Relatively few councils have introduced volumetric charges for water. Council reluctance to introduce water charging reflects community opposition, as 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)

In other cases, councils face pressure from developers to reduce development contributions:

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 [Development Contributions] 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)

F10.3

Financial, legislative and political barriers are limiting the ability of local authorities to efficiently recover the costs of infrastructure.

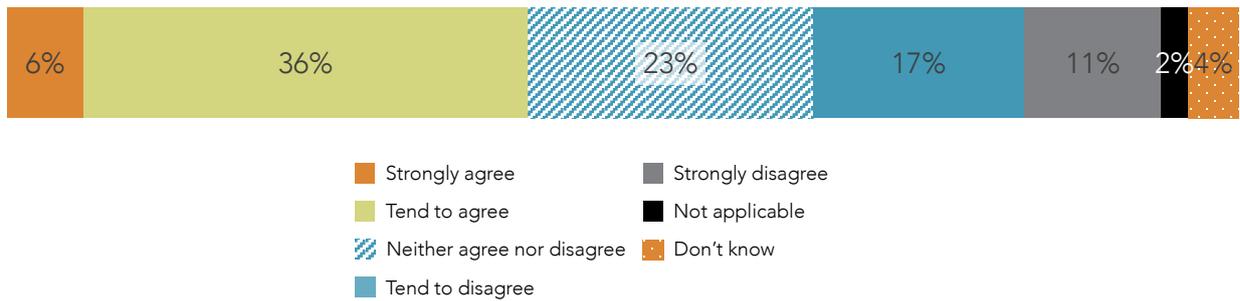
10.6 Removing barriers to efficient funding

Removal of legislative barriers to pricing and user charges

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 clear rationales. They unnecessarily limit the revenue sources of local authorities and their ability to ensure the efficient use of their assets and resources. Almost 50% of the respondents to the Commission's survey of local authorities thought greater use of user charges was needed (Figure 10.7). 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 10.7 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:

1. 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, which are two of the largest infrastructures services that councils provided in New Zealand. 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). None 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 have volumetric charges for water. 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 10.2).

Box 10.2 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 & Lipton, 2013). The OECD points out that while continuing investment in new road infrastructure will probably provide net benefits, there are ways to better 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, conducted under the auspices of the Government and Auckland Council, has been reviewing the strategic approach to transport investment in Auckland. In February 2016 it released a foundation report (ATAP, 2016b) that set out:

- the current transport situation in Auckland;
- an outline of future trends and agreed assumptions;
- the evaluation framework used to test how different options support the project objectives; and
- an assessment of future transport challenges.

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 a small number of employment hubs. 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)

The study suggests that an effective strategy will combine influencing travel patterns (eg, through variable road pricing); making better use of existing resources; and providing new infrastructure services.

The next stage of the ATAP project will incorporate feedback and undertake further analysis, before a final report is released in August 2016.

Source: ATAP, 2016a; ATAP, 2016b; Ministry of Transport, 2006; Ministry of Transport 2008; NZPC, 2015a.

The introduction of tolls or congestion charges to existing roads would need to take into account equity considerations, such as the availability of alternative routes or public transport options for those likely to be significantly affected by the new pricing arrangements.

R10.1

A future planning system should allow councils to:

- set volumetric charges for both drinking water and wastewater; and
- apply prices for the use of existing local roads where this would enable more efficient use of the road network.

Greater use of targeted rates

Targeted rates are a form of rate that 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. As the Local Government Rates Inquiry commented, there “is considerable scope for local authorities to target functions in specific areas and to set different levels of rates for different properties” (2007, p. 44).

Targeted rates could fill two gaps that restrictions on development contributions leave in funding local infrastructure. First, they could be used to fund community infrastructure that is expected to yield benefits to people and businesses located outside the development area. To do this efficiently and equitably, the council would need to be able to define both the larger area within which the benefits are generated and the size of these benefits. Second, targeted rates could be used to fund costs that cannot be recovered 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 they never use the facilities themselves.

Greater use of targeted rates would also help to overcome some of the political economy barriers that councils face. Such a move would help ensure that those benefiting from the additional infrastructure bear the financial cost. This would reduce the burden that infrastructure expenses place on general rates.

R10.2

Councils should use targeted rates to help fund investments in local infrastructure, wherever the benefits generated can be well defined.

Allow targeted rates to capture value arising from public action

If urban infrastructure generates net benefits for landowners (after allowing for any development contributions and payments they have to make for using the infrastructure), this should be reflected in rising land and property values (Box 10.3).

Box 10.3 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 (2003) examined the effect of upgrades to the Western Line, which included double tracking of the rail line from the central business district through 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 & 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 2km 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 which broadly matched the \$620 million cost of the rail developments.

Source: Grimes & Young, 2013.

In its previous inquiry into *Using land for housing*, the Commission (2015) investigated mechanisms that capture some of the increase in value arising from infrastructure investments. The Commission concluded that value capture mechanisms can be useful for generating funding for infrastructure projects that would

otherwise be difficult to initiate, and are a fair way of recouping some of the cost from those who benefit quite directly. However, the Commission noted a potential risk: market anticipation of the infrastructure investment could mean that the full benefits are not realised.

The Commission proposed that councils could capture some of this value uplift to pay for infrastructure by imposing a targeted rate based on the increase in land value. Rates targeted on changes in land values are more efficient than rates targeted on the capital improved value of properties, as using this latter base would penalise people who improve their properties and so discourage such improvements. In some cases, targeted rates could be set in advance, providing a price signal that may improve the spatial allocation of people and housing development.

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 identifying properties that would benefit from council investment.

R10.3

A future planning system should enable councils to levy targeted rates on the basis of changes in land value, where this occurs as the result of public action (eg, installation of new infrastructure, upzoning).

The funding policy responses to demand risk are not clear

Although demand risk is clearly a significant concern for some councils, the funding policy responses to this issue are not clear. Existing instruments could be expanded and used more widely to recover direct costs of infrastructure, but they might not adequately reflect these risks. Theoretically, risk premiums could be added to development contributions and other charges, but the Commission was not convinced that allowing councils to add such premia was practicable or desirable.

- Setting such risk premia would be a complicated task, and could reduce the transparency and accessibility of development contributions. It may also lead to overcharging, if not properly designed and overseen.
- Demand risk is better managed through the design, sizing and staging of infrastructure delivery, to align supply with demand (NZPC, 2015a).

Could legislative change help to address political barriers?

Perhaps the most significant barriers to responsive infrastructure supply and efficient infrastructure funding are political barriers. These barriers are community opposition to higher levels of council debt; rates increases and pricing of water; and concerns about the impacts of growth on local amenity.

Local authorities operate in a challenging environment, where they are required to manage two potentially competing objectives. On the one hand, councils are expected by law to “enable democratic local decision-making and action by, and on behalf of, communities”. On the other hand they have 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, LGA 2002; emphasis added). Democratic decisions and action by current communities – such as overspending on infrastructure – may not necessarily be in the interest of future communities.

Reforms proposed elsewhere in this report – such as the clearer statutory obligation to provide enough development capacity to meet demand – are designed to provide a better balance between the interests of current and future communities and between incumbent and future residents. On its own, however, this new statutory obligation may not be enough. The system may need additional policy changes.

One option would be to create stronger legislative expectations for local authorities to recover the costs of infrastructure from beneficiaries. Current legislation obliges councils to spell out *how* they will fund their

activities, and lays out some general issues that they should consider when setting its budgets. As the Local Government Act (LGA) 2002 states:

(3) The funding needs of the local authority must be met from those sources that the local authority determines to be appropriate, following consideration of,—

(a) in relation to each activity to be funded,—

(i) the community outcomes to which the activity primarily contributes; and

(ii) the distribution of benefits between the community as a whole, any identifiable part of the community, and individuals; and

(iii) the period in or over which those benefits are expected to occur; and

(iv) the extent to which the actions or inaction of particular individuals or a group contribute to the need to undertake the activity; and

(v) the costs and benefits, including consequences for transparency and accountability, of funding the activity distinctly from other activities; and

(b) the overall impact of any allocation of liability for revenue needs on the community (section 101 (3))

Beyond this, however, councils have considerable latitude to determine what tools they will use in which circumstances.

The legislation governing the planning and funding of local authority infrastructure could be amended to include a general expectation that councils should seek to recover the capital and operating costs of new infrastructure from beneficiaries. This could assist those councils facing community resistance to charging to meet their obligation to provide enough development capacity to meet demand.

Because of the technical difficulties involved in charging for some forms of infrastructure (eg, stormwater, and green spaces), any legislative expectation would need to be subject to a practicality caveat. It may also be difficult in some circumstances to clearly identify beneficiaries. Where all residents benefit from an infrastructure asset (eg, a wastewater treatment plant that serves an entire city), cost recovery through general rates, uniform annual general charges or volumetric charges would be an appropriate response.

Q10.2

Would there be benefit in introducing a legislative expectation that councils should recover the capital and operating costs of new infrastructure from beneficiaries, except where this is impracticable?

10.7 Are more far-reaching changes worth considering?

The discussion of tools and policies above has largely used examples from within the existing planning framework. However, some commentators have argued that more far-reaching options need to be considered to provide sufficient incentives for local authorities to welcome and accommodate growth.

- Bassett, Malpass and Krupp (2013) argue that the rating system “stack[s] the odds against property development and housing affordability” (p. 11). They recommend that central government provides “Housing Encouragement Grants” to councils to offset some of the additional costs created by growth (eg, community facilities).
- LGNZ (2015b) in its *Local Government Funding Review* discussion paper noted that property-based taxes like rates are constrained in their ability to “fund the costs of infrastructure and services required for a major metropolitan city to operate ... partly because of limited flexibility and the fact that increases in the property tax burden are shared unevenly” (p. 55). The report explored a range of alternative funding approaches, including local income taxes, revenue sharing between central and local governments, a local expenditure tax, selective taxes, regional fuel taxes and transaction taxes.
- Bassett and Malpass (2013) suggested creating Municipal Utility Districts (MUDs) as an alternative model for financing infrastructure. A MUD is effectively a statutory authority set up by a developer, which

borrow money (via the issuing of bonds) to construct infrastructure. Also, it has the power to tax residents in a new development to repay the debt and cover operating costs. The Commission explored this model in *Using land for housing*. The Commission concluded that while MUDs have the potential to inject competition into the market for infrastructure, it was not clear whether a proliferation of small, resident-managed infrastructure districts would achieve efficiencies (NZPC, 2015a, pp. 229-230)

Central government already provides significant funding to councils for capital and operating expenses, which arguably have wider spillover benefits (eg, facilitating the movement of goods and people through and to cities). At first glance, the arguments for additional central government transfers to local authorities to meet infrastructure expenses do not seem strong, for a number of reasons.

- Central government transfers would not encourage efficiency in the delivery and use of infrastructure.
- Central government transfers could discourage local authorities and communities from meeting their infrastructure needs themselves.
- The wider spillover benefits from general local authority infrastructure (eg, roads, footpaths, community facilities, water pipes and sewers) are likely to be low.

However, it may be the case that some additional form of support or new revenue stream is needed to help close short-run gaps between financing costs and funding from existing tools (eg, development contributions, volumetric charges). This may occur where infrastructure or corridors are provided significantly ahead of development. The Commission would welcome further evidence on this issues.

The Commission has an open mind about different ways of funding council services and operations. The rating system does have weaknesses, in that the process of setting a budget and then distributing the costs across units provides relatively muted incentives to accommodate growth (NZPC, 2015a). As the Local Government Rates Inquiry (2007) commented:

[M]any ratepayers believe that increases in property values by themselves increase rates. However, it is council expenditures that drives rates; property values are only a means to distribute the burden of rates. The extent to which the rates on an individual property will rise will depend on increases in expenditure to be funded from rates, the increase in the number of rateable properties, and the extent to which the value of the property increase by more or less than the average increase in property values in the rateable area. (p. 7)

Local taxes set on specified bases (eg, incomes, expenditure) could provide stronger incentives for councils to welcome growth. However, they would come with disadvantages:

- The addition of local taxes would increase complexity for individuals and firms and reduce the overall efficiency of the tax system.
- In comparison with the rating system, a tax-based funding system would introduce far more volatility into council finances and make it harder for local authorities to produce balanced budgets.

Q10.3

Would alternative funding systems for local authorities (such as local taxes) improve the ability to provide infrastructure to accommodate growth? Which funding systems are worth considering? Why?

Auctioning development rights

One particular innovation that may be worth considering is the opportunity for councils to auction development rights in particular circumstances. Under such an approach, councils would set a specified development envelope (eg, the ability to construct a certain number of buildings up to a certain height limit and floor-area ratio) and then sell the right to develop to the highest bidder.

Selling development rights is a form of land value capture that can be used to fund infrastructure development. This approach was used in Victoria, Australia in the 1990s when air rights were sold at Melbourne Central Station to contribute to the cost of building the station, resulting in significant retail and

commercial development (Infrastructure Victoria, 2016, p. 18). This approach differs from targeted rates in several ways:

- it tends to be focused on large one-off projects;
- the initial burden falls on developers rather than on targeted ratepayers;
- the amount is struck in advance rather than *ex post*; and
- the value is captured through some form of sale process, rather than by an estimate of the contribution of infrastructure to land values.

Giving councils the capacity to sell development rights would strengthen their incentives to provide growth infrastructure. However, the level of revenue from development rights available to councils will not necessarily depend on the quality or benefits of the infrastructure provided. This implies that development rights are not suitable as a primary tool for cost recovery, but could be used as a complement to other funding sources.

Development rights can also increase allocative efficiency by improving the allocation of developable space. If a fixed quantity (in terms of space) of development rights is auctioned, then development rights can be allocated the rights to those who value them the highest. Carefully applied, this might reduce opposition to intensification, especially where the revenue earned is used for infrastructure or service upgrades within the affected community (Chapter 7).

Land value capture mechanisms such as selling development rights face the difficulty of ensuring that the revenue aligns with infrastructure costs. As explained in Chapter 7, any auction system and associated development rights would need to be carefully designed to avoid creating undesirable outcomes or incentives.

Q10.4

Would there be benefit in allowing councils to auction and sell a certain quantity of development rights above the standard controls set in a District Plan? How should such a system be designed?

10.8 Procurement of infrastructure

The recommendations earlier in this chapter aim to strengthen the incentives 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 10.4). 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 that are infrequently used by councils: alliance contracts and PPPs. It considers why this is so and whether infrastructure costs would be lower if they were used more.

Box 10.4 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 against 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 of 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, NZTA 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 there is disagreement over the price. However, there can be uncertainty about the overall cost of construction and potential to put off rather than deal with risk early (APC, 2008).

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 (PPIRC, 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]rocurring 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 5-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 is also proposing to use a PPP for the Puhoi to Warkworth motorway (NZTA, 2015). The New Zealand Council for Infrastructure Development (NZCID) anticipates that construction will 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.). The Department of Corrections’ current Auckland prison PPP has design features intended to create pathways for prisoners’ rehabilitation and reintegration (Department of Corrections, 2016).

The Auckland Council is currently setting up a PPP for the Auckland Harbour Bridge cycleway, a \$33 million project. The project is awaiting final approval in the face of community opposition (*New Zealand Herald*, 30 April 2016). The Vector arena, also involving Auckland Council (Box 10.5) and Wellington City Council’s “Clear Water” sewage treatment project are other examples of PPPs.

Box 10.5 Vector Arena PPP

The Auckland Council entered into a PPP with QPAM Ltd in 2004 to build and manage the downtown Vector Arena. The Auckland Council wanted to develop the arena as a world-class, multi-use indoor sports and entertainment arena, with reasonable charges for community events and at no cost and minimal risk to the council. It wanted the arena to operate as a financially successful business, with positive social impacts and low negative impacts on the environment.

Under the terms of the PPP agreement, QPAM has an obligation to design, construct, operate, maintain and repair the assets, together with the rights to levy charges and generate revenue from them. QPAM leases the land on which the arena stands from the owner, Ngāti Whātua Ōrākei. The arena opened in 2007.

The Council contributed \$68 million towards the construction cost of \$79 million. Ownership and legal title of the assets remain vested in the project company until the end of the rights period. After

40 years, ownership and title will transfer to the Council at no further cost. The Council receives a small proportion of revenues (20 cents for each ticket sold) during the rights period.

Source: Hodges, Proctor & King, 2013, p. 15; Auckland City, n.d.; Scoop, 2004.

European councils have found PPPs for road lighting attractive as they offer a predictable source of revenue. Twenty-five local governments there 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 there are no regulatory barriers to the use of PPPs. Consistent with this, Auckland Council has a PPP policy, which follows Treasury guidance and gives it flexibility to consider PPPs (Hodges, Proctor & King, 2013).

The remainder of this section instead looks 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.⁸⁷ 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, which are above \$15 million.⁸⁸ 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

⁸⁷ Conditions that suit PPPs are discussed in APCC (2014) and New South Wales Government (n.d.).

⁸⁸ 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, the Greater Regional Wellington Council collects, treats and distributes water to four city councils – Hutt, Porirua, Upper Hutt and Wellington. It has joined with its four city customers to run the bulk water and retail water supplies as one network.

Collaboration between the central and local governments could also increase project scale. However, the portfolio structure of government agencies, limited scope of local government interests and commercial focus of the private sector may not support sole agency delivery of large projects (NZCID, 2015c).

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 them.

F10.4

Regulatory barriers do not seem to prevent councils from using 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 them.

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.

Q10.5

Should a requirement to consider public-private partnerships apply to all significant local government infrastructure projects, not just those seeking Crown funding?

If the government were to extend the requirement to consider PPPs, it is important that the right institutional support for councils be set up. The scale of projects could be increased if councils used some form of joint commissioning arrangements. At the same time, larger-scale commissioning would encourage the development of the required 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.

The two main options are a new commissioning agency, or some form of joint procurement.

A new commissioning agency

The NZCID proposed a specialist local government procurement agency (NZCID, 2015c). 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, 2016c).

The entity would have more bargaining power 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 Local Government Funding Agency (LGFA), a council controlled organisation (CCO) operating under the LGA 2002, is a precedent. The LGFA helps local authorities access less costly and more diversified funding (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 10.4.

The NIU and PPP team in the Treasury already provide advice on infrastructure issues. It might be more efficient for councils to use this existing expertise, instead of creating a new agency.

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, 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 10.6).

Other groups of councils, for example in the Wellington region, have considered joint procurement in areas such as water infrastructure. The Department of Internal Affairs 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 10.6 **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 (RATA)

The 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. Building on current shared services arrangements looks like a promising way forward.

F10.5

Examples such as the Waikato region 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 councils.

R10.4

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 current regional shared-services initiatives that increase project scale and develop project commissioning expertise.

10.9 Conclusion

The quality of life in New Zealand's cities depends on the quality of their infrastructure. To maintain that quality of life, infrastructure needs to be maintained, renewed and, particularly where populations are growing, expanded. Planning and funding infrastructure can be a challenging task for councils – delivery costs can vary significantly between locations, and it can be difficult for local authorities to recover the costs. 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 users. This helps to encourage the efficient use of existing infrastructure, while signalling to consumers the additional cost of a unit of service. However, full cost recovery faces a number of barriers, including apparent 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 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. There may also be scope to resolve some political economy barriers by introducing clearer legislative obligations to recover the costs of new infrastructure from beneficiaries.

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 is interested in hearing further evidence on these ideas.

If infrastructure is to be expanded efficiently, it is also important that each council's procurement processes are well planned, fit for purpose, and secure value for money. Collaborative procurement can enable a council to:

- share the cost of specialist procurement organisations and to share expertise, experience and information about suppliers and their performance history;
- permit standardised specifications; and
- facilitate large volume procurements that can attract more competition and enable the council to access more favourable pricing.

Opportunities may also exist for councils to increase their use of more complex delivery models such as PPPs, provided that they have first developed, or had access to, the capabilities required to manage such models.

11 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 the obligation of kaitiakitanga (stewardship and protection);
 - 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 give recognition to and protect Māori interests arising from the Treaty of Waitangi.
- Planning legislation requires local authorities to engage with iwi/Māori in developing and administering plans. Other never- or little-used provisions allow devolution of planning to Māori authorities, or for them to join with councils in managing particular areas or aspects of planning.
- Some Treaty settlements have, over the last decade, provided for iwi, local authorities and central government agencies to co-govern the management of features of the natural environment such as rivers and mountains. Some of these arrangements cover urban areas. Such arrangements have helped build relationships between iwi and local authorities and develop capability on both sides. As a result, engagement of these iwi in other planning processes has strengthened.
- Over the last 25 years, iwi/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 where it has been based on building positive relationships that allow Māori to participate early and strategically in planning. There are many examples where this approach has produced outcomes welcomed by both councils and Māori.
- Despite ongoing development in the relationships between councils and Māori on planning, practice remains uneven across the country. The biggest barriers to good practice seem to stem from some councils and some Māori groups having insufficient capacity to engage effectively. Information on what has been achieved by good practice, learning from experience, and growing capability from Treaty settlement processes should stimulate further improvements.
- Carrying forward the current general framework for the planning relationship between Māori and local authorities has broad support. Successful relationships depend more on local circumstances, good practice and willingness to engage, than on adjustments to the national regulatory framework.
- Fruitful opportunities exist to draw on mātauranga Māori (Māori knowledge) in urban planning and to build on Māori design principles in urban design.

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.

11.1 Māori and urban development

The land now occupied by most New Zealand cities, particularly the largest, was inhabited or otherwise used by Māori prior to 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, was no longer in possession of 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, temporarily 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)

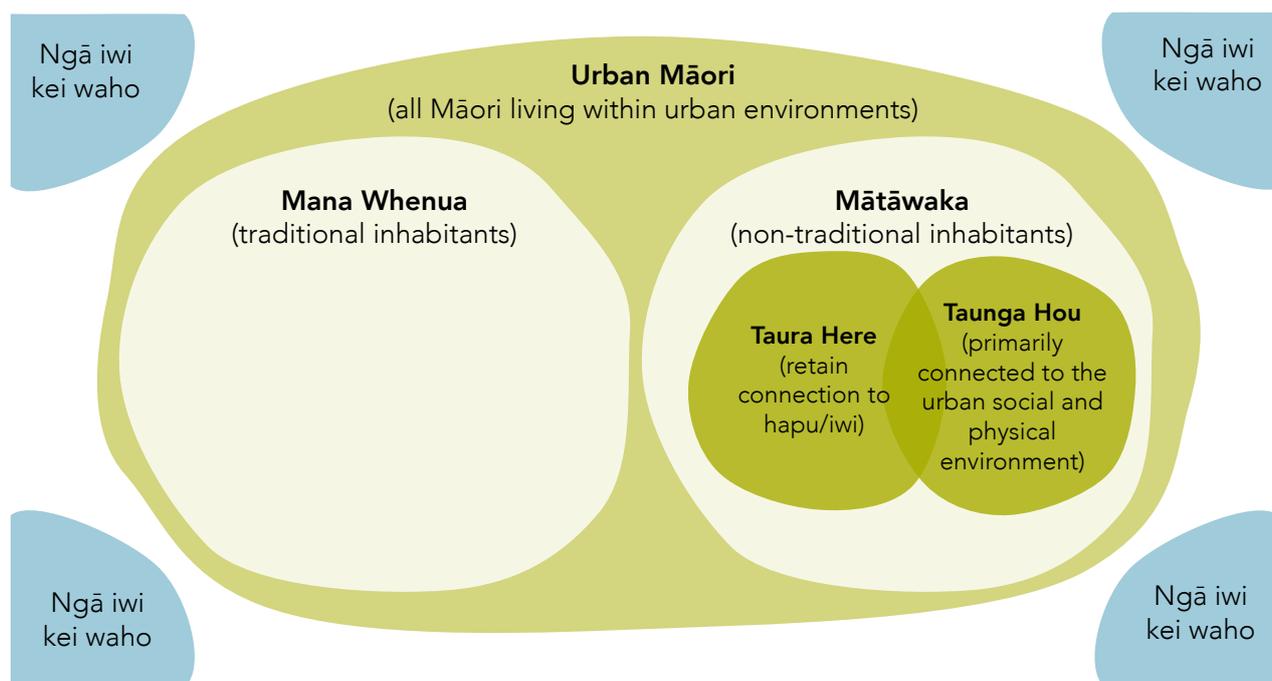
Most Māori lived outside the developing colonial settlements during the 19th century and first half of the 20th century. By 1896 the total Māori population, at around 42 000 and largely rural, was greatly outnumbered by a settler population of over 700 000 (Ryks, et al., 2014; Statistics New Zealand, 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 their differing development experiences 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 four main groups among urban Māori (based on migration patterns and relationships with iwi and hapū of origin) (Figure 11.1).

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 anchor”) is a term coined by the authors 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).

Figure 11.1 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.

In 2013, the proportions of mana whenua and mātāwaka (comprising taura here and tauga hou) varied greatly across New Zealand's main cities (Table 11.1). 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 (IMSB, 2012).

Table 11.1 Urban Māori within Auckland, Hamilton, Wellington and Christchurch, 2013

	Mana whenua	Mātāwaka		Total
		Taura here	Taunga hou	
Auckland	19 527 16%	84 633 69%	18 279 15%	122 439 100%
Hamilton	14 136 38%	17 571 48%	5 286 14%	36 993 100%
Wellington	3 009 7%	37 833 80%	6 168 13%	47 010 100%
Christchurch	8 151 30%	15 003 55%	4 290 16%	27 444 100%

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, 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 kaitiakitanga relationship with their ancestral lands and natural resources (Box 11.1). The Resource Management Act 1991 (RMA) specifically recognises this relationship (section 11.3).

Box 11.1 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).⁸⁹ 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)

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 11.4).

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. (Ryks et al., 2014, pp. 6–7)

[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. (Waikato District Council, sub. 02, p. 10)

⁸⁹ 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”.

The key to successful implementation of kaitiakitanga in urban settlements is positive relationships between iwi/hapū/whanau, property developers, community groups, and local government that have beneficial outcomes for all agents involved. (Ngā Aho & Papa Pounamu, 2016, p. 25)

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.

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 and covering four domains (environment, economic, social, and cultural). The five values are:

- whanaungatanga – expressed through the relationships that are 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.⁹⁰

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).

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). 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)

⁹⁰ 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 (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, 2016, 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)

Yet, while land-use planning sets a context for and can influence these broader social and economic outcomes, it is not, by far, the most salient instrument available to government to address them. This chapter is primarily focused on Māori participation in land-use planning.

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)

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).

Te Aranga principles for a Māori cultural landscape strategy

Māori have an interest in seeing themselves reflected in urban design. 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 11.2).

Box 11.2 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.
3. Whakapapa – Māori names are celebrated.
4. Taiao – The natural environment is protected, restored and/or enhanced.
5. Mauri Tu – Environmental health is protected, maintained and/or enhanced.
6. Mahi Toi – Iwi/hapū narratives are captured and expressed creatively and appropriately.
7. Tohu – Mana whenua significant sites and cultural landmarks are acknowledged.
8. 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 the way in which the principles should be applied. 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.” In addition, Mātauranga Māori is evolving and dynamic. 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, 2016, p. 20).

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 Kapa Morgan’s mauri model as an example of an assessment tool. Broadly, mauri refers to the life force which 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 that any assessment be undertaken as a collaborative process that allows whānau/hapū/iwi values to be incorporated.

Papakāinga

The Waikato District Council submitted that Māori in its district have a particular interest in the development of papakāinga housing and marae areas (sub. 2).

‘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. (Hoskins, 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. 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 instance, 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 are being developed in Māngere, Tauranga and Waimakariri, for example (Awatere et al., 2008; Livesey, 2010; Hoskins, 2012).

Q11.1

What policies and provisions in district plans are required to facilitate development of papakāinga?

Public Health South submitted that the value placed by Māori on developing papakāinga provided another perspective on competing interests in urban land, and that the commercial value of urban land might risk squeezing out other uses for it (sub. 17, p. 3).

F11.1

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 are more closely connected to urban land-use planning than others.

11.2 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 11.2). The Māori search for a Treaty-based partnership long predated the greater recognition of the Treaty in New Zealand law over the last four decades (Durie, 2009). Prior to 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 11.3 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.⁹¹ 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

⁹¹ This excluded Treaty Settlement Acts or references to Waitangi Day.

between Māori and the Crown. Second, reference to the Treaty principles better copes with the historical 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 Courts, Waitangi Tribunal and the Executive have all offered their views on the nature of the Treaty principles (Box 11.3).

Box 11.3 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 Executive⁹²

- 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: PCE, 2002; NZPC, 2014b.

⁹² 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).

11.3 The Treaty and 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 protection of Māori interests in urban planning decision making. 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 talks about engagement of Māori more broadly.

Resource Management Act

The RMA was designed with objectives that include better recognition and 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 allows a local authority (subject to specified conditions) to transfer any one or more of its powers under the RMA to an iwi (among other public authorities).
- Sections 36B to 36E provide for a local authority (subject to specified conditions) to 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, currently before Parliament, would require councils to invite iwi to enter into participation arrangements 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).

The Bill would also give new functions to regional councils and territorial authorities to ensure that development capacity for residential and business land is sufficient to meet expected long-term demands (Parliamentary Library, 2015, pp. 3–4).

Local Government Act and Land Transport Management Act

The LGA and LTMA both 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 accordance 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, “[i]n order 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 accordance 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”⁹³ 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)

⁹³ These include regional councils and territorial authorities.

- 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)).

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 and its predecessors;
- general land owned by Māori; and
- Māori reserves - land officially set aside for cultural and communal purposes (OAG, 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 (Question 11.1; section 11.1).

Māori customary and freehold land is governed by Te Ture Whenua Māori Act 1993. 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, their hapū and their descendants. The Act 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 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 there was a need to streamline processes between the planning system and Te Ture Whenua Act (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. (Far North District Council, sub. 45, p. 2)

Q11.2

How can processes involving both the Te Ture Whenua Act 1993 and the Resource Management Act 1991 be better streamlined?

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 mean that no Māori land can be taken without consent (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 11.4).

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 11.4 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, prior to 2005, the courts found they had no power to reverse planning decisions which 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 and planning decision making have in fact 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 arrangements (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 Breton (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 11.5).

Box 11.5 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 11.5 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 National Policy Statement 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, have their character. 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.

F11.2

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.

11.4 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 11.2).

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: “all 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 application of the law and not the exercise of discretion.
- The laws of the land should apply equally to all, save 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 afford adequate protection for fundamental human rights.
- Means must be provided for resolving, without prohibitive costs or inordinate delay, bona fide civil disputes which the parties themselves are unable to resolve.
- Adjudicative procedures by the state should be fair.
- The rule of law requires compliance by the state 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 11.4).

Meshing two traditions in practice

A large majority (over 90%) of councils responding to the Commission’s survey said that they could use the planning system to recognise and protect the special interests that Māori have in the environment, such as kaitiakitanga. Almost 50% thought that 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 tauwiwi (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.

Building relationships

Treaty principles involve a relationship between Māori and the Crown that is in the nature of a partnership (Box 11.3). 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 12):

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/whanau, property developers, community groups, and local government that have beneficial outcomes for all agents involved. (Ngā Aho & Papa Pounamu, 2016, 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 Greater Wellington Regional Council (GWRC), for example, has a memorandum of understanding with six iwi in the region (GWRC, 2013). A leadership advisory body, Ara Tahī, with joint membership from the Council and iwi, provides a vehicle to set shared directions for the ongoing relationships. Among other roles, Ara Tahī 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 Runanga 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 Māori participation in urban planning processes. (Selwyn District Council, sub. 33, p. 7)

Te Rūnanga o Ngāi Tahu has representation at the UDS Implementation Committee and council partners have worked collaboratively with Ngai 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 11.4).

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).

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 of 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. (Selwyn District Council, 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 11.3). 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.

Some councils submitted that they welcomed Māori involvement in planning.

Our view is that our council already regard Māori 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)

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. (Waitangi Tribunal, 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 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 11.3).

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)

Identification of sites of significance can be controversial. Auckland Council initially identified 3 600 sites of significance to mana whenua in its proposed unitary plan.⁹⁴ After public debate and criticism, the Council later decided to remove over 600 of the sites located on private land, because it was unable to confirm that they were of significance 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

⁹⁴ Previously only 61 such sites were protected (Ngā Aho & Papa Pounamu, 2016).

significance to Māori. Cultural provision in the proposed Auckland Unitary Plan attracted a large number of submissions in opposition (pers. comm., 20 April 2016).

Cultural impact assessments (CIAs)

Planners and developers use CIAs to determine the effect of proposed developments on sites of significance 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. (QP, 2016)

While CIAs are not formally required by the RMA, they may facilitate consenting processes, and District Plans may require 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, engagement with mana whenua to develop the Proposed Auckland Unitary Plan included working with mana whenua 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, 2016, p. 25)

Federated Farmers argued:

As regards iwi consultation, there is currently little consistency or transparency in how cultural impact assessments are carried out, or the fees that are charged. There is no ability for applicants to challenge the fees or outcome of the assessment, or whether the circumstances justify an assessment in the first place.

Some iwi currently lack the capacity to complete these assessments in a timely fashion, or to respond meaningfully to consultation requests. It may be that some capacity building or more strategic consultation is required e.g. on areas of agreed interest and on large scale consent applications. (Federated Farmers of New Zealand, sub. 21, p. 10)

CIAs appear to 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 may have developed unevenly across the country.

Q11.3

Do councils commonly use cultural impact assessments to identify the potential impact of developments on sites and resources of significance to Māori? How do councils set the thresholds for requiring a cultural impact assessment? Who sets the fees for a cultural impact assessment and on what basis? What are the barriers to cultural impact assessments being completed in good time and how can those barriers best be addressed?

Iwi management plans (IMPs)

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.

Matunga (2000b) 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. (p. 45)

IMPs are a valuable means for iwi and hapū to identify, record and disseminate the particular interests they have in the environment. They complement other consultative processes for iwi to participate in resource management plan making. It is for councils to decide how they will take IMPs into account in formulating plans and policy statements.

The Ministry for the Environment identified 190 IMPs lodged with local authorities throughout New Zealand in 2015 (MfE, 2016i).⁹⁵

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.

The Independent Māori Statutory Board model

As an alternative to Māori representation on the Auckland Council, the Local Government (Auckland Council) Act 2009 established the IMSB.⁹⁶ 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);
- 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.

11.5 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 11.3 and section 11.4).

⁹⁵ This may include double-counting of some IMPs lodged with more than one local authority.

⁹⁶ The Royal Commission on Auckland Governance had recommended that Auckland Council should include two councillors elected at large by voters on the Māori electoral roll and one councillor appointed by a Mana Whenua Forum (Royal Commission on Auckland Governance, 2009b).

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 11.4).

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.

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 2013.⁹⁷

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 hapū 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).

⁹⁷ Joseph Williams was appointed as a judge of the High Court in 2008.

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 she later submitted to the current inquiry that: “While 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).⁹⁸

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 – albeit 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
- 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).

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 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.

⁹⁸ Caroline Miller is Associate Professor of Planning at Massey University, Palmerston North.

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, 2016, p. 31). Many see the Te Aranga cultural landscape principles, based as they are on mātauranga Māori, as a good starting point (Box 11.2). 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 11.2).

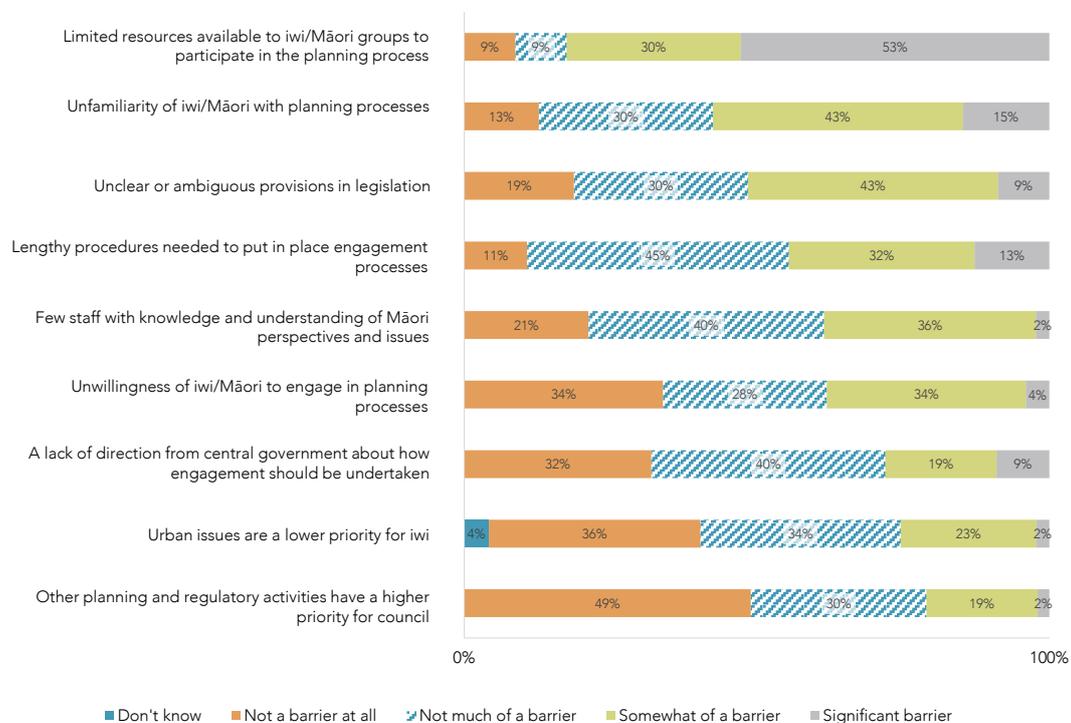
This positive picture was complemented by the perspectives of developers. Some Auckland developers told the Commission that they welcomed the contribution that mana whenua made to design choices based on the Te Aranga principles.

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 11.2).

Figure 11.2 Councils’ perceptions of barriers to engagement with iwi/Māori on planning



Source: Colmar Brunton, 2016.

Notes:

- Responses to the questions “To what extent is each of the following 9 things a barrier for your council?”
- 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, 2016). This confirms the view that the Commission reached in its 2013 inquiry into better local government regulation (NZPC, 2013).

The Commission's survey of councils for the current inquiry found that councils perceived the capability of iwi/Māori to engage as a major barrier; while the knowledge and skills of their own staff was a lesser barrier (Figure 11.2). 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).

In any case, 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 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 saw the lengthy procedures needed as 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)

Inquiry participants frequently told the Commission, however, 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). Yet Ngā Aho and Papa Pounamu (2016) reported:

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. (p. 11)

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 iwi/Māori engaging in planning. Yet only a few inquiry participants raised this as an issue, and then only in very general terms. Various proposals to amend legislation or regulation to clarify or strengthen expectations on engagement are discussed in section 11.6. However, the current legislative framework appears to provide ample room for stronger engagement, where the capability and willingness to take opportunities exists. From the uneven performance across the country, it appears that the barriers are more local than national.

A perceived lack of guidance from central government is a related issue. While, in the Commission's survey, this was not raised by many councils as an issue, 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, 2016, p. 11)

Current possible mechanisms for further guidance would be through national policy statements under Part 5 of the RMA (Waitangi Tribunal, 2011; Fox & Bretton, 2014), or through inserting provisions into the schedules of the RMA (Matunga, 2016). The Commission does not see a place for instruments like the national policy statement in a new urban planning system (Chapter 8). Instead it favours use of a Government Policy Statement with clearer priorities to address environmental issues. New legislation would also set clear purposes to guide decisions for the built environment (Chapter 7).

Useful guidance on Māori participation in planning would need to be sufficiently flexible to address the wide variety of local circumstances, capabilities, environmental features, and social and cultural mixes. General direction in legislation is unlikely to fulfil this requirement.

Q11.4

What sort of guidance, if any, should central government provide to councils on implementing legislative requirements to recognise and protect Māori interests in planning? How should such guidance be provided?

Weak political support

In some districts, political support for deeper engagement of Māori in planning may have been lacking. For instance, Fox & Bretton (2014, pp. 12–13) follow Coates (2009a) in suggesting that one reason that 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. This is an issue that will take time and a growing understanding from experience of the mutual benefits of engagement to overcome.

F11.3

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.

11.6 How would a new planning system provide recognition and protection of Māori interests?

Māori have diverse interests in the urban environment, some of which more closely involve land-use planning than others (section 11.1). 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 accordance 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, 2016).

The current legislative framework provides for recognition and protection of Māori interests in urban land-use planning (section 11.3). Many examples exist of successful and productive engagement of Māori in planning processes (section 11.3; section 11.4). 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 11.5).

Māori are also reporting successful outcomes from more informal 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, 2016). Successful engagement helps to build the relationships and organisational culture that facilitates a respectful and reciprocal partnership. The boundary between what is covered by land-use planning legislation and what is a matter of choice is inevitably somewhat blurry. Goodwill and patience, and an eye on design solutions that will provide mutual benefit, will help negotiate this boundary successfully. “Māori involvement in planning needs to be reframed as a positive experience which opens up opportunities for unique, world-leading project outcomes” (Ngā Aho & Papa Pounamu, 2016, p. 29).

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 11.6).

Box 11.6 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. 02, 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. 04, 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. (NZPI, 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)

The UDS Partnership supports moves to enable greater Māori participation in urban planning matters. (Greater Christchurch Urban Development Strategy Partnership, sub. 44, p. 8)

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)

F11.4

There is broad support for carrying forward into any new urban planning system the current general regulatory framework for recognition and protection of Māori interests and for Māori engagement in land-use planning.

Proposals for regulatory reform

Commentators have proposed various ways to strengthen legislative and regulatory provisions to recognise and protect Māori interests in planning. The two main ideas are:

- strengthening the reference to the Treaty in section 8 of the RMA, for instance by requiring people exercising powers under the Act to act in conformity with the principles of the Treaty, rather than to take them into account (proposed by the Waitangi Tribunal in the early 1990s, as discussed in Fox & Bretton, 2014, p. 2); and
- amending the RMA to strengthen the provisions for recognition of IMPs by giving them the same status as regional or district plans, and require councils to be proactive in looking for opportunities to transfer and share powers under sections 33 and 36B to 36E (Waitangi Tribunal, 2011).

These proposals would entail a significant shift in the balance of the current legislative regime that is likely to be contested. The proposals, if implemented, would usher in an extended period of uncertainty as the meaning and implications of the changes were tested through the courts. Even with the best of intentions, separate environmental plans of equal status and covering the same spaces would cause confusion.

From another perspective, considerable progress in strengthening Māori participation is already occurring through the opportunities provided under current legislation. Ryks et al. (2014) noted:

The existing and emerging mechanisms and provisions for Māori involvement in local and central government decision-making ... represent both challenges and opportunities for urban Māori. The challenges partly related to the need to find ways to increase utilisation of these mechanisms and provisions over current levels. The opportunities relate to the fact that these mechanisms simply exist and that many urban Māori are more resourced and positioned to make use of them. (p. 10)

So questions remain about whether further strengthening or tightening of legislative provisions is the best way forward.

- The major barriers to making further progress in recognising and protecting Māori interests appear to be uneven capabilities across local authorities and across some iwi and other Māori groups – and some evidence shows an increase in the capability on both sides (section 11.5).
- Trust and recognition of the mutual benefits is the necessary base for productive ongoing relationships between iwi/Māori and local authorities, and it cannot be legislated for.
- New models for Māori engagement in planning have been steadily introduced over the last decade. As the success of these models becomes known, they will stimulate further innovations and further strengthening of capabilities.
- Interests are shaped by local circumstances that vary widely across New Zealand's urban areas. Standard prescription in regulation is not likely to address this variety well.

Some submitters raised a further argument against strengthening participation rights for iwi in the context of the Resource Legislation Bill 2015 (section 11.3). Allison Tindale argued that, combined with “a reduced ability of [the] general public to influence local decision making”, this would create a “[p]otential inundation of iwi with requests for involvement in a range of projects” (sub. 8, attachment one, p. 10). The Kaipatiki Local Board expressed concern that “‘weighting’ of input from different groups [including iwi] ... may supersede that of the general public” (Auckland Council, sub. 47, p. 13).

Q11.5

In what way, if any, and through what sort of instrument, should legislative provisions for Māori participation in land-use planning decisions be strengthened?

Proposals to improve Māori representation on local authorities

A number of commentators have proposed that Māori elected representation on 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). Even so, compelling local authorities to adopt representation models that do not enjoy local support is unlikely to produce productive ongoing working relationships. It is preferable for arrangements for representation to grow out of a relationship based on mutual trust and respect; and from recognition of the benefits that will arise.

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 (section 11.4). An advantage of the IMSB model is that it provides a mechanism for engagement with *mātāwaka* in planning decisions – *mātāwaka* are represented on the board, and the board appoints representatives to council resource management committees.

[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 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)

Successful planning relationships depend on willing engagement between the parties. In addition, circumstances of Māori vary widely across urban areas (section 11.1). No one model for Māori participation in planning is likely to suit all circumstances. Yet the IMSB model may suit some locations and become increasingly relevant if there is a move towards greater recognition of *mātāwaka* interests. A new planning framework could provide for the IMSB model as one possible model that councils could adopt, in the same way that they are able to choose to have Māori wards.

11.7 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. Progress is uneven and many commentators remain disappointed by poor practice and weak commitment to effective engagement in some areas. Yet the current trajectory suggests that, as knowledge and understanding of successful initiatives spreads, the outcomes for Māori of the current regulatory framework will improve further. Carrying something like the current framework forward into a new planning system has broad support.

Accompanying more effective participation of Māori in planning processes is a greater recognition of the value of *mātauranga Māori* in shaping design choices.

Questions remain about indifferent performance of obligations to Māori in some districts. Is there room for more guidance from central government? If so, what form should such guidance take? How would that guidance be provided?

Leadership and capability development in local authorities is an important issue. The Commission has the impression that effective leadership and whole-of-organisation commitment is a key difference between councils that are building successful relationships with Māori and those that are not. *Iwi* participants told the Commission that in some councils engagement was inconsistent and effective engagement depended on individual officers who might move on. The capabilities required in a new planning system are discussed in Chapter 12.

12 Culture and capability

Key points

- A number of historical influences have shaped the planning culture in New Zealand:
 - 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;
 - legislative frameworks, planning models and traditions imported from Britain;
 - public concerns for the protection of productive agricultural land, reflecting the importance of farming to 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.
- Planning in New Zealand has struggled to carve out a unique professional identity. This is largely due to the difficulty the planning profession has had in identifying and developing a core of knowledge that is unique to the profession.
- As with other disciplines, good planning outcomes are more likely when planning culture:
 - places a strong emphasis on robust and evidence-based decisions;
 - values continuous learning and feedback;
 - empowers staff to “speak-up” and challenge existing practice; and
 - acknowledges and respects the boundaries of planning’s influence.

While generalisations are difficult, it is clear that these attributes are not universally displayed within the planning system.

- Capability gaps exist at both the local and central government level. At the local level, gaps are evident in the area of economic impact assessment and climate change adaptation strategies. Evidence also shows that some councils find it difficult to fill planning positions – particularly the role of consent planner.
- At the central government level, knowledge or understanding of the local government sector is insufficient, and few staff have practical planning experience.
- More tightly defined boundaries are needed between those trained in planning and those trained in other professional disciplines.
- Leaders within the planning profession – particularly within universities, professional bodies and councils – will play a crucial role in refocusing planning to meet the needs of the future urban planning framework outlined in this report.

12.1 Introduction

The Terms of Reference ask the Commission to investigate the behaviour and actions of councils, planners and central government. This chapter explores behaviour through a lens of organisational and professional 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).

This chapter uses the term “planning culture” as shorthand for the organisational culture of planning bodies and the professional culture of planners. The chapter starts with a brief overview of the concept of organisational and professional culture and then examines the forces that shape planning culture and capability in New Zealand. Cultures that are conducive to good planning outcomes are then discussed.

The chapter also looks at the skills and workforce capabilities required to undertake the three core functions of urban planning:

- 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.

The chapter focuses mainly on capability with central and local government. Within local government, the chapter looks specifically at the skills and knowledge of planners.

12.2 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 key sources.

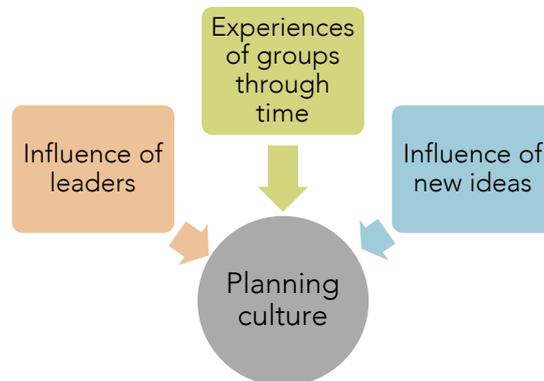
- **The actions of leaders.** Leaders have a profound impact on the beliefs, values, assumptions and behaviours that evolve within the planning profession. They do this by drawing on their own experiences, convictions and assumptions to propose answers to the questions that young planners have about the scope and goal of planning and how best to undertake planning tasks. In this way, leaders provide a source of ideas and cognitive frameworks for those involved in planning. Importantly, cultural messages are sent through all 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).

Important sources of leadership include universities, industry bodies (such as the New Zealand Planning Institute or NZPI) and workplace managers and mentors. These leaders transfer culture directly through their interactions with new planners and indirectly through the subjects that are taught during training and the emphasis placed on different subjects and frameworks.

- **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 (NZPC, 2014b). 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 that 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 12.1 Sources of professional and organisational culture

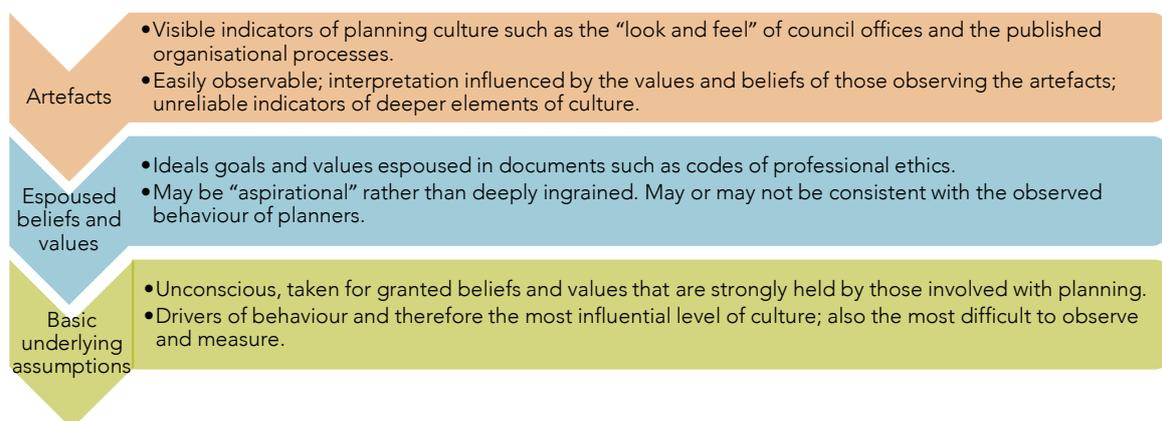


Assessing the planning culture is a difficult task. At the most basic level, culture can be examined by looking at visible attributes or “artefacts” of culture (Figure 12.2). These visible artefacts include, for example, the design and style of planning publications, the language used by planners, and observations of how planners interact with other professions. While such artefacts can be readily observed, they can be difficult to decipher. That is, it is hard to know whether the artefacts reflect deeply held values and beliefs that drive behaviour (NZPC, 2014b).

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 espoused 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 the espoused values may be “aspirational” rather than deeply ingrained and may therefore have little influence on the behaviour of planners.

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 measure and examine.

Figure 12.2 Levels of culture



Source: Schein, 2010.

This chapter will focus on the culture of the planning profession and of local authorities (due to their influence on the operation of the planning system).

12.3 Influences on culture and capability

This section explores some of the influences of planning culture and capability in New Zealand.

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. As Gunder (2011) notes, planners “tend to gain professional satisfaction from their achievement of the public interest, perhaps to create a better city, or even world, than mere personal gain and success” (p. 185).

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 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 local authority unwillingness 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 tenet 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 12.1).

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 are 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).⁹⁹

The Commission’s survey of local government indicates that councils may see less scope to use the planning system to achieve some of the broad social objectives advocated by New Urbanism. For example:

- 6% of respondents think that planning can have a “major or moderate” influence on reducing socio-economic disparities;
- 17% of respondents think that planning can have a “major or moderate” influence on addressing crime and violence; and
- 19% of respondents think that planning can have a “major or moderate” influence on reducing greenhouse gas emissions.

Another relatively recent approach is the communicative or collaborative planning model pioneered by Patsy Healey (see for example Healey 1997). These approaches focus on increasing dialogue between planners and stakeholders. Under this approach, planners act as “facilitators” of the planning processes – drawing in resources and knowledge from stakeholders to develop/negotiate consensual planning outcomes.

Importantly, as the number of people involved in a decision increases, the costs of facilitation and coordination rise, and the likelihood of consensus falls. In other words, communicative and collaborative planning approaches are likely to be viable within a given scale of participation. Beyond this scale, the

⁹⁹ Gunder (2011) provides a good summary of the literature on New Urbanism.

approach eventually becomes too unwieldy, voices are lost in the noise, and those with the sharpest elbows and loudest voices prevail. This suggests that communicative and collaborative planning processes are best suited to planning for the provision of local public goods and regulating localised spillovers, particularly where the number of competing interests is small and when the resource in question is well-defined.

Box 12.1 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

F12.1

A number of historical influences have shaped the planning culture in New Zealand:

- during the chaotic growth and widespread disease brought on by the Industrial Revolution, planning embraced the moral precept of doing good for society by bringing “order” and “certainty”;
- 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 institutes in six countries (including New Zealand) articulate the role of planning and planners (Table 12.1).

The 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.

Material from the various planning institutes confirms that a concrete description of the role of planners is elusive (Table 12.1). 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 needed to perform planning related tasks and duties. *Theory of planning* involves planners trying to understand the very 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.

Table 12.1 The perceptions that overseas planning institutes have about the role of planning

Planning institute	Summary of planning advocated by the planning institute
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.

Source: McDermott (2016).

F12.2

A “procedural” view of planning dominates the professional identity of the planning profession in New Zealand and overseas. This perspective of planning emphasises how planners can make planning processes work more effectively, rather than examining whether planning is the best tool for achieving a desired social outcome.

The value of planning processes is assumed to be self-evident

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 institutes assert that planning has a positive role to play in society. Yet “shaping places”, “managing growth”, and “enhancing economies and communities” are fuzzy 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. In

practice, however, planners have struggled to convince others that they possess unique knowledge which justifies this broad cultural licence. McDermott notes that “planning risks being an introverted and even defensive discipline, authoritarian in practice even if benign in intent” (2016, p. 8).

F12.3

Planning institutes see planning as making a positive contribution to a broad range of social outcomes. The profession appears to have developed a “cultural licence” to assert specialist knowledge in a wide range of socio-economic and environmental issues – often with little specialist training in the area.

Universities are the starting point for professional culture and capability

Many young planners begin their socialisation into the planning profession at universities. It is here that planners first encounter the ideas and cognitive frameworks needed to succeed in their chosen career. The NZPI has a significant influence on planning education through its accreditation of university planning courses. In doing so, the institute and universities play a critical role in setting the body of knowledge, values, goals and assumptions passed on to new planners.

The knowledge that NZPI and universities emphasise is a strong source of professional culture and capability. Almost as important to cultural formation is the knowledge that *isn't* emphasised – as this sends a signal that the knowledge is peripheral to professional qualifications and success.

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 12.2).

Box 12.2 Content of university planning programmes in New Zealand

The content of NZPI-accredited planning programmes are noted below.

- 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 (Box 12.3). This reinforces the procedural focus of the profession.¹⁰⁰

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 knowledge based 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.

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. One possible exception is Massey University’s programme 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.

Universities structure and manage their programmes differently according to the academic colleges or departments in which they are located. In New Zealand, geography remains the host discipline for planning degrees at Massey, Waikato, and Otago universities (Table 12.2). 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 provides a basis for reinforcing the urban design elements of the programme and provides grounds for a distinctive urban design emphasis.

Generally speaking, planning degrees from Lincoln University place more emphasis on the natural environment, while Waikato University offers opportunities to supplement planning courses with learning in the cultural (particularly Māori) and political science spheres. Lincoln University tends towards the physical sciences in its complementary papers.

Table 12.2 Planning schools in New Zealand

University	Faculty	Bachelor’s Degree in:	Master’s Degree in:
University of Auckland	National Institute of Creative Arts and Industries	Urban Planning	Planning Urban Planning

¹⁰⁰ 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).

University	Faculty	Bachelor's Degree in:	Master's Degree in:
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 Arts and Social Sciences, Department of Geography, Tourism and Environmental Planning	Environmental Planning	

Source: New Zealand Planning Institute website: <https://www.planning.org.nz/>

In the 1990s, planning courses altered to reflect the sustainable management objective of the Resource Management Act 1991 (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-couched in terms of environmental management and sustainability. Some universities also changed the name of their degrees to reflect the reorientation of the legislation.

As noted, university courses are a powerful conduit for transferring professional culture and knowledge. Cultural messages are not only sent through what students learn, but also through what they *don't* learn. By downplaying the need to think critically about when planning is the best response to a policy problem, leaders within the profession perpetuate the tenet that the value of planning is self-evident.

Box 12.3 Outcomes of planning education

“Universities will be able to demonstrate how their programmes and individual courses contribute toward the development of the following competencies in their graduates:

- overview and scoping of problems, both individually and in teams
- data collection and forecasting techniques
- quantitative and qualitative research and evaluation methods
- synthesis and integration of information
- policy and plan preparation and evaluation
- techniques for monitoring plan outcomes and reviewing plan effectiveness
- processing and assessing resource consents
- spatial tools in planning, including design and/or geographic information systems
- assessing risk
- critical thinking
- understanding of Mātauranga Māori and Te Reo Māori and environmental perspectives
- understanding a range of socioeconomic and equity issues ethics in planning

- awareness and identification of cultural and community values
- consultative techniques (including mediation and negotiation)
- written, verbal and graphic communication”

Source: NZPI (2011, p. 10).

Professional bodies reinforce professional culture and capability

Leaders are arguably the strongest driver of planning culture as they act as a powerful conduit for values, beliefs and assumption. This transfer of knowledge can occur through formal leaders (such as chief planning officers or university professors) or informal leaders (ie, staff that have the respect of co-workers and who consciously or unconsciously act as behavioural role models for others involved in planning) (NZPC, 2014b).

Knowledge, practices and values are typically articulated, codified, reinforced, and promulgated by professional associations. In this sense, NZPI (for example) literally institutionalises the values and beliefs of the planning profession. The institute also plays 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 espoused 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 a successful planner. 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 period of 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 leaders tolerate also sends important cultural messages. Responsibility for correcting poor workplace practice generally lies with a planner’s manager. However, NZPI also plays a role through enforcement of its code of ethics. Over the past five years, NZPI’s Professional Standards Committee has considered 10 potential breaches that either have been brought to the institute’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 becoming a member of the institute is voluntary.

Other avenues through which NZPI transmits cultural messages to its members include submissions to the national policy debates, hosting a yearly conference, organising periodic workshops and coordinating mentoring programmes for new planners.

F12.4

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.

Planning has struggled to establish a unique professional identity

To be valued as a profession, planning has to demonstrate a unique body of knowledge that it can lay claim to. This is important, as it creates intellectual legitimacy which is a key element of a profession's identity (Miller, 2016). Yet the planning profession (both in New Zealand and abroad) has struggled to identify a unique body of knowledge, or a specific professional space which it exclusively occupies. In fact, 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 "add-on" role, practised within the culture of a person's primary profession. Even today some planners do not have undergraduate qualifications in planning. For instance, a survey of NZPI members conducted in 2014 found that 23% of respondents did not have a 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 12.3 provides council's answers as to why professional membership was not required.

Figure 12.3 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) membership to 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). Generally, the other staff will have advanced degrees in geography, social policy, environmental management or ecology.

The difficulty that planning has had in demonstrating a unique knowledge base, combined with the fact that planning has never been a registered profession, has made planning a much-maligned endeavour. Against this backdrop, planners often fall back on legislation to define (and justify) their role in the planning system (and their actions as planners).

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)

Consent planners complain that policy planners write provisions that are difficult to administer or that are open to interpretation. The need for interpretation leads to inconsistency in the administration of plans, which irritates plan users (NZPC, 2013). 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)

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) notes 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 disciplines of the economic and fiscal disciplines that should underlie urban planning disciplines. (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)

F12.5

The planning profession in New Zealand has struggled to carve out a unique professional identity. 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.

The culture of councils impacts planning practices

The organisational culture within which planners work can impact 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 councils plays a large role in determining the quality of the relationship between planners and local iwi/Māori (Chapter 11).

The organisational culture of councils can also impact:

- 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 planning (ie, regulation, the provision of local public goods, and the provision of infrastructure).

The political risk tolerance of councils can also impact planning 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, organisational cultures that are overly sensitive to external criticism can result in timid planning practices. This can contribute to:

- more complex and prescriptive plans and policies as councils try to “cover their bases” in the event 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 (due to perceived public intolerance of failed “experiments”).

In the face of public scrutiny, councils will be most effective when they are able to learn from *valid criticism* while not being overly influenced by *invalid criticism*.

Of course, 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)

F12.6

Planning practices can be influenced by the organisational culture of councils, particularly in areas such as the relationship between planners and iwi/Māori and the openness of councils to new and innovative approaches to planning tasks.

The RMA challenged the existing planning culture

When the RMA came into existence 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. This theory emphasised the need to control land use through prescriptive regulation that separated incompatible land uses (zoning). The RMA looked to replace this prescriptive approach with an enabling “effects-based” approach. Under this new approach, development was permitted subject to the protection of environmental bottom lines (see Chapter 8). This approach ran contrary to conventional planning wisdom and challenged existing mental models, beliefs and frameworks underpinning the planning profession. These tensions remain to this day.

The RMA was introduced without a sophisticated understanding of the impact the existing planning culture would have on the successful implementation of the Act. As central government provided only limited direction (Chapter 5) it is not surprising that the RMA planners looked to 'tried and tested' planning approaches (notably zoning) when implementing the Act.

Figure 12.4 Influences on planning culture



12.4 Desirable cultural attributes for planning

It is clear that some popular planning tenets have become outdated or lack evidential foundations. For example, the unwavering belief that planning can bring “order” and “certainty” to urban environments is inconsistent with the modern understanding of cities as complex adaptive systems. Regardless of whether the government decides to reform planning legislation, an argument can be made to address these beliefs of planning.

The Commission has previously outlined cultures conducive to good regulatory outcomes (NZPC, 2014b). Based on this work and the discussion above, the Commission believes that good planning outcomes are most likely when planning cultures:

- **Insist on robust, evidence-based, decision making:** The success of any planning regime depends on the quality of decisions that planners make. Robust analysis and reliable evidence not only helps achieve the planning objectives, but also promotes public trust in councils and the planning system. Planning cultures should therefore place a strong emphasis on the robustness and evidential basis of decisions – particularly when planners are inferring subjective trade-offs on behalf of the community. Embedding this culture begins at university and is reinforced through the organisational culture of places where planners work.
- **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 that fail). Learning cultures will typically encourage “systems thinking” that goes beyond immediate roles of planners and emphasise the sharing of insights and experiences throughout the planning organisations – especially with other planners.
- **Empower planners to “speak-up” and challenge existing practice:** Related to the concept of a learning culture is the idea that planners should be continuously challenging their own methods and ways of

operating. This dynamic learning requires a working environment in which employees feel safe to “speak-up” when they observe poor or doctrinaire planning practices.

- **Stress the importance of being open, transparent and accountable:** Trust in the planning system will be strongest when the community is confident that planners are following rigorous and fair decision-making processes. Planning cultures that embrace transparency, openness and accountability are likely to engender a higher level of trust than those that resist public scrutiny.
- **View facilitation and public education as important “planning tools”:** For any regulation to be successful, regulators need to adapt their compliance strategies to match the behaviour, attitudes and characteristics of regulated parties (NZPC, 2014b). In the context of planning, this means having a culture that values planners as facilitators of public compliance with land use regulations (*as well as an enforcer of regulations*). This requires an educative and facilitative mindset that recognises that the majority of people are happy to comply with planning laws if compliance is not overly complex or administratively opaque.
- **Value operational flexibility and adaptation to changing socio-economic or environmental conditions:** Planners do 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 planners operate is constantly shifting. In such a setting, flexible planning legislation is “necessary but not sufficient”. *Planners and planning organisations* require a culture that allows planning practices to respond quickly to legislative changes or shifts in community requirements. That is, cultures that “let go” of planning approaches that no longer meet the needs of community.
- **Recognise 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 New Zealand citizens. It is important that council staff (including councillors) understand the responsibility that comes with their role, and that this responsibility is taken seriously. Such cultures will engender a belief that, as a profession, planners are working for the good of the community and that the role of elected officials is to make value judgements and trade-offs on behalf of the community.
- **Acknowledge and respect the scope of planning’s influence:** No profession can lay claim to all the knowledge and expertise needed to achieve successful planning outcomes. All professional groups within the planning system need to be conscious of the boundaries of the knowledge and be willing to draw in specialist skills when needed. This requires a culture that views planning as a collaborative, rather than competitive, process. Leaders within councils and other planning organisations will play a key role in encouraging and strengthening such cultures.

F12.7

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; and
- acknowledge and respect the boundaries of planning’s influence.

Table 12.3 Behaviours that do not reinforce good planning culture

Cultural attribute	Behaviours that do not align with the attribute (some examples)
Planning cultures that insist on robust, evidence-based, decision making	Uncritically accepting planning models and paradigms from other countries. Universities that do not emphasise the importance of critical thinking and that take the need for planning as given in all circumstances. Leaders (central and local) that emphasise “process” rather than “outcomes”. Basing planning decisions on personal views and political beliefs rather than views expressed by the community.
Planning cultures that value continuous learning and feedback (ie, learning cultures)	Limited internal communication between “policy” and “consent” planners. Leaders who do not allocate resources to monitoring planning outcomes. Leaders who do not allocate resources to professional training and development.
Planning cultures where staff are empowered to “speak-up” and challenge existing practice	Internal processes that punish, rather than reward, planners for challenging entrenched practices in search of better outcomes for society. Providing few formal avenues through which staff can raise concerns with current practices.
Planning cultures that view facilitation and public education as important “planning tools”	Planning processes that adopt a tick-box approach to compliance. Leaders who emphasise adherence to procedure rather than assisting people to comply with planning regulations. Leaders who allocate limited resources to public education and facilitation processes.
Planning cultures that value operational flexibility and adaptation to changes in the local conditions	Overly zealous adherence to rigid internal processes. Limited internal and external feedback loops. Dogged defence of the status quo in the face of evidence of the need for change. Leaders who allow current practices to “tick along” for fear of “rocking the boat”.
Planning cultures that recognise the significance of the civic responsibility that comes with using the coercive powers of the state	Failure by leaders to act on poor planning processes or inappropriate behaviour. Failure of leaders to create a sense of importance around the activities that planners undertake and to make the connection between the actions of planners and consequences of poor planning decisions (eg, environmental damage, loss of employment, and loss of property).
Planning cultures that acknowledge and respect the scope of influence and expertise of planners	Leaders who reward and encourage disciplinary silos within planning organisations. The superficial use of theory from other disciplines to justify existing practices. Not sharing information and knowledge for fear that other groups will “take the credit” for outcomes or “hijack” planning processes.

12.5 What skills and capabilities are required for planning?

As with other professions, there is no standard “measure” of planning capability. Also, few published reviews focus on capability within the planning profession. Reviews undertaken are more than a decade old and are likely to be out of date (see Ericksen et.al., 2003; Miller, 2003).

Common indicators of capability may not be accurate. For example, Miller (2016) notes it is common for councils to measure planning capability by the percentage of planning recommendations that are accepted unchanged by council Planning Committees. Such indicators are just as likely to signal that planners are making recommendations they believe the committee wants to hear, as they are to indicate that the planner “got it right”. In some cases, having recommendations challenged may be an indication that the planner is doing a good job in that they are providing “frank and fearless” policy advice.

Despite the obvious limitation of available data, this section provides insights into workforce capability within the planning system.

Chapter 3 describes three core functions of planning – regulation of spillovers, the provision of local public goods, and infrastructure supply and maintenance. In undertaking these functions councils and central

government agencies require access to a wide array of skills and knowledge. As noted, no single profession can lay claim to all of these skills.

Table 12.4 summarises some key skills required when undertaking core planning tasks. The table is not intended to be a comprehensive; rather it aims to highlight the spectrum of knowledge that is needed to undertake planning tasks.

Table 12.4 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.	<p>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.</p> <p>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.</p> <p>Policy/rule-making: Knowledge of the range of policy tools available for achieving social goals (eg, regulation, market-based mechanisms, and suasive 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).</p> <p>When regulating natural systems specific scientific knowledge will be needed. 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. An understanding of the resilience of natural systems to different types of spillovers and of ecosystem dynamics.</p>
Providing a fair and efficient level of local public goods.	<p>Design skills: Ability to design public spaces that provide functional and aesthetic utility to the public. Ability to design local public goods that reflect the preferences of local communities. The ability to demonstrate the connection between public preferences and design.</p> <p>Engineering 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.</p> <p>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.</p> <p>Communication and facilitation: Ability to design and implement effective public consultation processes. Ability to assess public preferences for different types of local public goods.</p>
Coordinating investment in relevant infrastructure.	<p>Engineering 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.</p> <p>Scientific knowledge of the natural environment: Understanding the potential impacts of infrastructure constructions 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).</p> <p>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.</p>

Core role	Examples of knowledge and skills needed
	<p>Legal 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 interpreting legislative requirements on government bodies.</p> <p>Communication and facilitation skills such those mentioned above (including dispute resolution).</p> <p>Project management skills such as the ability to manage multiple interdependent workstreams, manage budgets, and marshal and synthesise input from technical specialists.</p>
General skills and knowledge	
<p>Understanding of how civil society works, how it operates, and the respective roles of central and local government.</p> <p>A strong understanding of Māori worldview and its application to urban planning and tikanga Māori.</p> <p>An understanding of the institutional structures within which planning operates, particularly the implications of operating within a politically driven system.</p>	

F12.8

A well-functioning planning system requires central and local government to have access to specialist technical knowledge such as engineering, economics, legal analysis and environmental science. Just as important are “soft skills” such as communication, mediations and facilitation skills and an understanding of Māori worldviews.

Qualifications held by planners

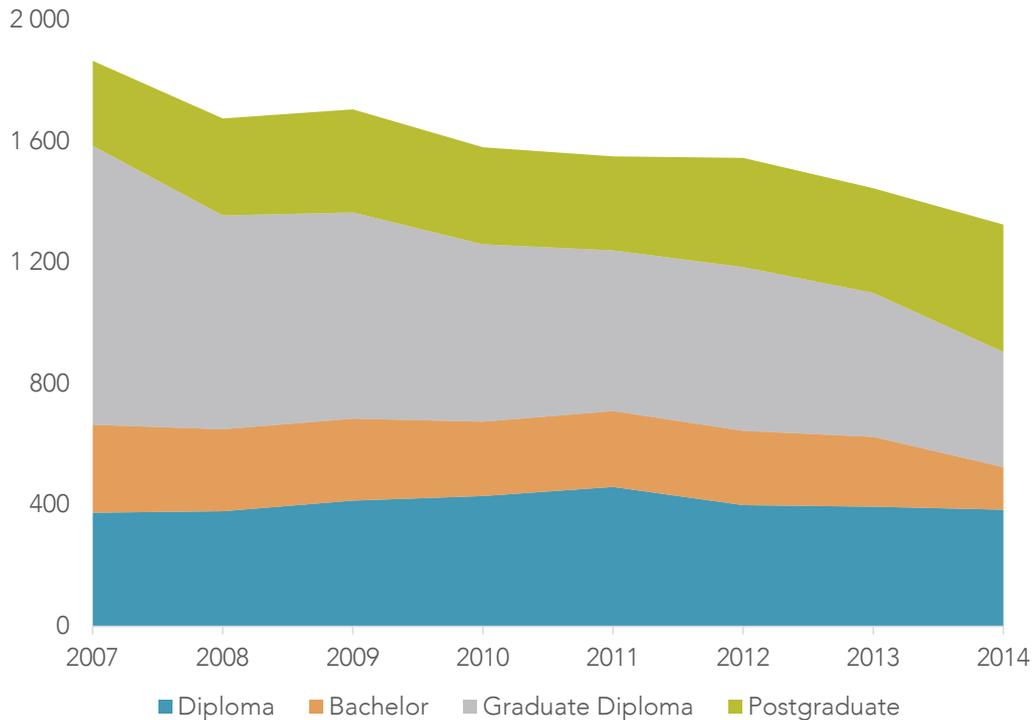
The qualifications held by planners provide some indication of capability. A 2014 survey of NZPI members found that:

- 80% of respondents held a planning qualification (up 2% from the previous year);
- 20% of respondents held a non-planning qualification;
- 57% of respondents held an undergraduate degree; and
- 43% of respondents held a postgraduate degree.

As not all planners are members of NZPI (and therefore part of the survey) it is difficult know whether these results are representative of the workforce as a whole. Even so, the survey provides some valuable insights into the profession.

The number of students enrolled in planning courses provides another insight into the education of the workforce. Figure 12.5 shows that over the period 2007 to 2014 the number of undergraduate students remained fairly constant, while the number of postgraduate students has declined.

Figure 12.5 Number of students enrolled in planning courses, 2007–2014



Ease with which vacancies are filled

The ease that employers can fill planning vacancies is another (imperfect) indicator of capability in the system. If employers find it relatively easy to find planners with the required skill, it would tend to suggest that a relatively robust supply of qualified staff is available. Again, the NZPI survey provides some insights. The survey found that:

- 73% of respondents responsible for recruiting staff in 2014 experienced no difficulties in filling vacancies; and
- 27% of respondents responsible for recruitment found vacancies difficult to fill. NZPI notes this represents a 5% increase from 2013 results.

These results somewhat contradict the Commission's 2016 council survey undertaken for this inquiry. The Commission's survey found that 47% of respondents saw attracting qualified staff as a barrier to successfully implementing urban planning. Further, less than half of respondents (44%) agreed with the statement "Most councils have the capability to fulfil their planning functions to a high standard".

These 2016 results are consistent with the 2013 council survey undertaken for the *Towards Better Local Regulation* inquiry (NZPC, 2013). In that survey, just over half of the respondents (52%) identified attracting qualified staff as a barrier for councils implementing their regulatory functions. Further, 60% of councils said that planning, land use and water consents vacancies were the hardest to fill. In the regional councils, water quality and monitoring was commonly cited as the hardest area in which to fill positions. The unitary council respondents stated coastal management, planning, land use or water consents, and other areas as the positions that were hardest to fill. Two-thirds of councils were happy with the quality of applicants attracted to fill regulatory positions, with 13% being very happy.

Amount and quality of ongoing training

Graduates do not leave university equipped with all the knowledge they will ever need to be a good planner. Rather, maintaining and building professional expertise is a career-long endeavour. NZPI members are required to keep adding to their knowledge and skills through continuing professional development (CPD). A full member of the NZPI is required to undertake 25 hours of CPD a year; graduate members are required to do 15 hours.

Absolute statements on the quality of ongoing training are difficult. However, some evidence shows that planners look favourably on the level and quality of training they receive. For example, in relation to courses offered under its CPD programme, NZPI's 2015 annual report notes:

The courses attracted a total of 1364 enrolments (a 15% increase on 2014). The commitment to constantly improve the quality of the courses provided is reflected in the very positive feedback from members who attend. The average course rating for 2015 has been 4.5 on a 1-5 point scale (up from 4.4 in 2014). The ratings of course presenters were also higher: 4.5 for their course content (up from 4.1 in 2014), 4.4 for presentation skills (4.0), 4.6 for answering questions (4.2) and 4.6 for relating to audience (4.3). (p. 8)

While not all planners are members of NZPI, these observations are consistent with the Commission's survey of councils in which found:

- 87% of respondents agreed that planning staff receive training that enables them to do their job better; and
- 85% of respondents agreed that planning staff have real opportunities to improve their skills through education and training programmes.

Interestingly, survey results published by Victoria University and Public Service Association (2014) found that *regulatory* staff working in councils are generally more satisfied with the level and quality of training they receive than central government staff. While covering a broader range of functions than planning, this survey illustrates the commitment of local government (where many planners work) to ongoing training.

While none of these results are definitive, they tend to indicate:

- ongoing training of planners is established practice within local government;
- planners generally consider the quality of ongoing training to be high; and
- ongoing training is an accepted and institutionalised process for the planning profession.

Compliance with statutory time limits

The RMA sets statutory time limits for local authorities to process resource consent applications. Information collected by MfE indicates that a high proportion of consents are processed within the statutory time limits. For example, in 2014/15 some 96% of all new resource consents were processed within the statutory time limits (MfE, 2016e). Of these:

- 91% of *publicly* notified consents were processed within the statutory time limits;
- 91% of *limited* notified consents were processed within the statutory time limits; and
- 96% of *non-notified* consents were processed within the statutory time limits.¹⁰¹

Of course, the percentage of consents processed on time does not necessarily indicate a high level of capability. For example, a group of planners may be able to process all consents within the statutory timeframes simply because they have a large well-resourced office or because they are dealing with relatively minor consent applications (eg, removing a tree rather than installing a windfarm). Similarly, the *speed* at which a decision is made says nothing about the *quality of the decision* or the skill taken to make the decision.

¹⁰¹ Full result from the Ministry for the Environment's National Monitoring System is at www.mfe.govt.nz/rma/rma-monitoring-and-reporting/reporting-201415

F12.9

No standard assessment of planning capability currently exists, and the available indicators have limitations. Even so, these indicators suggest:

- not all planners have planning related qualifications – around 20% to 30% have qualifications in other disciplines;
- many councils have difficulty finding qualified staff to fill planning positions – particularly for consent planners (NZPI members appear to have fewer problems attracting staff);
- the planning profession is used to ongoing professional training, and planners generally consider the standard of existing training to be high; and
- a high proportion of consent applications are completed within statutory timeframes (although speed is a poor indicator of capability).

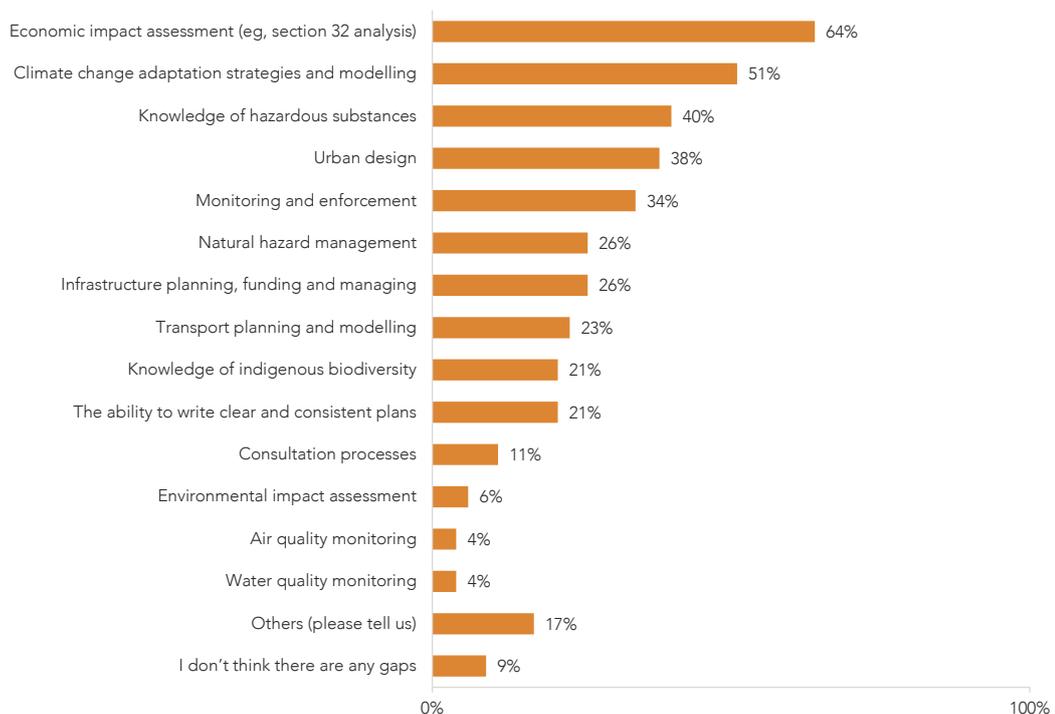
12.6 Capability gaps

Local government capability gaps

The Commission’s 2016 council survey asked for respondent’s 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% identified this as a significant capability gap), climate change adaptation strategies and modelling (51%), knowledge of hazardous substances (40%), and urban design (38%) (Figure 12.6). More than 75% of the councils that identified economic impact assessment as a capability gap had urban planning responsibilities.

Notably, NZPI’s submission to this inquiry also noted “gaps in capability relating to economic and social analysis” (sub. 27, p. 17).

Figure 12.6 Areas of significant capability gaps



The survey also found that only 38% of councils agree that 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. Further, 72% of participants indicated that 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 8). Both of these areas require a deep technical knowledge – knowledge that an introductory-level university course is unlikely to be able to provide.

Inquiry participants noted that some councils lack capability to engage with Māori groups (eg, IMSB pers. comm., 20 April 2016; Ngā Aho & Papa Pounamu, 2016). Conversely, the Commission's 2016 council survey found that councils generally perceived that the capability of iwi/Māori, rather than the capability of council staff, is the greatest barrier to engagement. Chapter 11 explores the interface between urban planning and iwi/ Māori interests in greater detail and explains why caution is needed in interpreting these results.

Capability gaps at 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 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 assigned to them in legislation. Yet, central government has little knowledge or understanding 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 (SSC et al., 2012; NZPC, 2013).

Evidence also suggests that central government agencies have few staff trained in planning. NZPI's 2014 survey of members found that only 3% of respondents worked in central government agencies (less than 20 members). Assuming this is representative of all NZPI members, this means that less than 70 NZPI members work within central government. While this in itself is not an indication of capability, it does suggest that planning is not seen as a key profession for central government agencies and that there is scope to improve knowledge in this area.

While general training on what constitutes good policy analysis is readily available to government agencies, those in agencies show little focus on developing the specific knowledge needed to analyse issues involving the local government sector, let alone urban planning (NZPC, 2013).

Central government could improve their capability through:

- additional training aimed at raising each official's 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).

F12.10

Many councils have capability gaps in technical areas such as economics and environmental science. These gaps hinder the ability of councils to undertake rigorous evaluation of the costs and benefits of alternative policy options and planning proposals. Some councils also lack the capability to engage effectively with iwi/Māori.

R12.1

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 in areas such as environmental science and economics. It would also require strengthening soft skills – particularly those needed to engage effectively with iwi/Māori.

R12.2

Central government should improve its understanding of urban planning and knowledge of the local government sector more generally. An improved understanding will help promote more productive interactions between central and local government.

12.7 Touchstones for successful reform

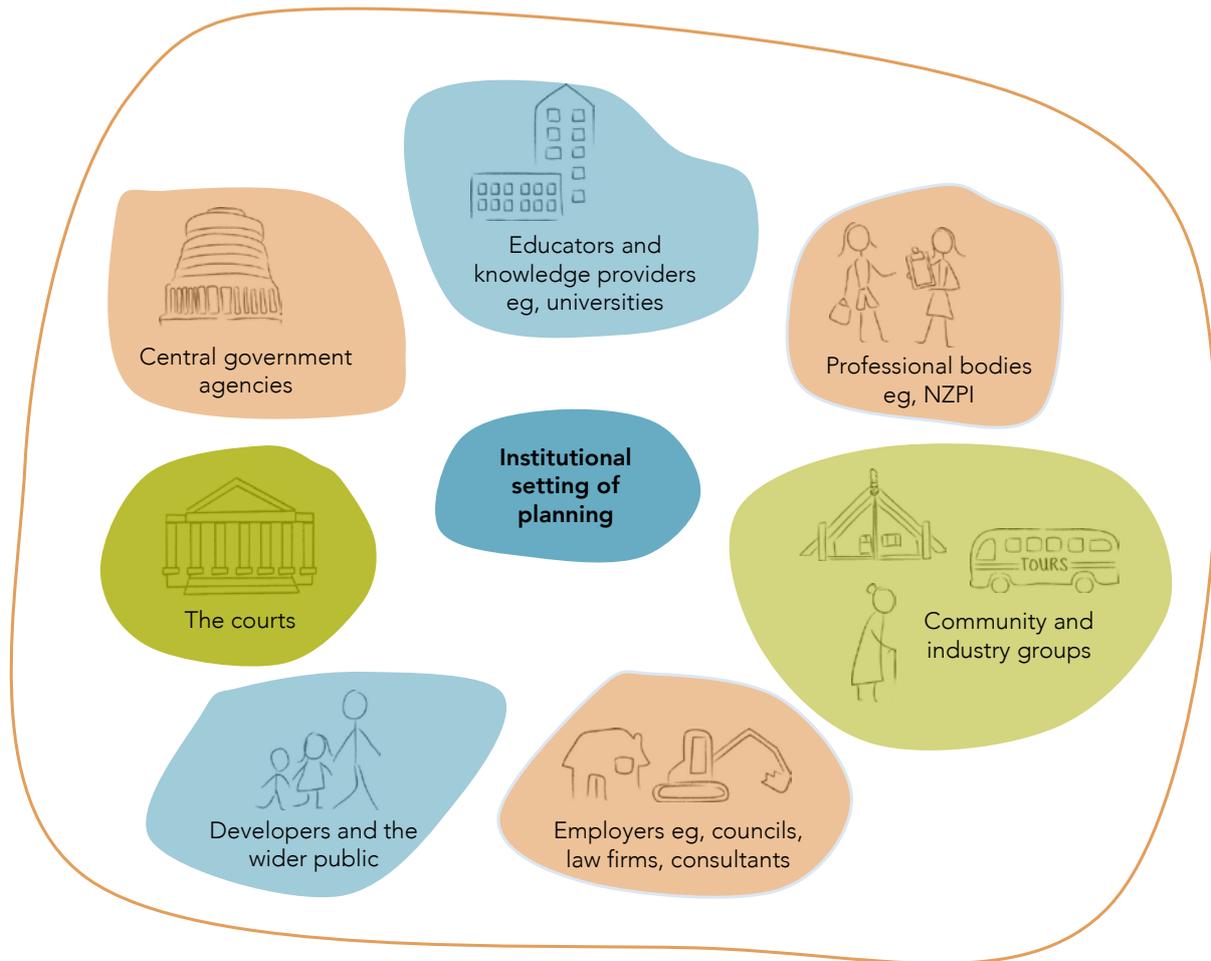
Problems can arise if embedded assumptions about how planning should be undertaken conflict with the direction of reform, or if the government pays inadequate attention to the capability needed to implement reform. As such, when contemplating changes to the structure and functions of public bodies, a substantive assessment of the culture and capability should be undertaken (NZPC, 2014b).

Planning culture is influenced by the wider institutional context within which planning occurs. Figure 12.7 indicates the range of relevant institutions. While by no means complete, Figure 12.7 demonstrates the crowded nature of the planning system and the breadth of interests at play.

The Commission has observed institutionalised commitment to the current planning regime and to current planning practices. Professional associations, the legal profession and special interest associations, as well as resource users themselves, have built up a repository of experience and knowledge based on the existing planning system. Most of the agencies in Figure 12.7 (or implied by it) have a stake in the existing planning system simply because they currently operate within it. Years of developing internal capacity or making decisions within the planning framework engenders a natural conservatism and resistance to change. Reform of the system is unlikely to succeed unless these entrenched views (and the incentives that support them) are understood and addressed.

The role and skillset of urban planners needs to be more tightly defined. A more tightly defined role for urban planners would require some elements of the planning profession (notably urban designers and those promoting New Urbanist ideals) to develop:

- a greater understanding of the scope of influence of the planning profession;
- a clearer focus on the evidential basis for decisions; and
- a greater understanding of the responsibilities that come with the use of the coercive powers of the state.

Figure 12.7 Institutional context of planning

Changes of this nature are unlikely without the support and leadership of professional bodies and universities. When considering reform, the government should identify leaders within these institutions to champion change at the “grass roots” of the profession (ie, new planners). This will require more than just “consulting” with universities and professional bodies on proposed changes. Leaders within these groups will need to have a sense of ownership of the reforms so that they are willing to act as agents of change.

To change existing values and assumptions a group must see that the existing assumptions and patterns of behaviour no longer align with their objectives. In the case of urban planning, a lack of feedback loops makes demonstrating such “cultural misalignment” difficult. That is, because the outcomes of planning decisions are seldom measured, it is difficult to test the founding assumptions on which the decision was made.

Several factors have attributed to this situation.

- Central government has been slow to introduce processes to capture key data on the performance of the planning system. This is partly due to having no clear vision for the urban outcomes that it wants to see and no clear departmental lead within central government (Chapter 5).
- The “success” of the planning system is often judged by the speed at which consents are processed (rather than the outcomes achieved). This overlooks that some consents pose a greater risk to the natural environment than others.
- Outcomes of the system are often the result of a complex mix of socio-economic and biophysical factors – making attribution difficult and mistakes easy to miss. This is particularly destructive where planning “mistakes” are “political successes” (Chapter 6).

Moving forward, changes to planning culture will only become embedded if measures of success align with the broader objectives of the system. This means developing mechanisms that reward planning approaches

that are aligned with the objectives of the system, and provide negative consequences for approaches that are not so aligned (eg, Ministerial intervention in local decisions).

Change strategies will be most effective when “positive” cultural attributes are leveraged against “negative” attributes to achieve the desired behaviour change – and where a balance of rewards and sanctions are used.

F12.11

Successful reform of the planning system will require central government to:

- develop a firm understanding of the institutional forces that act against change – that is, the sources of cultural inertia;
- recognise the importance of universities and professional bodies as agents of change (and engage with them accordingly);
- develop feedback loops that reward planning approaches that align with the objectives of the system (and that discourage behaviours that do not so align); and
- more tightly define the role of urban planning.

12.8 Conclusion

The planning profession has struggled to identify a unique body of knowledge that it can lay claim to, or a specific professional space which it exclusively occupies. This has contributed to the profession having a weak professional identity, leading planners to fall back on legislation to define (and justify) their role in the planning system.

Good planning outcomes are more likely when planning culture:

- places a strong emphasis on the robustness and evidential basis of decisions;
- values continuous learning and feedback;
- empowers staff to “speak-up” and challenge existing practice; and
- acknowledges and respects the boundaries of planning’s influence.

While generalisations are difficult, it is clear that these attributes are not universally displayed within the planning system.

Capability gaps are evident at both the local and central government level. At the local government level, gaps in the area of economic impact assessment and climate change adaptation strategies are evident. Also, some councils find it difficult to fill planning positions – particularly consent planners. Central government has limited knowledge and understanding of the local government sector.

Moving forward, greater emphasis on critical thinking is needed within the planning profession, and more tightly defined boundaries are needed between the technical knowledge of planners and of other professions. Leaders within the planning profession – particularly within universities, professional bodies and councils – will need to play a crucial role in refocusing planning along the lines suggested in this report.

13 A future planning framework

13.1 Introduction

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. This chapter draws together the key findings and recommendations of the report, and outlines what they would mean for the structure, institutions and operation of a future planning system.

13.2 What drives cities?

The “first principles” mandate of this inquiry led the Commission to consider the nature of cities, and the factors that contribute to their success. The overwhelming majority of New Zealanders live in urban areas of some form or another (Chapter 4), and New Zealand has been a majority urban country since the 1910s. The growth of urban populations reflects the many benefits that cities provide to their residents – greater employment opportunities, higher incomes, and better access to services and amenities (Chapter 2).

The benefits created by the co-locations of people and firms are mostly the result of millions of unpredictable decisions made by individuals, and are influenced by changes in technologies and preferences. Attempts to force the creation of these benefits through restrictive rules (eg, planning policies that attempt to promote density in the expectation that this will necessarily lead to higher productivity) are at best, mistaken and, at worst, harmful. There are inherent limits to what land-use planning can achieve (Chapter 6), and greater room and respect should be given to the decisions of individuals and firms in any future planning system.

13.3 What land-use planning can contribute

While individual and firm choices are the driving force behind the growth and evolution of cities, planning can make two main contributions to wellbeing. The first is to ensure that the decisions of both 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. Land-use planning can help manage conflicts between people, by setting up rules to minimise significant harms on others, assigning rights, and by setting up processes to reach decisions on competing interests.

Land-use planning can also create the opportunities and conditions that allow people and firms to make decisions. This is seen mostly clearly in the organisation and provision of infrastructure, where the supply of water pipes and roads is needed before development can take place. In addition, land-use planning can ensure that communities have access to the public spaces and facilities that help to support wellbeing and vibrancy in cities.

13.4 The current planning system – the Commission’s diagnosis

The current system has strengths....

New Zealand’s planning system has a number of strengths, including a focus on speed in approvals for lower-risk developments and relatively enabling zones (Chapter 7). The competence and capabilities of the planning system to recognise Māori interests and engage with Māori stakeholders is evolving (Chapter 11). It has also helped to reduce point-source water pollution and had some limited success in reducing air pollution (Chapter 6).

...but it can struggle to resolve conflicts

Planning deals with conflicts between competing demands for resources (eg, land, clean air, and fresh water), the competing interests of citizen interests and competing values (eg, development, amenity, and environmental protection). The current system makes the resolution of these conflicts harder than it should be.

Planning legislation lacks clarity and focus

Chapters 7 and 8 outlined how ambiguous and broad language in the Resource Management Act 1991 (RMA) and the Local Government Act 2002 (LGA) has led to regulatory overreach in urban areas, and a lack of stringency in the regulation of the natural environment. Overreach in urban areas has created unduly restrictive rules, unhelpful exercises of regulatory discretion and unnecessary conflicts and costs.

The absence of central government has led to unbalanced decisions

Planning decisions have both local and national impacts, but outside of land transport 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, and which have had harmful wider effects – most notably rising land and housing costs.

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) provides limited guidance on how to differentiate important from less-important natural environmental issues, and does not give prominence to urban issues. Central government has a number of instruments it can use to emphasise particular issues or approaches. These include National Policy Statements (NPSs) and National Environmental Standards (NESs). Yet such instruments can sometimes be slow to prepare and translate into local plans and policies, and have no clear hierarchy. It is unclear, for example, what a council should do when it faces conflicts between national instruments.

At the local level, 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).

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 indiscriminating approach to avoiding adverse effects, and infrastructure funding tools (that do not adequately reflect or recover costs or account for the risk placed on councils) also inhibit the system's ability to respond promptly to growth pressures.

13.5 What changes are needed?

Clearer distinctions between the built and natural environment

The natural and built environments require different 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 blurs the two environments, and provides 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 the same framework, a future planning system should clearly distinguish between the natural and built environments, and clearly outline how to manage the inter-relationship between the two.

Greater prioritisation

A future system should be clearer about its priorities, especially at a national level and regarding land use regulation and infrastructure provision. New Zealand's system is unusual by international standards in that

central government has relatively blunt tools with which to signal its priorities, and key legislation (ie, the RMA) provides little guidance. 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). As discussed in Chapter 8, this reflects unresolved tensions within the RMA around the balancing of environmental and socio-economic interests. One area where the system adequately identifies priorities is land transport management. A future planning system would benefit from applying elements of this model more broadly.

More responsive infrastructure provision

A future planning system needs to be responsive in providing key infrastructure, especially where cities are facing high population and housing growth. Infrastructure is a binding constraint on increases in the supply of development capacity, and on the ability to respond to growth pressures. A future planning system needs clearer statutory frameworks for water services, funding mechanisms that better recover costs and reflect the risks involved, better procurement practices, and tools for councils to manage pressures on existing assets.

A more restrained approach to land use regulation

A future planning system should only apply rules where there is a clear net benefit, where the link to externalities is clear, and where alternative approaches are not feasible. This implies:

- broader zones that allow more uses,
- greater reliance on pricing and market-based tools rather than rules;
- less use of subjective and vague aesthetic rules and policies;
- greater use of 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); and
- clearer and broader “development envelopes” within which low-risk development is either permitted or only subject to minimal controls.

Stronger capabilities within councils and central government

A key lesson from the implementation of the RMA is that successfully introducing a new planning regime is not just about replacing legislation. It also requires changes to the underlying institutions – both formal and informal – and capability and culture. In particular, a future planning system would place greater emphasis on rigorous analysis of policy options and planning proposals. Councils will need to build their technical capability in areas such as environmental science and economics. Soft skills such as communication, mediation and facilitation skills will need strengthening, as will an understanding of Māori worldviews. Central government will also need to improve its understanding of urban planning and knowledge of the local government sector more generally (Chapter 12).

13.6 What would these mean for the operation and design of planning in the future?

A presumption in favour of development in urban areas, subject to clear limits

The legislation governing urban planning would clearly specify that the primary purposes of the planning system are to:

- enable development and changes in land use;
- ensure the provision of sufficient development capacity to meet demand; and
- promote the mobility of people and goods to and through cities.

The legislation would also make clear that urban development would need to fit within biophysical limits (specified through the Government Policy Statement (GPS) on environmental sustainability, outlined below).

Clearer legislative purposes will provide better guidance to councils on the sorts of land use rules and policies that should be put in place. A permanent independent hearings panel (IHP) would then scrutinise these proposed rules against the legislative purposes (Chapter 7). Clearer purposes would also give councils greater scope to accept only private Plan changes that promote the goals of flexibility, sufficient supply, mobility, or fitting urban development within biophysical limits.

Factors that should help to encourage more responsive infrastructure provisions in support of development include:

- the greater availability of value capture mechanisms (such as targeted rates that capture the uplift that arises from rezoning);
- more use of pricing for water and roads;
- clearer statutory arrangements for water infrastructure; and
- better-aligned legislative planning requirements (Chapters 9 and 10).

Councils would be encouraged to adopt more sophisticated approaches to procuring infrastructure, and central government could provide greater advisory support to local authorities wishing to use such tools (eg, Public-Private Partnerships).

A clearer set and hierarchy of priorities for the natural environment

In a future planning system, central government would issue a GPS on environmental sustainability, which would have to be given effect to in local plans. This GPS would differ from the current NPSs and NESs in that it would lay out clear environmental priorities and articulate principles to help decision makers prioritise environmental issues when faced with scarce resources or conflicting objectives.

The aims of replacing NESs and NPSs with a single GPS on environmental priorities would be to:

- focus the efforts of the planning system on protecting aspects of the natural environment most at risk or under pressure;
- provide clearer guidance to councils on where to put their resources;
- encourage central government to regularly review the state of the environment and identify priority areas for action; and
- coordinate the environmental protection efforts of local government (through planning) and central government (through its regulatory and funding levers).

As it can take some time to change plans and implement new policies, the GPS will need to have some longevity.

Ideally, the development of each GPS would be informed by scientific advice on the state of the environment, and on the most significant threats to its health. Chapter 8 cited some criteria from the Parliamentary Commissioner for the Environment which could be used to guide advice on an environmental GPS.

More, and more robust, environmental management tools

Rather than relying primarily on rules and other command and control methods, councils would have access to a wider array of policies, including market-based tools. Under a future planning system, central and local government would work more closely to:

- develop standardised methods, data and assumptions to inform effective and locally tailored strategies for adapting to climate change; and
- remove barriers to the development and use of market-based instruments.

More effective management of cumulative effects is a priority for any future planning system. The existing “predict and control” approach struggles to cope with the complexity and uncertainty of natural systems. A greater emphasis on adaptive management is needed.

Infrastructure pricing and funding that more accurately reflects actual costs, use and impacts

The prices charged for installing and using infrastructure under a future planning system would better reflect the actual costs of providing and operating those assets, and the negative externalities created by overuse. This will help to encourage more efficient locational decisions by developers, ease congestion, and discourage wasteful use of scarce resources. It would also help to avoid unnecessary investment and debt costs for councils. A clearer process for central and local government to identify, assess and agree on large-scale “city shaping” infrastructure works should help to ensure that projects with wider spillover benefits can come to fruition. There is also scope for local authorities to make greater use of innovative procurement models, such as Public Private Partnerships. A future planning framework should ensure councils have the capability to use such infrastructure delivery models (Chapters 9 and 10).

Rezoning and regulatory change that adapts more rapidly to circumstances

Instead of every change in Plan provisions and land use regulations going through the Schedule 1 process, under a future planning system a larger share of land use rules would change automatically, in response to pre-identified, objective triggers. In urban areas, this could include land prices hitting certain thresholds or the installation of specified infrastructure. In rural areas, land use rules could be linked to predetermined environmental standards (eg, if nutrient levels in rivers increase beyond particular levels, more stringent controls could be “switched on”). This would provide a more responsive regulatory environment.

Similarly, where price differentials between land zoned for development and non-developable land at the fringe of cities exceed thresholds set by central government, local authorities will be obliged to provide more development capacity, either through “upzoning” within established areas or through rezoning and servicing new greenfields land (NZPC, 2015a). Ensuring that the commitment to bring land price inflation under control is credible, and to act where the land price threshold is exceeded, will require the Crown to have the powers and capacity to rezone and service land itself, if necessary.

A focus on those directly affected by change, not third parties

Notification requirements in a future planning system would be more squarely focused on those directly affected by a resource consent application or land use Plan change. This would better align the operation of the system with its fundamental purpose of managing negative externalities. It would also reduce the opportunities for vexatious litigation, and increase the certainty and timeliness of decisions.

The general public would continue to be able to participate in the processes for reviewing land-use plans, but the ability to appeal council decisions on a Plan would be limited. Only those individuals or groups who could demonstrate that the changes in policy or rules would directly affect them would be able to appeal. Where the council accepted the recommendations of the permanent IHP on a change or review of a Plan, no individual or group could then appeal.

A different role for the Environment Court

The Environment Court would play a different role under the planning system proposed by the Commission. The introduction of a permanent IHP, narrower notification criteria, and more limited abilities to appeal council decisions on regulatory plans for land use, would reduce the Court’s workload. This would help provide greater finality and certainty about regulatory decisions.

The Court would, however, still be needed to hear cases where:

- councils rejected recommendations from the IHP;
- directly affected parties wished to challenge a consent decision;
- applicants wanted to challenge resource consent decisions or conditions; or

- decisions of national importance were “called in”.

The Environment Court would also continue to have roles and functions under other statutes.

More representative, less rigid consultation

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

- encourage and enable participation by people affected, or likely to be affected, by a decision; 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 laid 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 (Chapter 7).

Continued 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 11). So there should continue to be an expectation under a future planning system that councils will engage with Māori/iwi early on in the development and review of Plans, and clear provisions to ensure that engagement. This 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).

Spatial planning as a core, and fully integrated, component

Spatial plans should be a standard and mandatory part of the planning hierarchy in a future system. New and expanded infrastructure increases the supply of development capacity and can improve the mobility of people and goods. Signalling the future location and timing of infrastructure investment is therefore important for the efficient and effective operation of land markets, and for the achievement of the goals of a future planning system. Ensuring that sufficient land (for public streets, other infrastructure networks and public open spaces) has been secured and planned ahead of development is also important for the efficient future growth and operation of cities.

As discussed in Chapters 4 and 9, in recent years a number of local authorities have recognised these benefits and adopted spatial plans that lay out their long-term vision for urban development and help to align land-use planning and the provision of infrastructure. Yet these spatial plans have no official status under the RMA, which leads to frustrating duplication of process.

Making spatial plans a formal and mandatory part of the planning system risks adding to the system’s overall cost and complexity. Given the focus of spatial plans on infrastructure and transport planning, there would seem to be opportunities to partially or fully replace the infrastructure strategy requirements of the LGA and regional land transport plan requirements of the LTMA with a properly defined spatial plan. Removing some other elements of the current planning hierarchy may also be possible.

To ensure that spatial plans are sufficiently flexible to cope with the uncertain growth and evolution of urban areas over time, councils should use real-options analysis when preparing them.

Central government as a more active partner in the planning process

Central government would more clearly signal the national interests in planning decisions, and would monitor the overall performance of the planning system in meeting national goals (ie, flexibility, sufficient development capacity and accessibility) and environmental priorities.

Because poor local planning decisions can create wider social costs and residual risks for the government, central government will continue to need intervention powers. These would include the ability to override

local plans in a limited array of circumstances, to co-ordinate or require common land use regulatory approaches to specific issues (eg, the installation of utilities), and to direct council infrastructure units or providers where there is a need to ensure a credible commitment to bring land prices down.

Table 13.1 Key differences between the current and future planning systems

Current system	Future planning system
Scope of planning legislation	
<ul style="list-style-type: none"> • Planning legislation is broad in scope and lacks clear prioritisation. Urban issues do not have prominence. 	<ul style="list-style-type: none"> • Planning legislation distinguishes between the natural and urban environment. • For urban planning, 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, central government issues a Government Policy Statement that lays out which environmental issues and standards take precedence over others, and must be given effect to in local Plans and decisions.
Consultation	
<ul style="list-style-type: none"> • 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 are more flexible. 	<ul style="list-style-type: none"> • Councils have more flexibility to select the consultation and engagement tool that is most appropriate to the issue at hand. Councils face clearer obligations to encourage and enable participation by people affected, or likely to be affected, by a decision. 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	
<ul style="list-style-type: none"> • Expectation that councils will engage with Māori/iwi in the development and review of Plans. A range of tools is available in statutes and planning practices to support engagement (eg, as devolution, joint management arrangements, identification and protection of sites of significance to Māori and the use of cultural impact assessments). 	<ul style="list-style-type: none"> • The current regulatory framework and engagement tools both continue. Capability and good practice continue to evolve through the spread of successful examples. Guidance from central government on how councils should put legislative provisions into practice possibly increases. • Participants have a good 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.
Rezoning / changes in land use rules	
<ul style="list-style-type: none"> • All Plan changes and reviews must go through the RMA Schedule 1 process. 	<ul style="list-style-type: none"> • Councils are able to set objective thresholds in Plans that, when met, would automatically trigger changes in land use rules.
Appeal rights	
<ul style="list-style-type: none"> • Broad appeal rights are available through the RMA, including for third-parties. Environment Court reviews rules or Plan provisions that are appealed. 	<ul style="list-style-type: none"> • Appeal rights are narrowed to those directly affected by a decision. All Plan changes or new Plans may be reviewed by a permanent independent hearings panel. Where councils have accepted the recommendations of the permanent independent hearings panel on a Plan provision, no merits appeal is available.
Participation in planning decisions	
<ul style="list-style-type: none"> • Public participation in the development of new Plans and Plan changes, including appeal rights, is broad. Resource consent applications with "more than minor" effects are publicly notified. 	<ul style="list-style-type: none"> • Public participation in the preparation of new Plans continues, but appeal rights are narrowed (see above). Site-specific Plan changes have limited notification. Urban notification requirements more tightly focus on those that a proposed development will directly, or highly likely, affect.

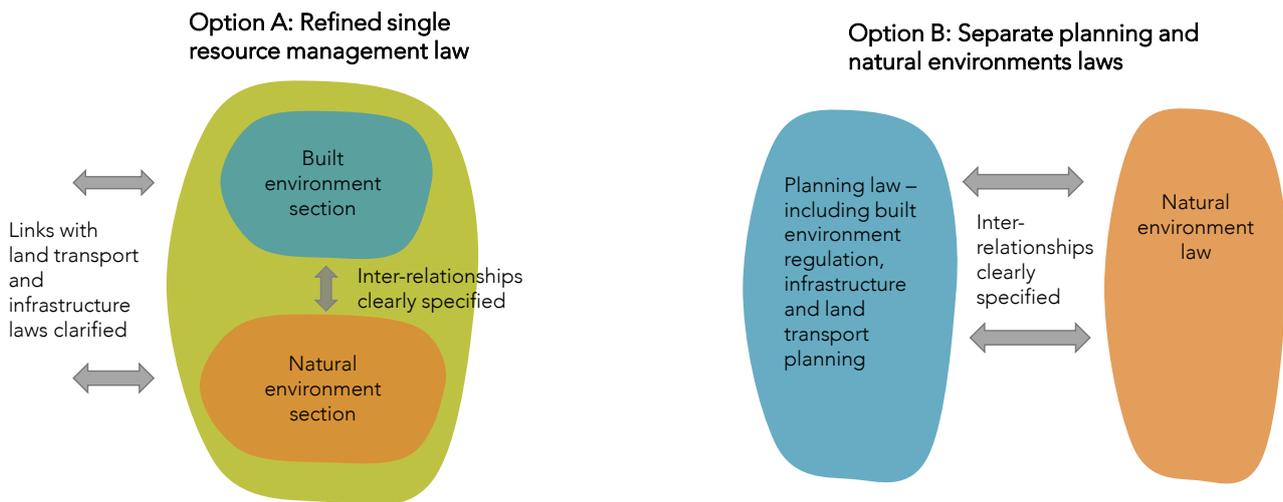
Current system	Future planning system
Land release	
<ul style="list-style-type: none"> • Price signals do not inform planning and infrastructure decisions. • Time-driven release of land is based on population projections, rather than market conditions. 	<ul style="list-style-type: none"> • The commitment to release land and control land price inflation is credible. Central government sets threshold outlining maximum differential between the price of urban and non-urban land. Central government is also empowered to direct council infrastructure units when land price thresholds are breached and council does not respond.
Central government's involvement in planning	
<ul style="list-style-type: none"> • Central government is largely absent from land-use planning decisions, but very involved (via NZTA) in land transport issues. 	<ul style="list-style-type: none"> • Central government more clearly signals the national interests in planning decisions, and provides avenues to work through the implications of these interests with councils. The planning system's desired outcomes (ie, flexibility, sufficient development capacity, accessibility, environmental priorities) are monitored.
Spatial plans	
<ul style="list-style-type: none"> • The spatial plan is a mostly optional tool, with weak legislative links to other planning processes. Some current plans are very broad in focus. 	<ul style="list-style-type: none"> • Spatial plans are a mandatory and integrated component of the planning hierarchy, tightly-focused on issues closely related to land use (ie, the provision of sufficient land for development and water, transport and community infrastructure) and natural hazard management.
Infrastructure funding and procurement	
<ul style="list-style-type: none"> • The supply of infrastructure is rationed, reflecting perceived difficulties recovering costs or risks. 	<ul style="list-style-type: none"> • The use of user charges and targeted rates is increased to capture value uplift. Infrastructure pricing better reflects the actual cost of provision and use of assets. Sophisticated procurement (eg, public-private partnerships) increases. Processes in place for central and local government to assess and agree on large-scale 'city shaping' projects with spillover benefits
Management of the natural environment	
<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Economic and market-based instruments are used more widely. The data and assumptions on which to base the strategies to adapt to climate change are commonly known and cohesive. The approach to cumulative effects is more flexible and adaptive. A stronger multi-level governance is in place, based on a productive interaction between central and local government.
Culture and capability	
<ul style="list-style-type: none"> • Capability gaps exist in technical areas such as economics and environmental science. Outside of a few pockets, central government lacks knowledge of urban planning and the local government sector. 	<ul style="list-style-type: none"> • Technical capabilities are more developed, with increased knowledge in both local and central government. Greater emphasis is on rigorous analysis of policy options and planning proposals and on strengthening soft skills such as communication, mediation and facilitation. Those in central government have a greater understanding of the local government sector.

13.7 Issues still to be resolved

Legislative separation of planning and environmental protection?

Setting the goal of having clearer distinctions between the natural and built environments raises the question of how to reflect this in legislation. The Commission has considered two approaches – retention of a single resource management law, but with clearly separated natural and built environment sections; and establishment of two laws, which regulate the built and natural environment separately (Figure 13.1). Under either approach, the Commission envisages land use legislation having separate purposes and definitions for the natural and built environments. Feedback is sought on which approach would work better.

Figure 13.1 Two possible future legislative models



A large point of difference between the two approaches is how land use regulation for the built environment could be linked to decisions on infrastructure and transport provision. A separate statute which regulates the built environment provides the opportunity to better integrate urban planning activities by combining the roles of land use regulation (within the urban environment) with infrastructure and transport provision into one piece of legislation.

Further, a separate law dedicated to protecting natural resources may bring environmental objectives into greater focus. In their submission, Waikato District Council suggests

it would appear that there would be merit in separating out the environmental from the spatial development planning aspects... The RMA could be replaced with an environmental statute that is more aspirational in character – “What is the natural environment that we want to have in NZ?” From this should be some clear goals that drive achievable objectives and from which an environmental impact assessment regulating system is devolved. (sub. 2, p. 19)

However, regulating the urban and natural environment under a single statute has the advantage of retaining a more integrated approach to resource management. Having separate laws raises the risk of inadequately recognising the interconnection between urban and environmental issues. Adding a new law to the planning system may also increase its complexity and create additional uncertainty for councils and developers.

Q13.1

What are the strengths and weaknesses of these two approaches to land use legislation? Specifically:

- What are the strengths and weaknesses in keeping a single resource management law, with clearly-separated built and natural environment sections?
- What are the strengths and weaknesses in establishing two laws, which regulate the built and natural environment separately?

Centralisation of environmental enforcement, or greater oversight of regional councils?

Making progress on environmental priorities will require more robust monitoring and enforcement. Performance by regional councils on this front has been disappointing. Monitoring efforts are often under-resourced and enforcement decisions show evidence of some political interference (Chapter 6).

This raises the question of whether different institutional arrangements would lead to better performance. One option proposed by some submitters was to expand the Environmental Protection Authority's (EPA) role to take over national environmental regulation, enforced and monitored through a network of regional offices (New Zealand Planning Institute, sub. 27, EMA Northern, sub. 49)

Depending on its design, this approach could help resolve problems of resourcing, capture and inappropriate political interference in enforcement decisions, but would represent a significant change to the structure of local government and involve considerable transition costs. For example, new arrangements would need to be established to conduct region-wide planning exercises (eg, transport). A national regulator may also lack the information or the inclination to reflect local environmental goals or aspirations.

A less radical alternative would be to increase oversight of council monitoring and enforcement activities. For example, the EPA or Ministry for the Environment could be explicitly given responsibilities to audit and report publicly on the monitoring and compliance performance of regional councils. Where a council is found to be performing consistently poorly over time, central government could use its existing powers to intervene (eg, appoint a Crown observer or manager, appoint a Commission, or call another election).

Q13.2

Which of these two options would better ensure effective monitoring and enforcement of environmental regulation?

- Move environmental regulatory responsibilities to a national organisation (such as the Environmental Protection Authority).
- Increase external audit and oversight of regional council performance.

13.8 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 directions. The Commission's proposals for a future planning system are designed to provide this greater responsiveness and adaptability in a number of ways, including:

- less prescriptive land use rules, creating more space for local innovation and adaptation;
- faster "event-based" processes for changing land use rules, better allowing regulation and the supply of development capacity to keep up;
- 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, but leave them to decide how to respond; and
- longer-term infrastructure and land-use planning based on real-options analysis, which explicitly factors uncertainty into the development and analysis of options, and incorporates 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 (NZPC, 2013). 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 woes and its poor urban and environmental outcomes stem from years of neglect or absence by central government, particularly in the founding years of the RMA.

Under the new planning system discussed 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 biophysical 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 be less subject to delays and uncertainty created by appeals and unduly rigid consultation processes. 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, public-private partnerships).

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 the use of a particular piece of land is beneficial or not will continue.

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

- being clearer about the system's purposes, objectives and priorities;
- ensuring that participation in decision making appropriately reflects the interests at stake; and
- making sure that decisions taken are implemented with greater confidence, certainty and speed.

Summary of questions

Chapter 7 – Regulating the built environment

Q7.1

Would it be worth moving to common consultation and decision-making processes and principles for decisions on land use rules, transport and infrastructure provision? How could such processes and principles be designed to reflect both:

- the interest of the general public in participating in decisions about local authority expenditure and revenue; and
- the particular interest of property owners and other parties affected by changes to land use controls?

Do the consultation and decision-making processes and principles in the Local Government Act adequately reflect these interests?

Q7.2

Should all Plan changes have to go before the permanent Independent Hearings Panel for review, or should councils have the ability to choose?

Q7.3

Would the features proposed for the built environment in a future planning system (eg, clearer legislative purposes, narrower appeal rights, greater oversight of land use regulation) be sufficient to discourage poor use of regulatory discretion?

Q7.4

Would allowing or requiring the Environment Court to award a higher proportion of costs for successful appeals against unreasonable resource consent conditions be sufficient to encourage better behaviour by councils? What would be the disadvantages of this approach?

Q7.5

Would it be worthwhile requiring councils to pay for some, or all, costs associated with their visual amenity objectives for private property owners? Should councils only rely on financial tools for visual amenity objectives, or should they be combined with regulatory powers?

Chapter 8 – Urban planning and the natural environment

Q8.1

What should be the process for developing a Government Policy Statement (GPS) on Environmental Sustainability? What challenges would developing a GPS present? How could these challenges be overcome?

Q8.2

Would a greater emphasis on adaptive management assist in managing cumulative environmental effects in urban areas? What are the obstacles to using adaptive management? How could adaptive management work in practice?

Chapter 9 – Urban planning and infrastructure

Q9.1

Which components of the current planning system could spatial plans replace? Where would the greatest benefits lie in formalising spatial plans?

Chapter 10 – Infrastructure: funding & procurement

Q10.1

Is there other evidence that either supports or challenges the view that “growth does not pay for growth”?

Q10.2

Would there be benefit in introducing a legislative expectation that councils should recover the capital and operating costs of new infrastructure from beneficiaries, except where this is impracticable?

Q10.3

Would alternative funding systems for local authorities (such as local taxes) improve the ability to provide infrastructure to accommodate growth? Which funding systems are worth considering? Why?

Q10.4

Would there be benefit in allowing councils to auction and sell a certain quantity of development rights above the standard controls set in a District Plan? How should such a system be designed?

Q10.5

Should a requirement to consider public-private partnerships apply to all significant local government infrastructure projects, not just those seeking Crown funding?

Chapter 11 – Urban planning and the Treaty of Waitangi

Q11.1

What policies and provisions in district plans are required to facilitate development of papakāinga?

Q11.2

How can processes involving both the Te Ture Whenua Act 1993 and the Resource Management Act 1991 be better streamlined?

Q11.3

Do councils commonly use cultural impact assessments to identify the potential impact of developments on sites and resources of significance to Māori? How do councils set the thresholds for requiring a cultural impact assessment? Who sets the fees for a cultural impact assessment and on what basis? What are the barriers to cultural impact assessments being completed in good time and how can those barriers best be addressed?

Q11.4

What sort of guidance, if any, should central government provide to councils on implementing legislative requirements to recognise and protect Māori interests in planning? How should such guidance be provided?

Q11.5

In what way, if any, and through what sort of instrument, should legislative provisions for Māori participation in land-use planning decisions be strengthened?

Chapter 13 – A future planning framework

Q13.1

What are the strengths and weaknesses of these two approaches to land use legislation? Specifically:

- What are the strengths and weaknesses in keeping a single resource management law, with clearly-separated built and natural environment sections?
- What are the strengths and weaknesses in establishing two laws, which regulate the built and natural environment separately?

Q13.2

Which of these two options would better ensure effective monitoring and enforcement of environmental regulation?

- Move environmental regulatory responsibilities to a national organisation (such as the Environmental Protection Authority).
- Increase external audit and oversight of regional council performance.

Findings and recommendations

The full set of findings and recommendations from the report are below.

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 meet the needs 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 differing purposes of the three planning Acts create internal tensions, duplication, complexity and costs.

F5.3

The founders of the Resource Management Act envisaged it as an enabling statute that would produce "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.

F5.4

Appeal rights in New Zealand are broader than in other comparable jurisdictions. The ability to appeal provisions of Plans is particularly unusual.

F5.5

The carrying over of old traditions and institutions from the former Town and Country Planning Act, capability gaps, and local government restructuring, contributed to the Resource Management Act failing to achieve its potential.

F5.6

Although local authorities are required to ensure that their plans, policies and regulations are necessary, efficient and effective, these checks and balances have had disappointing effects.

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

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.

F5.9

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.

F5.10

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. However, 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, as 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 and local or political resistance has limited the planning system's ability to manage pollution of fresh water or cumulative pollution.

Chapter 7 – Regulating the built environment

Findings

F7.1

The planning system shows considerable evidence of unnecessary, excessive and poorly-targeted land use regulations.

F7.2

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.

F7.3

In trying to protect existing city and town centres, some New Zealand urban local authorities have sought to reduce retail and commercial competition from other locations.

F7.4

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 ideal, not least because such rules can take a long time to change and inevitably lag developments on the ground.

F7.5

Council requirements on some developments to undergo urban design assessments are leading 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.

F7.6

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 price of residential and commercial land has increased at much faster rates.

F7.7

The planning system has an inherent status quo bias and risk aversion, 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;
- the pressure placed on councils not to set rules and policies that enable development; and
- an overemphasis in the implementation of the RMA on managing or avoiding adverse effects, which does not sit well with the dynamic nature of urban environments.

F7.8

The current planning system is too often blind to price signals, leading to poor responsiveness, and undersupply of development capacity, and misdirection of effort.

F7.9

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 can take considerable time to complete.

F7.10

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.

F7.11

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.

F7.12

Current institutional arrangements do not provide the level of scrutiny over land use regulation that they could. While the Environment Court plays an important role as a check on local authority regulation, it only has the opportunity to review those rules or provisions that have been appealed. As a result, only a limited proportion of a District Plan's rules are subject to thorough scrutiny.

F7.13

Central government lacks the capability and systems needed to support timely and well-informed intervention on issues of local land use regulation, or effective engagement with local authorities on planning issues.

Recommendations

R7.1

Future urban planning legislation should clearly prioritise responding to growth pressures, providing land use flexibility, and supporting the ability of residents to easily move through their city.

R7.2

Information about land price 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.

R7.3

A future planning system should allow for more responsive rezoning, in which land use controls can be set in anticipation of predetermined and objective triggers and activated once those triggers are reached.

R7.4

A future planning system should focus urban notification requirements (and any associated appeal rights) on those directly affected, or highly likely to be directly affected, by a proposed development. This would better align the planning system with the fundamental purpose of managing negative externalities.

R7.5

Any appeal rights on Plans in a future system should be limited to people or organisations directly affected by proposed plan provisions or rules.

R7.6

Consultation requirements under a future planning system should:

- give councils flexibility to select the most appropriate tool for the issue at hand;
- allow councils to notify only affected parties of Plan changes that are specific to a particular site;
- 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.

R7.7

A permanent Independent Hearings Panel should be established to consider and review new Plans, Plan variations and private Plan changes across the country. As with the Auckland and Christchurch IHPs:

- councils should retain the rights to accept or reject recommendations from the permanent Independent Hearings Panel; and
- once a council accepts a recommendation from the permanent Independent Hearings Panel, appeal rights should be limited to points of law.

R7.8

A future planning system should enable councils to provide targeted infrastructure or services investment (eg, the expansion of green spaces or upgrades to existing community facilities) for areas facing significant change, to help offset any amenity losses.

R7.9

Central government should develop processes to more clearly signal the national interest in planning, and have protocols to work through the implications of these national interests with local authorities. It should also monitor the overall performance of the planning system in meeting national goals (ie, flexibility, sufficient development capacity and accessibility).

R7.10

In a future planning system, central government should have the power to

- override local plans in a limited set of circumstances,
- co-ordinate or require common land use approaches to specific issues, and
- direct council infrastructure units or CCOs to increase their supply, where the differential between the price of developable and undevelopable land exceeds a pre-determined threshold.

Chapter 8 – Urban planning and the natural environment

Findings

F8.1

Efficient management of the natural environment in urban areas requires an understanding of links between the different components of the natural system, and of how decisions that affect one component of the system influence other parts of the system. This requires specialist scientific knowledge supported by reliable data.

F8.2

Philosophical tensions are at the core of the Resource Management Act. Successive governments have failed to find a way to efficiently represent different perspectives and reconcile these tensions.

F8.3

Sustainability and sustainable development are core principles of New Zealand's planning system. Yet the philosophical lens through which actors in the system should interpret these concepts has never been clear.

F8.4

Failure to provide clarity around the purpose of the RMA has resulted in:

- interpretations of the statute that seem inconsistent with the reported intent of the Act;
- inconsistency in how councils administer the law;
- reduced accountability for public decision makers who lack clear benchmarks against which their performance can be assessed;
- regulatory creep as councils bring an ever-increasing scope of issues under the banner of "sustainable management"; and
- a loss of focus in urban areas on maintaining the integrity of ecosystem services.

F8.5

The Environmental Reporting Act 2015 is a significant step forward in the development of sound environmental data. However, it is unclear how the data collected will link with monitoring the effectiveness of land use regulation.

F8.6

Recent steps to strengthen central government oversight of the Resource Management Act have focused predominately on process indicators (such as the time taken to process consents) rather than the environmental outcomes of planning decisions.

F8.7

The core functions of urban planning will play an important role in adapting to climate change. This role will need to be reflected in any future planning system.

F8.8

Adapting to a changing climate will require more than simply strengthening planning legislation. Improvements in other parts of the planning system will be required, including:

- standardising the methods, data and assumptions used as the basis for developing adaptation strategies;
- improving understanding of the costs and benefits of alternative adaptation strategies (both within local and central government and within affected communities);
- identifying people, places and infrastructure that are most vulnerable to the impacts of climate change and prioritise them accordingly; and
- improving understanding of the interaction between existing stresses on the environment and the impacts of climate change.

F8.9

Evidence shows that increasing residential density can reduce vehicle use in some situations. But also it shows that local factors (other than density) are at least as important in influencing travel behaviour.

F8.10

Evidence on the proposition that higher-density cities in New Zealand are more environmentally sustainable is ambiguous at best.

Recommendations

R8.1

A future planning system should include a Government Policy Statement (GPS) on environmental sustainability. The GPS should:

- set out a long-term vision and direction for environmental sustainability;
- establish quantifiable and measureable goals against which progress would be monitored and reported on; and
- establish principles to help decision makers prioritise environmental issues when faced with conflicting priorities or scarce resources.

R8.2

Before attempting to use urban planning as a means of reducing GHG emissions in New Zealand, a more robust empirical research base should be developed reflecting New Zealand circumstances. Specifically, research should aim to improve the government's understanding of local factors that shape urban GHG emissions in New Zealand, and the extent to which urban planning can influence these factors.

R8.3

Central and local government should develop an agreed set of principles to govern the development of national regulations that have implications for the local government sector. This should be along the lines of the 'Partners in Regulation' protocol recommended in the Commission's report *Towards Better Local Regulation* (2013).

R8.4

When regulating urban spillovers affecting the natural environment, a future planning system should provide government bodies access to the full suite of policy tools including market-based tools.

Chapter 9 – Urban planning and infrastructure

Findings

F9.1

Infrastructure assets:

- are long-lived;
- are lumpy;
- are highly place specific and inflexible;
- are irreversible;
- are typically part of a network;
- need to be coordinated often; and
- may require public funding.

Providers of infrastructure are exposed to many risks, including that demand may be less than expected and their assets are underused or stranded. This puts a premium on effective planning, procurement, monitoring and funding processes.

F9.2

The current infrastructure planning and provision systems are insufficiently responsive, do not always align infrastructure supply and land use rules, and lack tools for the provision of city-shaping assets.

F9.3

Institutional and governance arrangements for “three waters” infrastructure act against responsive supply.

F9.4

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.

F9.5

Fragmented and small-scale water networks in New Zealand, the uncertain net benefits of mergers, and the high costs of setting up alternative institutions mean that the Commission does not see merit in proposing large-scale structural reform for urban water services. However, there is considerable scope for improved performance in the delivery of water services.

F9.6

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.

F9.7

The Auckland Transport Alignment Project is a promising institutional innovation to enable the council of a major city and central government to work together and consider a central funding contribution when a major programme of urban infrastructure has national spillover benefits.

Recommendations

R9.1

Spatial plans should be a standard and mandatory part of the planning hierarchy in a future system. Spatial plans should be tightly defined and focus on issues closely related to land use, in particular the provision of water and transport infrastructure and community facilities (eg, green space, reserves, conservation areas, and libraries), protection of high value ecological sites, and natural hazard management.

R9.2

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 to conduct real-options analysis in the development of land use plans.

R9.3

A future planning system should include institutions or formal processes through which councils and central government can work together to assess major programmes of urban infrastructure investment with wider spillover benefits.

Chapter 10 – Infrastructure: funding & procurement

Findings

F10.1

An efficient infrastructure funding system would consider three important issues: peak load pricing, connection charges and marginal cost pricing.

F10.2

Financial modelling provides some support for arguments made by councils that it can take a long time to recover the costs of new infrastructure.

F10.3

Financial, legislative and political barriers are limiting the ability of local authorities to efficiently recover the costs of infrastructure.

F10.4

Regulatory barriers do not seem to prevent councils from using 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 them.

F10.5

Examples such as the Waikato region 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 councils.

Recommendations

R10.1

A future planning system should allow councils to:

- set volumetric charges for both drinking water and wastewater; and
- apply prices for the use of existing local roads where this would enable more efficient use of the road network.

R10.2

Councils should use targeted rates to help fund investments in local infrastructure, wherever the benefits generated can be well defined.

R10.3

A future planning system should enable councils to levy targeted rates on the basis of changes in land value, where this occurs as the result of public action (eg, installation of new infrastructure, upzoning).

R10.4

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 current regional shared-services initiatives that increase project scale and develop project commissioning expertise.

Chapter 11 – Urban planning and the Treaty of Waitangi

Findings

F11.1

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 are more closely connected to urban land-use planning than others.

F11.2

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.

F11.3

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.

F11.4

There is broad support for carrying forward into any new urban planning system the current general regulatory framework for recognition and protection of Māori interests and for Māori engagement in land-use planning.

Chapter 12 – Culture and capability

Findings

F12.1

A number of historical influences have shaped the planning culture in New Zealand:

- during the chaotic growth and widespread disease brought on by the Industrial Revolution, planning embraced the moral precept of doing good for society by bringing “order” and “certainty”;
- 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.

F12.2

A “procedural” view of planning dominates the professional identity of the planning profession in New Zealand and overseas. This perspective of planning emphasises how planners can make planning processes work more effectively, rather than examining whether planning is the best tool for achieving a desired social outcome.

F12.3

Planning institutes see planning as making a positive contribution to a broad range of social outcomes. The profession appears to have developed a “cultural licence” to assert specialist knowledge in a wide range of socio-economic and environmental issues – often with little specialist training in the area.

F12.4

The New Zealand Planning Institute provides 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.

F12.5

The planning profession in New Zealand has struggled to carve out a unique professional identity. 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.

F12.6

Planning practices can be influenced by the organisational culture of councils, particularly in areas such as the relationship between planners and iwi/Māori and the openness of councils to new and innovative approaches to planning tasks.

F12.7

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 adaption 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
- acknowledge and respect the boundaries of planning’s influence.

F12.8

A well-functioning planning system requires central and local government to have access to specialist technical knowledge such as engineering, economics, legal analysis and environmental science. Just as important are “soft skills” such as communication, mediations and facilitation skills and an understanding of Māori worldviews.

F12.9

No standard assessment of planning capability currently exists, and the available indicators have limitations. Even so, these indicators suggest:

- not all planners have planning related qualifications – around 20% to 30% have qualifications in other disciplines;
- many councils have difficulty finding qualified staff to fill planning positions – particularly for consent planners (NZPI members appear to have fewer problems attracting staff);
- the planning profession is used to ongoing professional training, and planners generally consider the standard of existing training to be high; and
- a high proportion of consent applications are completed within statutory timeframes (although speed is a poor indicator of capability).

F12.10

Many councils have capability gaps in technical areas such as economics and environmental science. These gaps hinder the ability of councils to undertake rigorous evaluation of the costs and benefits of alternative policy options and planning proposals. Some councils also lack the capability to engage effectively with iwi/Māori.

F12.11

Successful reform of the planning system will require central government to:

- develop a firm understanding of the institutional forces that act against change – that is, the sources of cultural inertia;
- recognise the importance of universities and professional bodies as agents of change (and engage with them accordingly);
- develop feedback loops that reward planning approaches that align with the objectives of the system (and that discourage behaviours that do not so align); and
- more tightly define the role of urban planning.

Recommendations

R12.1

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 in areas such as environmental science and economics. It would also require strengthening soft skills – particularly those needed to engage effectively with iwi/Māori.

R12.2

Central government should improve its understanding of urban planning and knowledge of the local government sector more generally. An improved understanding will help promote more productive interactions between central and local government.

Appendix A Public consultation

Submissions

INDIVIDUAL OR ORGANISATION	SUBMISSION NUMBER
Allison Tindale	008
Aquaculture New Zealand	013
Associate Professor Caroline Miller	050
Auckland Council	047
Auckland Regional Public Health Service	030
B Waghorn	009
BusinessNZ	018
Canterbury District Health Board	011
Catherine Scheffer	039
David Hattam	041
Duncan Rothwell	038
Dunedin City Council	032
Employers and Manufacturers Association (Northern)	049
Environment Canterbury	012
Far North District Council	045
Federated Farmers of New Zealand	021
Future Proof	043
GNS Science	016
Greater Christchurch Urban Development Strategy	044
Greater East Tamaki Business Association Inc.	046
Hamilton City Council	004
Hawke's Bay District Health Board	040
Hill Young Cooper Ltd	006
Horizons Regional Council	025
ICOMOS New Zealand	048
Local Government New Zealand	019
New Zealand Council for Infrastructure Development	020
New Zealand Planning Institute	027
New Zealand Telecommunications Forum	022
Otago Regional Council	036
Palmerston North City Council	024
Professor Hirini Matunga	052
Property Council New Zealand	031
Public Health South	017
Rangitikei District Council	010
Regional Public Health and the New Zealand Centre for Sustainable Cities	035
Registered Master Builders Association	026
Retail NZ	029
Rhys Phillips	001
Robert Riddell	003
Rosebank Business Association	051
Selwyn District Council	033
Sir Geoffrey Palmer QC and Dr Roger Blakeley	007

SmartGrowth	042
Stephen Milner	014
Toi Te Ora – Public Health Service	015
Urban Design Forum NZ	037
Waikato District Council	002
Waipa District Council	005
Water New Zealand	023
Watercare Services Limited	028
Wellington City Council	034

Engagement meetings

INDIVIDUAL OR ORGANISATION

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, Te Waka Angamua
 Auckland Independent Māori Statutory Board
 Bank of New Zealand
 Bell Gully
 Boffa Miskell
 BRANZ
 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
 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 New Zealand
 Local Government New Zealand – Metro Sector
 Local Government New Zealand – Rural and Provincial Councils
 Mark Sowden
 Ministry for Primary Industries
 Ministry for the Environment

Ministry of Transport
Motu Economic and Public Policy Research
Muna Wharawhara, Te Amorangi Māori – Hamilton City Council
New Zealand Council for Infrastructure Development
New Zealand Fish and Game Council
New Zealand Initiative
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
Parliamentary Commissioner for the Environment
Professor Hirini Matunga – Lincoln University
Professor Klaus Bosselmann
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
Sir Geoffrey Palmer QC
Sir John Hansen
Tauranga City Council
Te Rūnanga o Ngāi Tahu
Te Rūnanga o Ngāti Whātua
Waikato Regional Council
Waikato River Authority
Waikato Tainui
Wigram Capital Advisors

Better Urban Planning wānanga

Te Noho Kotahitanga Marae, Unitec, Auckland
Ngā Aho (network of Māori designers) and Papa Pounamu (NZPI Māori Interest group)

17 June 2016

Australia engagement meetings

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

New Zealand Transport & Infrastructure Summit

University of Otago – Sustainable Urban Transport

University of Otago – Urban Health and Sustainability: Affordable Housing

Presentations

BusinessNZ

NZ Planning Institute

NZPI Conference 2016 - The Next Generation Planning System Workshop

Roundtable – Ministry for the Environment, The Treasury, Local Government New Zealand

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