

Part Three

# Implementation



*The ongoing success of the National Infrastructure Plan revolves around its ability to set a vision and then to make measurable progress towards achieving it.*

The Plan identifies a number of actions for government and provides some guidance on the opportunities for local government and the private sector.

The first edition of the plan provided a number of short term priorities for infrastructure investment and regulatory reform. In addition, it provided a stock-take of infrastructure in New Zealand, and identified a number of proposed projects around the country.

This second edition sets out a vision, principles and goals to provide an 'operating framework' for infrastructure decision-makers. At the coal-face, decisions are based on the best information available. However, at a national level the information available is variable in relation to the stock, state and value of infrastructure assets. Specific actions are required to allow the next version of the Plan, scheduled for 2014, to provide greater direction to decision makers. In building towards 2014, the Crown will work with infrastructure providers and managers to collect improved national information and trends.

The implementation program for the Plan will be provided on the National Infrastructure Unit website (www.infrastructure.govt.nz). This will include a breakdown of all the actions arising from this Plan, and which agency is responsible for leading implementation and reporting back on progress in the interests of transparency.

In addition to the overall nationwide work programmes, the two cities of Auckland and Christchurch face significant infrastructure challenges, which require specific infrastructure tools. Auckland, as the largest and fastest-growing metropolitan region, faces significant infrastructure demands and the new Auckland Council's Spatial Plan will provide one framework for addressing these. Christchurch, and the wider Canterbury region have a large rebuilding task ahead, which the new Canterbury Earthquake Recovery Agency will manage. These are discussed further in the following pages.

The government is committed to the short-term actions that will allow the Plan to deliver on a long term perspective.

## Evolution of National Infrastructure Plans



# Focus on Auckland



## The Challenge

As outlined in this Plan, New Zealand as a whole faces some significant infrastructure challenges. Many of these are felt most acutely in our largest and fastest growing city. While Auckland will account for 60 per cent of New Zealand's future population growth, is a strong productivity performer, boasts high wages, and is our international gateway, it also faces significant social and economic challenges as well as opportunities for economic growth. Auckland's future growth has to be well managed and the government is already investing in key infrastructure sectors.

In the past, Auckland has suffered particularly from infrastructure issues associated with:

- » **Coordination** – Infrastructure investment decisions made by central government departments and agencies (including transport, education, health, justice) and local government in Auckland are often poorly coordinated with each other and with land use and other strategies for the city.
- » **Funding** – Auckland's infrastructure aspirations are often disconnected from funding and implementation realities, and funding priorities and strategies are often misaligned. Not enough effort has been made to explore alternative options for funding and financing high-value projects, including using pricing to manage demand and raise revenue.
- » **Resilience** – Building resilience into the energy and telecommunication sectors is of key importance if Auckland is to be a globally competitive city in which investors have confidence. For example, all sources of electricity generation are south of the city and feed through one of only two major transmission lines.

## The Opportunity

The Royal Commission on Auckland Governance was established in October 2007 to respond to a growing concern that the region's development was being held back by fragmented local government arrangements. The Commission's key recommendation, when it reported in March 2009, was the amalgamation of all eight local authorities in Auckland into a new single unitary authority called the Auckland Council. This and many other recommendations were adopted and implemented by the current government.

The governance reforms have, in the Auckland Council, created an organisation of significant scale and influence, with a real opportunity to help tackle the important issues facing the region. The Auckland Council will have a greater ability to:

- » Make key strategic decisions, prioritise investments, raise capital, and partner with the private sector and central government.
- » Develop a robust evidence-base and expertise on the growth pressures facing the region, and understand the urban growth management and infrastructure investment that will deliver both realistic and achievable outcomes in the long term.
- » Develop expertise in project assessment and delivery, and in the operation of large and complex infrastructure networks.

This creates enormous opportunities for Auckland and New Zealand. The key document to help ensure these opportunities are realised is the Auckland Plan (or Auckland Spatial Plan), also a key Royal Commission recommendation adopted by the government.

## The Auckland Plan

The Auckland Plan is a broad-based strategy for the management of Auckland's growth, its aim is to enable the type of urban growth required to make Auckland more competitive and productive. The Auckland Plan is intended to be a 30-year economic, environmental, social and cultural strategy for the management of Auckland's growth and development. Its aim is to enable the type of urban growth required to make Auckland more competitive, productive and prosperous. The development of the Auckland Plan will be an important opportunity to identify, negotiate and agree on priorities and actions across multiple parties including local and central government, the private sector and non-government organisations.

The Auckland Plan will be a strategic instrument rather than a regulatory one, but the strategy it contains will influence statutory instruments such as the Auckland Unitary Plan, and therefore resource consent and other decisions made in Auckland.

The Auckland Council launched the "Auckland Unleashed" discussion document for engagement and consultation on 23 March 2011, leading up to the release of the Auckland Plan in December 2011.



## The Role for Central Government

As the largest investor in Auckland's infrastructure, the investment decisions that central government makes, and how it engages with the Auckland Council and the Auckland Plan, will have a significant influence on Auckland's future and the realisation of the agreed strategy for growth.

The Auckland Plan will not alter the fundamentals of how central government budgets for or makes infrastructure investment decisions, but it will be a key vehicle for negotiating and agreeing on joint strategic priorities and actions between central government and the Auckland Council. If implemented successfully the Auckland Plan will help central government meet its objectives.

The government expects the billions of dollars that it is already investing in Auckland to deliver outcomes, and expects better use to be made of current infrastructure assets. The Auckland Plan provides a coordination and information-sharing tool to help deliver better outcomes, by ensuring that agencies' investment decisions are aligned (where possible and appropriate) with each other and with local government and private sector infrastructure investment and landuse decisions.

To work, the Auckland Plan will need to acknowledge and reinforce central government's objectives for New Zealand, and complement central government interventions, funding and decision-making processes. At the same time central government will need to consider changes to current policy settings or funding scenarios if the Auckland Plan demonstrates that there are better ways of achieving things. Central government's spending decisions should always be informed by the best available evidence, and there is opportunity for the Auckland Plan to bring useful evidence to light.

Central government agencies will work closely with the Auckland Council and all Aucklanders in the development of the first Auckland Plan. There is an expectation that government agencies will, as part of good business case development and overall decision-making, consider the Auckland Plan (and the landuse, growth and infrastructure strategy it contains) in their own investment decisions and strategies.



## Focus on Christchurch

Christchurch was struck by two large earthquakes on 4 September 2010 and 22 February 2011. The February earthquake had a human toll of 181 dead, and there was significant damage to buildings and infrastructure in the CBD and residential areas, especially in the city's eastern suburbs. Christchurch has continued to experience aftershocks, including two that caused further damage to infrastructure on 13 June, and these are likely to continue for some time.

### Damage to Infrastructure

Most of the network infrastructure in Christchurch was disrupted, or was constrained, in the initial hours after each earthquake. The networks showed some resilience, in that lifelines operators were able to make temporary repairs to progressively return services in the short-term, but it will be many years before all services are fully restored.

Following the February earthquake, the effects on infrastructure were:

- » **Transport** – Minor damage to state highways, with local roads and structures (bridges etc) affected by shaking and liquefaction, while cordons around damaged areas of the CBD have led to traffic management issues. Lyttelton Port and

Christchurch International Airport suffered some disruption, but were operational relatively quickly. Air traffic control was out of action for several hours, which had flow-on effects for air travel over much of the country.

- » **Communications** – Initial disruption was due to cell sites being damaged or losing power, with some on batteries/generators for several weeks, but overall service was maintained.
- » **Energy** – Initial disruption of electricity was gradually restored to most of the city, sometimes with temporary lines.
- » **Water** – Council-owned water assets were significantly damaged. Drinking water has been progressively restored to suburbs over time. Waste/storm pipes were damaged in the eastern side of the city and it is likely that a full rebuild will take many years.
- » **Social** – Forty-three Christchurch schools suffered moderate to serious damage, with six so badly damaged that their facilities are unusable – most are working out of temporary/shared locations; the majority of local and central government services were relocated to areas outside the CBD; some damage to the hospital occurred.

## Coordination

After the September earthquake, a Minister for Earthquake Recovery was appointed. Recognising that the February earthquake was above the scale that local authorities can be expected to respond to, the government established the Canterbury Earthquake Recovery Authority (CERA) as a government department.

During its establishment phase, CERA will:

- » Establish and maintain close working relationships with local councils, other local and central government agencies, Ngāi Tahu, businesses, and the local community.
- » Coordinate and prioritise recovery planning by central government agencies.
- » Gather information necessary to assess the best approach(es) to the long-term recovery and then work on a long-term recovery strategy.
- » Review and oversee existing operations on the ground and work towards structures and arrangements that will be necessary for effective and coordinated rebuilding and recovery of Christchurch.

CERA has significant powers, similar to those that apply in a state of emergency, so the model includes a number of fora and review panels. One of CERA's goals, consistent with the National Infrastructure Plan, is to increase coordination amongst other agencies working in this area.



## Challenges and Opportunities Ahead

The immediate challenges for CERA and the local authorities are to restore basic infrastructure to the residents and businesses in Canterbury, moving from temporary fixes to longer-term solutions. At the same time, councils are continuing to progress infrastructure rebuilding in the wider Canterbury area affected by the September earthquake, e.g. land remediation in Kaiapoi.

Decision-makers will balance a desire to act quickly to restore services and confidence against the opportunity to redesign and rebuild New Zealand's second largest city, with incentives to try innovative approaches to deliver infrastructure and quality of life.

This National Infrastructure Plan focuses on population and economic growth as two key drivers of infrastructure demand. The earthquakes have impacted both of these, with people leaving the area (a mixture of permanent and temporary exits) and a significant impact on business productivity in affected areas (with a resulting decline in employment and the rating base). There will be a population influx and increased economic activity associated with rebuild, but this is at the expense of other productive activity, and there are challenges in predicting what the size and make-up of Christchurch will be after this period.

The significant rebuilding task ahead also has implications for the availability of construction personnel across the country (and internationally, given similar pressures in Queensland and Japan), and thus risks overheating the construction market and increasing the price of other infrastructure developments.

Looking wider than Christchurch and Canterbury, the earthquake raises questions about infrastructure and building standards across the country, especially around whether structures built before the current standards need assessment and strengthening. The recently-announced Royal Commission on the Canterbury Earthquake will examine issues around the built environment in the Christchurch CBD and the adequacy of the relevant building codes and standards into the future. This flows into the wider resilience points referred to in this Plan.

# Work programme

This Plan recognises a number of Ministerial priorities for infrastructure, guiding principles to set the government's aspiration for infrastructure, and a three-year programme of action to give effect to the principles. In addition, the Plan signals actions within each sector, which link back to the principles.

Over the next three years, the National Infrastructure Unit will work with other government and private sector agencies to give effect to the actions in this Plan, and will report on activities and progress at [www.infrastructure.govt.nz](http://www.infrastructure.govt.nz).

The overall approach involves a mixture of:

- » Maintaining a high level of dialogue with stakeholders, and developing partnerships.
- » Working with industry stakeholders to identify opportunities for better regulation.
- » Improving the practice of government as an asset manager.
- » Research into infrastructure issues to allow improved management in the future.
- » Reporting on a regular basis against the vision, goals and principles set out in the Plan, and on infrastructure performance.

## Partnerships

No one organisation – government or otherwise – can achieve the vision set out in this document in isolation. Partnerships and good communication are therefore crucial.

One of the key relationships is between central and local government. The Canterbury earthquakes demonstrate the significant investments that local governments have and their critical importance to daily life and the economy. While each local authority is accountable to its community, the government must also understand the total effect of local government on the country's economy, and work with local government to improve performance reporting.

### Action

The government will develop a coordinated communications program with key stakeholders and partners in each sector to allow regular and meaningful communication on infrastructure issues, including identifying and collating information on regulatory barriers. Initially (2011 to 2012), this will focus on how to implement the immediate priorities and actions in this Plan.

## Government Agencies

The government has a number of agencies responsible for delivering infrastructure – in particular social infrastructure (e.g. education, health, justice). The government is also a major investor in some sectors (such as energy/electricity) through SOEs and a number of agencies have a monitoring role with these agents. In addition, the government will provide a stable and transparent regulatory environment in each sector.

### Action

Given the significance of the government sector, and the need for leadership, the government will focus on how to improve the efficiency and performance of its own assets and asset management systems. This will include learning lessons from those agencies that are leaders in asset management within the government.

## Research

The New Zealand infrastructure market involves a number of players from the government to the private sector. While the government owns a number of assets, most sectors have clear pricing structures that are linked to demand. This allows infrastructure providers to deliver an appropriate level of service relative to demand. However, collating consistent information on asset performance at national level in some sectors is challenging (e.g. urban water systems).

In many cases, different decisions might be made in the future if better data was available now. The government believes that further research into the infrastructure market in New Zealand is critical to achieving the vision set out in the Plan. Initial priorities for research topics for the government or other infrastructure providers are:

- » Demand management and modelling.
- » Creating national datasets of projects and performance measures.
- » Benefits and costs of alternative procurement models.
- » Regulatory barriers – the real costs.
- » Resilience – understanding network resilience issues relating to assets, coordination and end-user expectations, including seismic and other forms of geophysical and environmental research.
- » Continuing to refine models on externalities and Cost Benefit Analysis to improve decision making in a New Zealand context.

### Actions

Government will develop a research framework for infrastructure which feeds into its broader funding programme for research, science and technology based on these initial priorities.

Government will seek support for research from other infrastructure providers.



