



THE TREASURY

Kaitohutohu Kaupapa Rawa

*National Infrastructure Advisory Board
& the Treasury's National Infrastructure Unit*

Progress one year on from
the Thirty Year New Zealand Infrastructure Plan 2015

NATIONAL STATE OF INFRASTRUCTURE REPORT 2016



Introduction and Publication Details

Introduction to this Report

The 2016 *National State of Infrastructure Report* is the third annual “State of the Nation Report” the Treasury’s National Infrastructure Unit (NIU) has prepared. Previous reports were published in 2012 and 2013. In the *Thirty Year New Zealand Infrastructure Plan 2015* (the Plan), the Government committed to the Treasury’s NIU reporting on the progress of the Plan through an annually published *State of Infrastructure Report*. The Plan was the first Infrastructure Plan to identify specific actions from central government, local government and the private sector that would be reported on. The report is a joint NIU and National Infrastructure Advisory Board publication and provides an update one year on from the Plan.

The format of the report is similar to previous 2012 and 2013 reports and contains a separate page highlighting key achievements and challenges on each infrastructure sector and a report back on Auckland and Christchurch. The 2015 Plan contained Auckland and Christchurch overviews and, with the Canterbury rebuild and large growth in Auckland, New Zealand’s largest city, there is a need to maintain a focus on these cities. This report also contains a report back on the eight key anchor items, which represent a shift in the new approach to infrastructure, outlined in the Plan and a report back on the identified action items in the 2015 Plan with the addition of new action items. Input on progress achieved against each action item has been provided by lead agencies.

In putting this report together, the NIU acknowledges the contributions provided by colleagues from across government and infrastructure organisations and feedback from our strategic partners: Local Government New Zealand (LGNZ), New Zealand Council for Infrastructure Development, BusinessNZ, Institute of Public Works Engineering Australasia (IPWEA) New Zealand and Water New Zealand.

National Infrastructure Advisory Board

The National Infrastructure Advisory Board comprises a small group of suitably experienced and connected people, largely drawn from outside of central government. The Board provides independent expert advice to the NIU and to the Minister of Finance.

The National Infrastructure Advisory Board acts as an independent source of information and new policy thinking; acts as a conduit for engagement with the private sector, local government and other stakeholders outside central government; promotes best practice in the evaluation, planning, funding and delivery of infrastructure; and assists the Unit to monitor progress towards government infrastructure objectives.

National Infrastructure Unit

Located within the Treasury, the NIU has the overall responsibility for the Plan, working with the various agencies responsible for the different infrastructure sectors and ensuring a coordinated work programme is in place to deliver the Plan’s vision. The NIU has a particular focus on the national perspective, looking across the different infrastructure sectors at the networks and interdependencies between them.

The NIU recognises the critical role that local government and businesses play in the Plan. The majority of the work the NIU does is with the responsible agencies and decision-makers at the policy stage, focusing on the Plan’s outcomes and the new approach. The NIU leads a small number of items on the work programme, usually in conjunction with others, and typically where the issues cross infrastructure sectors and involve multiple agencies. The NIU also supports the National Infrastructure Advisory Board and, being located within the Treasury, provides advice to the Minister of Finance on spending and policy proposals.

Further information on the NIU, the Plan and the work programme is available at: www.infrastructure.govt.nz

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<http://www.infrastructure.govt.nz/plan/2015implementation/2016report>



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Contents

Overview by National Infrastructure Advisory Board.....	002
Overview by the Treasury's National Infrastructure Unit	004
Anchor Items.....	006
Sector Snapshots.....	008
Transport sector.....	010
Telecommunications sector.....	011
Energy sector.....	012
Three Waters sector.....	014
Productive Water sector.....	016
Social Infrastructure sector.....	017
Focus on Auckland.....	019
Focus on Christchurch	021
Report Back on Action Plan	023
Transport.....	023
Telecommunications.....	030
Energy.....	034
Three Waters.....	041
Productive Water	044
Social Infrastructure.....	047
Cross-cutting Initiatives.....	057
List of Abbreviations.....	070

Overview by National Infrastructure Advisory Board

The National Infrastructure Advisory Board (the Board) is pleased to release the *National State of Infrastructure Report 2016*.

This report shows that good progress has been made since the launch of the *Thirty Year New Zealand Infrastructure Plan 2015*¹ in August last year. The large number of action items reported on reflects that the sector is committed to delivering on the new approach outlined in the 2015 Plan.

The year

We are pleased to see the delivery of more certainty and visibility of future investment opportunities to the infrastructure market. In October, the latest *Ten-Year Capital Intentions Plan* will be launched. This will be closely followed by the launch of the Australia New Zealand Infrastructure Pipeline (ANZIP), which will show upcoming investment opportunities across Australia and New Zealand valued above \$100 million.

We have watched with interest the progress of the Resource Legislation Amendment and the Better Local Services Bills. While progress has been slower than would be ideal, both Bills have generated considerable amount of discussion across central government, the local government and infrastructure sectors which we believe is constructive.

The Better Local Services Bill appears to have caused significant angst amongst local government leadership; nevertheless, the Board believes that the outcomes the Bill is seeking to aspire to are the appropriate ones. The Board will be encouraging all parties to continue working together towards the aim of delivering quality infrastructure outcomes for their constituents which is in everyone's best interests.

If passed into law, the Resource Legislation Amendment Bill would reduce the complexity in existing environmental and planning legislation. The Board believes this would improve the regulatory settings that govern infrastructure planning and delivery.

Looking ahead

But there is still a lot more to do, and Auckland best highlights this. Auckland is critical to the national economy and it is essential that Auckland's growth and infrastructure is managed effectively to realise the opportunities of this growth. So while New Zealand will benefit from a growing Auckland, the country will continue to face rising house costs if housing, and the infrastructure that supports it, does not meet demand.

The \$1 billion Housing Infrastructure Fund, announced in July, will help with this challenge. The Fund, which is available to councils in high growth areas, will help bring forward the roads and water infrastructure needed for new housing where financing is a constraint.

But the \$1 billion fund alone will not solve the housing challenge created by growth. This reflects challenges with the wider planning, service delivery and financing system across central and local government. This means that infrastructure providers must instead look to non-asset solutions to delivering effective infrastructure.

Ways of managing demand, rather than simply building new infrastructure, is a key focus for the Board. Demand management is particularly suitable to the transport, water and the social sectors. When thinking about infrastructure solutions, we need to be aware of how changing technology may shape how we think about infrastructure and be open to new, alternative solutions.

We are also committed to exploring how regional integrated planning could be better utilised. We are pleased the New Zealand Productivity Commission has identified this in their *Better Urban Planning: Draft Report*². The Board's aim is that local authorities are able to better integrate transport nodes and other infrastructure with where people live and work. We are acutely aware of the issues faced by people who have to live far from their jobs and communities.

The Board considers it critical that, across all matters related to infrastructure and urban planning, central and local government collaborate more effectively. Collaboration could take numerous forms: it could include sharing capability, co-funding the delivery of infrastructure or planning together in order to better understand future levels of service.

We will also seek opportunities to increase the scale and strengthen the quality of procurement for large-scale infrastructure across central and local government. While agencies have generally improved their overall investment management practices in recent years, there is significant scope to drive better value from how we procure major assets. There have been some impressive recent examples of government agency procurement scoping, planning and delivery – which provide exemplars for other parts of government and the Board is keen to see and encourage the success stories to be shared across all agencies.

1 Details available at: <http://www.infrastructure.govt.nz/plan/2015/>

2 Details available at: <http://www.productivity.govt.nz/inquiry-content/urban-planning>

While we acknowledge the incremental progress made with regard to the management of the three waters sector, there is still more to be done. Increasing regulatory requirements, concerns over the level of renewals required and the lack of consolidated data and mature asset management practices mean this is a sector with scope for significant efficiency and performance gains. Regardless of the yet to be determined reasons, Havelock North has brought the water sector back into acute focus and the Board believes that this should be seen as an opportunity, rather than a threat, to take a step forward.

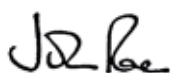
Since the launch of the Plan in 2015, the Board's focus has shifted to its implementation and delivery. This includes the Board exploring ways and means to improve monitoring and also to holding agencies and stakeholders to account on the progress of the Plan.

As part of this, we are seeking to more actively engage stakeholders involved in infrastructure delivery from across central and local government and the private sector. The Board will be seeking to push forward the infrastructure debate and act as a more visible and vocal public presence in support of the infrastructure agenda.

The Board would also like to acknowledge outgoing Chair Lindsay Crossen and Board members Matthew Birch and Dr Terence Heiler, who all recently finished their terms on the Board. All three Board members contributed significantly to the development of the 2015 Plan and Lindsay and Terry have been part of the Board journey since our inception in 2009. All three have been instrumental in building the infrastructure sector's understanding of the need for a coordinated approach to infrastructure development.

With me having taken over the Chair role from Lindsay Crossen, we also welcome Geoff Hunt, Fiona Mules and Lawrence Yule as new appointments to the Board. They join Margaret Devlin, Kathryn Edmonds, Carl Hansen and Edward Guy on the Board. This is a powerful cross-sector group of infrastructure professionals and we look forward to seeing the contribution that the Board can make over the next few years.

Finally, the Board is pleased to report that, despite challenges, New Zealand's infrastructure is in good hands and that the objectives set out in the 2015 Infrastructure Plan continue to be delivered on.



John Rae,

Chair, on behalf of National Infrastructure
Advisory Board



Overview by the Treasury's National Infrastructure Unit

The year

In August 2015 the Government released the *Thirty Year New Zealand Infrastructure Plan 2015*. One year on, this report outlines how central government, local government and the private sector are tracking in delivering on these actions, as well as how the new approach in the Plan is being implemented across New Zealand. We are pleased to note considerable progress on the action plan and the Government's commitment to infrastructure investment.

- > The Government's investment in Ultra-Fast Broadband (UFB) and Rural Broadband programmes is transforming the way New Zealanders live, work and do business. The first phase of the Rural Broadband Initiative (RBI) is complete, benefiting 300,000 homes and businesses. Under UFB, more than one million households, businesses, schools and hospitals are able to access UFB services.
- > The Government has committed \$212 million to the Accelerated Regional Roding Programme, which was established to accelerate regionally important state highway projects.
- > As part of a strategy to improve public sector investment, the Government is implementing changes to its investment management and asset performance system to lift performance across the State services. The changes include enhancing the quality of annual reporting on the performance of asset portfolios and lifting the level of management capabilities, such as benefits management. The Government is also changing the incentives in the system through the progressive roll out of the Investor Confidence Rating (ICR) across 25 of the most investment-intensive government agencies.
- > The ICR is providing a catalyst for improving the way agencies manage their investments and assets. Agencies are acting on the performance improvement insights coming out of the ICR process, and other agencies are making improvements in anticipation of future ICR assessments.

Good progress has been made on anchor action items, which represent a shift in the way the sector approaches infrastructure and are critical to implementing the Plan.

This includes strengthening the transparency and quality of infrastructure data. We will release the third annual *Ten-Year Capital Intentions Plan* this month, which shows around \$100 billion of planned infrastructure investment from central, local and private sectors to 2025.

This release, along with the new Investment Pipeline report³ and the latest National Construction Pipeline report⁴, will help build the picture of New Zealand's infrastructure plans for the medium term.

Alongside the Australian Government, our Government will also soon launch the ANZIP which will create more visibility of upcoming infrastructure investment opportunities from across Australasia.

Work has also progressed to develop national metadata standards for roads, water and buildings to ensure a consistent base to build evidence and undertake forecasting.

Good progress has been made on demand management. Through the Auckland Transport Alignment Project (ATAP)⁵, the Government and Auckland Council have agreed a strategic approach to developing the city's transport system over the next 30 years.

LGNZ has also launched the Local Government Excellence Programme, with 21 councils from across New Zealand signed up to be involved in the first year. The programme independently assesses how councils are performing and the value they deliver. This programme supports the existing Road Efficiency Group activity which LGNZ's Equip Centre of Excellence is leading, through the establishment of regional hubs delivering best practice asset management. This and the work IPWEA New Zealand is leading on asset management are good examples of key infrastructure stakeholders focusing on delivering continual performance improvement and delivering on the Plan's vision.

3 Details available at: <http://www.treasury.govt.nz/statesector/investmentmanagement/publications>

4 Details available at: <http://www.mbie.govt.nz/info-services/building-construction/skills-innovation-productivity/national-construction-pipeline>

5 Details available at: <http://www.transport.govt.nz/land/auckland/atap/>

Looking ahead

The challenges relating to our infrastructure, as outlined in the 2015 Plan, remain today. We continue to face an ageing population, the decline and rise of some regions, increasing pressures on our natural resources and pinch points on our infrastructure, especially in Auckland – all within a context of tight fiscal constraints.

As the Plan states, simply building things to address our problems is no longer sustainable. We need a better understanding of the levels of service we want to deliver, more mature asset management practices and use of data, and more effective decision-making that considers non-asset solutions.

While many of these challenges are nationwide, Auckland as our largest city has its own set of challenges with respect to providing infrastructure to manage growth and realise the opportunities this provides. To help meet these challenges, the Government's \$1 billion Housing Infrastructure Fund will help high growth councils unlock new housing areas. The Government is also considering establishing urban development authorities, which would also help identify and unlock new housing areas. Nonetheless, there will still be challenges with funding a sufficient supply of infrastructure in order to increase housing supply, reduce travel times or make services more accessible or affordable.

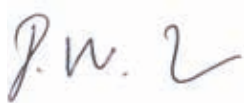
The Government will need to consider alternative ways to fund infrastructure while retaining the best value for money. Asset-driven solutions are only one way of tackling our infrastructure problems; non-asset solutions such as demand management offer innovative ways of making better use of our existing networks which means efficiency is increased, unnecessary spending is avoided and the right levels of service are maintained. The ATAP is an important step in showing the difference this can make and is an example of the increased collaboration we are seeing between government and councils.

We consider it important that central and local government work together to better understand the service levels required from their infrastructure investments. This will enable central and local government to have a broader understanding of future demographic trends and other drivers of change so they can better plan for levels of service that meet those trends. Greater shared services may also enable local authorities to deliver infrastructure at a greater scale, which could enable them to more efficiently deliver new infrastructure.

Over the next 12 months, the NIU will continue to focus on delivering the actions, especially the anchor actions, outlined in the Plan. Where we are not directly responsible for actions, we will, where possible, support agencies with the implementation of these actions. We will also continue to work closely with the infrastructure sector and local government to stay connected to the big opportunities and challenges in the infrastructure sector. We, alongside the Board, will also work closely with infrastructure providers to promote the step-change outlined in the Plan.

Looking forward, we aim to undertake more outcome-based reporting to measure the success of the vision to deliver a more resilient and coordinated infrastructure network by 2045 that contributes to a strong economy and high living standards. As a unit in Treasury, our vision is to be a world-class Treasury working for higher living standards for New Zealanders.

Together with the Board, we are pleased to present the *National State of Infrastructure Report 2016*. This report reflects our commitment to embedding the *Thirty Year New Zealand Infrastructure Plan 2015* into how infrastructure is delivered in New Zealand.







David Taylor

Manager, National Infrastructure Unit, the Treasury

Anchor Items

The 2015 Plan was the first National Infrastructure Plan that detailed a comprehensive suite of actions that would be undertaken to deliver on the new infrastructure approach. The eight anchor items below represent a major shift and anchor this new approach. A full report on the action plan items published in the 2015 Plan can be found from page 23.

<p>A Develop national metadata standards for roads, water and buildings to ensure a consistent base to build evidence, undertake forecasting and deepen capability.</p>	 In progress	<p>Draft NZ Asset Metadata standards for three major asset classes, buildings, roads and the three waters, have been completed and peer reviews are underway. The business case for the implementation of the standards is due to be completed in November 2016.</p>
<p>B Establish regional Centres of Excellence or similar arrangements for collating and making available the data obtained through shared metadata standards. This initiative will also explore the costs and benefits of any new entity providing the necessary analytics to interrogate the data and support local decision-making.</p>	 In progress	<p>Work is ongoing in relation to enhancing collaboration and capability at a regional level. Current projects to support this include the Asset Metadata standards and the One Network Road Classification (ONRC).</p> <p>As part of the NZ Asset Metadata standards business case due for completion this year (see above), arrangements for optimising the analytical capabilities across decision-makers are being explored.</p> <p>The Road Efficiency Group via Equip has established regional Centres of Excellence using the ONRC to build a platform that shares data on customer outcomes and value for money.</p>
<p>C Investigate options to support long-term integrated regional infrastructure plans, potentially with legislative recognition incorporating central and local government objectives.</p>	 In progress	<p>There are multiple programme areas of current work that intersect with local government and the planning system. These include the Better Local Services programme and Bill currently in Parliament, the National Policy Statement on Urban Development Capacity (NPS-UDC), the response to the Productivity Commission report <i>Using Land for Housing</i> and the current Productivity Commission inquiry on <i>Better Urban Planning</i>. The Waikato Plan being developed by the Joint Committee and the Wellington Water work on resilience are locally driven examples of this integration.</p>
<p>D Changes to the Resource Management Act 1991 (RMA) to improve the national planning framework and enable more responsive and efficient infrastructure and housing supply.</p>	 In progress	<p>The final package of reforms to the RMA and associated legislation was introduced to Parliament on 26 November 2015 and had its first reading on 3 December. It was referred to the Local Government and Environment Select Committee. The Select Committee has now heard all submissions and is due to report back to Parliament on 7 November.</p>

<p>E Commitment to the longer-term review and alignment of planning legislation.</p>	 <p>In progress</p> <p>Work being led by the Ministry for the Environment (in conjunction with Natural Resource Sector agencies) is underway to review the existing resource management framework.</p> <p>The review looks at issues concerning the broader resource management and planning system, such as legislative alignment, approaches to planning, participation and decision-making processes under the RMA. This work is closely connected to the draft Productivity Commission report on <i>Better Urban Planning</i>.</p>
<p>F Strengthen the transparency and quality of infrastructure pipeline data through the annual production of the <i>Ten-Year Capital Intentions Plan</i> and increasing the level of detail available in years one to three, including timing and planned procurement methodology.</p>	 <p>Implementing</p> <p>The <i>Ten-Year Capital Intentions Plan 2016</i> is planned to be released in October. The <i>Capital Intentions Plan</i> is the third in a series, the previous version being released in March 2015.</p> <p>The <i>Capital Intentions Plan</i> builds on our evidence base of information on where New Zealand's future infrastructure investment needs will be. The <i>Capital Intentions Plan</i> also helps deliver greater visibility and transparency of upcoming investment opportunities for the market.</p> <p>We have increased the level of detail available by providing a more in-depth year-by-year breakdown of spending estimates to a minimum of \$1 million.</p>
<p>G Investigate options for enhanced procurement governance of large/significant procurements – developing scale and building capability – including market engagement, coordination, risk pricing and the use of more sophisticated procurement tools with a focus on innovation and outcomes.</p>	 <p>In progress</p> <p>The NIU and the Ministry of Business, Innovation and Employment (MBIE) have developed initial advice to Ministers on various options in order to lift procurement governance. The options consider how we can best achieve the following:</p> <ul style="list-style-type: none"> > getting a better strategic overview of all upcoming investment intentions across the public sector, and > lifting capability for large-scale infrastructure investment decision-making within the public sector. <p>Further detailed policy work and advice to Ministers will be provided by the end of 2016.</p> <p>The Road Efficiency Group has completed a stocktake of best practice procurement in local government and is now shaping a value-for-money framework which includes new contract models.</p>
<p>H Expand and develop the trans-Tasman procurement market with Infrastructure Partnerships Australia and the Global Infrastructure Hub.</p>	 <p>Implementing</p> <p>The ANZIP will be launched in late October 2016. The ANZIP draws together information on potential upcoming projects from across Australasia for projects with a capital cost of more than \$100 million.</p> <p>The NIU is also working with peak advocacy group Infrastructure Partnerships Australia on medium-to-longer-term proposals to more closely align the Australasian infrastructure markets. In particular, we are looking more closely at opportunities to standardise documentation, procurement processes and pre-qualification stages.</p>

Sector Snapshots

Overview of current status	
 <p>Transport</p>	<p>A key area of focus for the sector has been improving the quality of information about the transport network, to inform investment decisions and enhance collaboration across transport agencies. The Transport Domain Plan was launched in July this year, with the aim of better coordinating the collection and management of data and knowledge and ensuring that existing information is visible and easy to use. In addition, draft metadata standards have been developed by the Transport Analytics Governance Group.</p> <p>Further areas of focus have included the ATAP, demand management and the delivery of projects within the National Land Transport Programme 2015-18.</p>
 <p>Telecommunications</p>	<p>The Government's investment in UFB and Rural Broadband programmes is improving internet speeds and network reliability and consistency. The Government is putting in place the appropriate regulatory settings for a productive and resilient telecommunications sector beyond 2020. The first phase of the RBI is complete, benefiting 300,000 homes and businesses. More than one million households, businesses, schools and hospitals are able to access UFB services.</p>
 <p>Energy</p>	<p>The New Zealand energy system is in a sound overall condition with sufficient energy available and adequate management of resources. The Government and the energy sector are reviewing the systems in place to ensure that New Zealand is well positioned to adapt to emerging technologies, such as solar photovoltaic (PV) generation and home energy management systems.</p> <p>This year, the focus for the energy sector has been about ensuring that New Zealand can: adapt to and take advantage of emerging technologies; continue its transition to a low-carbon, more productive economy; and maintain a secure energy supply.</p>
 <p>Three Waters</p>	<p>Steady progress has continued to be made in building the information and data picture across the three waters sector to strengthen the long-term provision of water services in an efficient and sustainable manner. The Waikato Waters project has provided valuable insight and Wellington Water is demonstrating the benefits of increased capability and an integrated approach, especially in resilience thinking. The Havelock North inquiry will add further to this knowledge base.</p>
 <p>Productive Water</p>	<p>The Government is progressing with the next stage of freshwater reforms to deliver better environmental and economic outcomes, and deliver better outcomes for iwi. Support for developing regional scale irrigation schemes is now provided through Crown Irrigation Investments Limited (CIIL).</p>
 <p>Social</p>	<p>The social sector has made good progress on asset management and the use of performance measures in decision-making. The Ministry of Education's new asset management system, Helios, was launched in April 2016. Twenty District Health Boards (DHBs) recently undertook asset management maturity self-assessments, with these assessments being used as a base for improving asset management maturity across the sector to support the requirements of the new Cabinet circular on central government capital asset management.</p>

Overview of current status



Auckland

Strong progress has been made in better aligning land use with infrastructure to support Auckland's rapid growth, which contributes to achieving key National Infrastructure Plan goals. Auckland Council's adoption of the Future Urban Land Supply Strategy, the final ATAP report and the Council's decisions on the Auckland Unitary Plan all have strengthened the relationship between council and government and set the scene to deliver the step change in approach required in our largest and fastest growing city.



Christchurch

Greater Christchurch has entered a new phase following the 2010-11 earthquakes as it transitions from recovery to regeneration. The groundwork has been laid for local partners to develop a vibrant region. Government is monitoring progress, as it is important that the recovery momentum of the past five years continues.



Transport sector



This year, the transport sector made significant advances to improving the evidence base for optimised decision-making across the sector.

Strong investment continues in the transport network, across all modes of transport. This includes the final instalment of the Government's \$212 million commitment to the Accelerated Regional Rooding Package, continued progress on the Roads of National Significance and urban cycleways.

The year

In addition, central government has worked with Auckland Council since the start of 2016 and has recently signed a Heads of Agreement for the City Rail Link⁶ (CRL). The Heads of Agreement formalises the Government's commitment to fund 50% of the CRL. Work continues on how project risks around costs, construction and operation will be addressed.

In order to meet future challenges – such as changes in demand, growth and an increase in major projects – making the best use of the existing transport network and ensuring the sustainability of transport funding will continue to be a focus for the sector.

Also from the year since August 2015:

- > The final report for ATAP was launched⁷. This report recommends a strategic approach to the development of Auckland's transport system over the next 30 years, and an indicative package of the type and amount of investment likely to be required to deliver the strategic approach.
- > The Transport Domain Plan⁸ was launched in July 2016. This provides a research strategy for better coordinating and management of data and knowledge.
- > Good progress has been made on the Intelligent Transport Systems (ITS) Technology Action Plan 2015–18, to encourage and enable ITS in New Zealand. ITS applies information, data processing, communication, and sensor technologies to vehicles (including cars, trucks, trains, aircraft and ships), transport infrastructure and transport users to increase the effectiveness, environmental performance, safety, resilience and efficiency of the transport system.

- > Most notably, a scan of the transport legislation to identify unnecessary barriers to ITS has been completed.
- > Implementation of the National Land Transport Programme 2015–18 (NLTP) continues to give effect to the Government Policy Statement (GPS) on Land Transport 2015/16–2024/25. In particular, good progress has been made on the Accelerated Regional Rooding Package and the Roads of National Significance.

Looking ahead

With the release of the final report for ATAP, Auckland Council and the Government will need to consider how to progress the recommendations in the report. This response will be critical to effectively manage Auckland's anticipated growth.

The CRL will be the largest transport infrastructure project undertaken in New Zealand to date. The Crown and Auckland Council both wish to ensure that the investment provides best value for taxpayers and ratepayers and key project risks are appropriately addressed over the course of construction and operation.

Understanding future demand across all modes of transport remains a challenge for the sector, with processes underway to improve the evidence base for decision-making as well as to increase collaboration across the sector. These include projects such as the 30-year vision for state highways, Auckland's City Centre Integration Project and the Transport Domain Plan.

To best optimise the use of existing infrastructure (particularly in Auckland), options for demand management are being explored. The recommendations in the final ATAP report will inform the development of these options.

6 Details available at: <http://transport.govt.nz/news/rail/city-rail-link-heads-of-agreement-signed/>

7 Details available at: <http://www.transport.govt.nz/land/auckland/atap/>

8 Details available at: <http://www.transport.govt.nz/research/transport-domain-plan/>

Telecommunications sector



The Government's investment in Ultra-Fast Broadband and Rural Broadband programmes is improving internet speeds and network reliability and consistency. The Government is putting in place the appropriate regulatory settings for a productive and resilient telecommunications sector beyond 2020.

The first phase of the RBI is complete, benefiting 300,000 homes and businesses. Also, more than one million households, businesses, schools and hospitals are now able to access UFB services.

The Government has committed to extend UFB by increasing the percentage of New Zealanders able to access fibre technologies from 75% to at least 80%. The Government has also committed to extend the RBI with an additional \$100 million and also create a \$50 million fund to extend mobile coverage into black spot areas of main highways and key tourist areas.

The year

A review of the policy framework for regulating communications services is underway⁹. From 2020, the Government will move to a framework for regulating copper and fibre services that is similar to the one used for utilities like electricity lines. Consultation on detailed design and implementation issues is ongoing.

The Telecommunications (Property Access and Other Matters) Amendment Bill was introduced to the House on 29 June 2016. It creates a new consenting process that telecommunications companies must follow when installing networks such as UFB. The Bill will also better protect homeowners through providing recourse to a disputes resolution scheme.

At 30 June 2016:

- A 52% of New Zealanders have access to UFB. The build is 68.2% complete (with 1,006,741 end users able to connect)
- B over 293,000 rural households and businesses are able to access RBI, and
- C 1,034 schools have access to fibre with peak speeds of 100Mbps; 49 remote schools have access to wireless broadband with peak speeds of at least 10Mbps; 39 rural hospitals and integrated family centres are able to access peak speeds of 100Mbps.

Changes are being proposed to National Environmental Standards (NES) for telecommunications facilities to provide New Zealanders with faster access to new technologies, and ensure NES are up-to-date with rapid developments in the telecommunications sector.

The Government is committed to delivering the Emergency Response System: Mobile Caller Location Project, to provide emergency services with a more precise location of an emergency caller when they dial 111 from a mobile device.

Looking ahead

The Government is committed to improving New Zealand's cyber security, recognising that cyber incidents can undermine strategic and competitive advantages. The Government's Cyber Security Strategy provides a framework aimed at ensuring New Zealand is secure, resilient and prosperous online. It includes the establishment of a New Zealand CERT¹⁰, ongoing delivery of capabilities to counter cyber threats to organisations of national significance, and other initiatives focused on improving the cyber security capability of New Zealand's most important information infrastructures.

The Government has also set aspirational targets that by 2025, 99% of New Zealanders will be able to access 50 megabits per second, and the remaining 1% will have access to broadband of 10 megabits per second.

Rural communities are set to benefit most under the new targets which mark a tenfold increase on the current target peak speeds of 5Mbps under the RBI. The extension of UFB and RBI programmes will assist in working towards these targets.

The Government continues to ensure the appropriate regulatory settings are in place that enable and incentivise responsiveness by industry and ensure high-quality and affordable communication services are available for consumers and businesses.

⁹ Details available at: www.mbie.govt.nz/telcoreview

¹⁰ CERT was once an acronym for "computer emergency response team". Since 1997, CERT has been a registered trademark owned by Carnegie Mellon University and is no longer used as an acronym.

Energy sector



The New Zealand energy system is in a sound overall condition with sufficient energy available and adequate management of resources. The Government and the energy sector are reviewing the systems in place to ensure New Zealand is well positioned to adapt to emerging technologies.

The year

This year, the focus for the energy sector has been about ensuring that New Zealand can: adapt to and take advantage of emerging technologies; continue its transition to a low-carbon, more productive economy; and maintain a secure energy supply.

For the March quarter 2016, renewable energy contributed 82.2% of New Zealand's electricity generation, increasing from 76.4% in the March quarter 2015.

At a high level, the Government is refreshing the New Zealand Energy Efficiency and Conservation Strategy (NZECS) and developing new energy targets, which are likely to focus on improving energy intensity or productivity and increasing our renewable energy.

The Government has been reviewing the regulatory regime for the energy sector in the light of emerging technologies. The Electricity Authority (EA) commenced a programme of work exploring the implications of emerging technologies for electricity distribution services. The Commerce Commission has also been undertaking an input methodology review which considers the implications of emerging technologies for the methods that will be used to re-set price paths from 2020. MBIE is reviewing the application of electricity legislation to secondary networks and publicly accessible charging infrastructure for electric vehicles.

EA's second issues paper on the transmission pricing review of options for the allocation methodology for transmission costs was released in May 2016¹¹. This review will importantly look at how infrastructure investment will be recovered from customers so that charges are linked to the transmission services delivered and the costs involved and is aimed to improve efficiency for the long-term benefit of consumers.

The Smart Grid Forum¹² continues to provide a platform for businesses, scientific and academic circles, consumers and government to advance the development of smart electricity networks in New Zealand through information sharing and dialogue.

EA's *What's My Number* programme and amendments to the Electricity Industry Participation Code have helped promote competition in electricity markets by providing consumers with better access to information. As evidenced by trends in electricity retail market concentration ratio and customers' switching rate, competition in the electricity retail market has continued to intensify.

In terms of security of electricity supply, most consumers have a highly reliable supply. An average household faces less than four hours of non-supply per year and around two power supply interruptions per year. The US Chamber of Commerce ranks New Zealand fourth out of the top 24 global energy users in its 2016 edition of the *International Index of Energy Security Risk*¹³.

The gas supply system also has a high degree of resilience. Regarding oil, while there is little spare capacity built into the system, the sector routinely demonstrates its ability to maintain reliable fuel supplies. MBIE, with the Ministry of Civil Defence and Emergency Management (MCDEM), is reviewing operational arrangements for oil emergency response to significant fuel supply disruption.

Looking ahead

The adoption of emerging technologies will change electricity supply and demand profiles, and will have implications for how the electricity industry maintains system balance and security, particularly at the distribution level.

11 Details available at: <https://www.ea.govt.nz/development/work-programme/pricing-cost-allocation/transmission-pricing-review/>

12 Details available at: <http://www.mbie.govt.nz/info-services/sectors-industries/energy/electricity-market/nz-smart-grid-forum>

13 Details available at: <http://www.energyxxi.org/energy-security-risk-index>

Emerging technologies like solar PV generation and batteries will increase opportunities for customers to choose between electricity supply from the connected networks or self-generation.

Information and communications technology, or more specifically, smart appliances, home energy management systems and the rollout of smart meters, are also enhancing consumers' ability to monitor and manage their energy use.

The potential closure of the Tiwai Point aluminium smelter creates uncertainty for investing in new electricity generation capacity and maintaining existing capacity. This has potential implications for security of electricity supply in future dry years, although Genesis Energy has recently indicated Huntly's ageing coal/gas generation capacity will remain in service until at least 2022. Transpower, as the system operator, is continuing to monitor the security of supply risks and works with electricity generators to minimise future uncertainty.



Three Waters sector



Steady progress has been made in building the information and data picture across the three waters sector to strengthen the long-term provision of water services in an efficient and sustainable manner. A number of projects have been slower to progress than ideal while the sector has been impacted by a much wider work programme, including housing supply, urban planning, disaster recovery funding and risk management.

The year

Quiet but steady progress has been made in the three waters sector both at a strategic and a project level. The three waters sector has been part of a much wider strategic programme of initiatives targeted at housing and local government including, for example, the Better Local Services reforms, the review of the disaster recovery funding arrangements, understanding the role of infrastructure in the supply of serviced land for housing supply and the two Productivity Commission enquiries, *Using Land for Housing*¹⁴ and *Better Urban Planning*. These, plus the current Havelock North inquiry and the work on the metadata standards, continue to build the information base about the sector.

LGNZ's position paper *Improving New Zealand's water, wastewater and stormwater*¹⁵ was released in September 2015. This sector-led project has resulted in a pathway for sector reform and improved performance. A proposal to progress a co-regulation option involving local and central government is now being considered.

At a delivery level, a number of projects have not moved as fast as is ideal, including the Waikato Waters project, whereas both Wellington Water and Watercare are demonstrating the increased capability that comes from scale and the specialisation and expertise it enables, especially in strategic asset management and resilience thinking.

Key areas of progress include:

- > Metadata standards for water, roads and buildings. Draft standards have been developed and are currently being reviewed. Implementation options for the standards are being explored through a business case process, due for completion in the next month.
- > The investigation into establishing a Local Government Risk Agency. The business case has been completed by the establishment board and is currently being considered.
- > Disaster recovery funding arrangements (60/40) are being reviewed and a consultation document is due for distribution shortly.
- > Watercare has completed an updated 20-year asset management plan that caters for the projected growth in Auckland and published a new and improved forward capital works programme.
- > The \$1 billion Housing Infrastructure Fund was announced, targeting funding for water and roads where infrastructure is a constraint to housing supply.
- > Wellington Water is well advanced in a whole-of-network and cross-infrastructure sectors resilience approach.
- > Waikato Waters project and the proposal to establish a water Council Controlled Organisation (CCO) across three councils (Hamilton City, Waikato District and Waipa District) has progressed slowly. All councils have now agreed a Record of Agreement (RoA) for the proposed CCO. New councils elected in the October 2016 local government elections will be asked to reconsider the RoA with a view to consulting the public on a proposal to form a CCO in 2017.

¹⁴ Details available at: <http://www.productivity.govt.nz/inquiry-content/using-land>

¹⁵ Details available at: <http://www.lgnz.co.nz/home/our-work/our-policy-priorities/4.-infrastructure/3-waters-programme/>

Looking ahead

As noted in the Plan, a continued focus is to strengthen capability across the full spectrum of asset management, increase our understanding of the challenges posed by renewals and the opportunities this creates for innovation and resilient service provision. Central and local government are also exploring whether alternative governance and service delivery arrangements would realise significant efficiency gains and improved outcomes. Delivering on the range of projects underway will make significant progress towards the key areas of focus.

Developing an effective implementation plan for the metadata standards is critical with the next step to determine how best to utilise the data to support better local decision-making. This may involve regional Centres of Excellence or similar arrangements.

The projects underway cover a wide range of areas and some have the potential to deliver significant change. Understanding how all of this works together as an interdependent network infrastructure system is critical to achieving the step change needed to deliver a three waters sector focused on the outcomes we want to achieve, not the assets used to deliver them.



Productive Water sector



The Government is progressing with the next stage of freshwater reforms to deliver better environmental and economic outcomes, and deliver better outcomes for iwi. Support for developing regional scale irrigation schemes is now provided through Crown Irrigation Investments Limited.

The year

Water reform

The Government has undertaken initial consultation on improving the management of freshwater to deliver better environmental and economic outcomes, with further consultation expected for later this year. A programme of work has been agreed over the next three years to develop, test, consult on and implement proposals to reform how freshwater is managed, including how it is allocated. This work will be led by government officials, who will have access to a technical advisory group and engagement with the Iwi Leader Group.

As part of the water reform process, the Land and Water Forum (LAWF) provided recommendations to the Government in the *Fourth Report of the Land and Water Forum*¹⁶ (released on 27 November 2015). The report focuses on maximising the economic benefits of freshwater while managing those benefits within water quality and quantity limits that are consistent with the *National Policy Statement on Freshwater Management 2014*¹⁷ (NPS-FM 2014).

Local government also plays a key role in delivering the Government's objectives for the management of freshwater. Regional councils are progressively giving effect to NPS-FM 2014 in regional policy statements and regional plans by 2025.

Looking ahead

The Ministries for the Environment (MfE) and Primary Industries (MPI) are also working with sector groups to develop tools, such as good management practices, to improve working within limits. The Government is also supporting economic capability building with training courses, development of benefit cost analysis tools and one-off case studies (initially with regional authorities). In addition there has been broader engagement with iwi, primary sector groups and environmental non-governmental organisations to identify areas for further support.

Irrigation support

Grants supporting the development stages for regional scale irrigation schemes are now being provided through CIIL. This will allow the commercial expertise of CIIL to be leveraged earlier in a scheme's development, helping them to get to the investment-ready stage faster. MPI continues to provide grant support during the development stages of smaller community irrigation infrastructure and strategic water management studies.

16 Details available at: <http://www.landandwater.org.nz>

17 Details available at: <http://www.mfe.govt.nz/publications/fresh-water/national-policy-statement-freshwater-management-2014>

Social Infrastructure sector



The social sector has made good progress on asset management and the use of performance measures in decision-making.

The year

This year the social sector has made good progress on asset management and the use of performance measures in decision-making. Individual social infrastructure sectors face their own challenges in using assets more effectively. The Government's rollout of the ICR is providing a catalyst for improving the way agencies manage their investments and assets.

Defence

In August 2016 Cabinet approved the New Zealand Defence Force (NZDF) Estate Regeneration Programme Plan. The plan provides a 15-year view of how NZDF will regenerate, manage and use the Defence Estate. Initially, investment will be directed towards health, safety and compliance measures, as well as initial recapitalisation works such as starting to replace outdated barracks with modern facilities. From 2021 to 2025, major upgrades of infrastructure and buildings are planned, and from 2026 to 2030 investment will target NZDF's operating requirements.

Justice

The Ministry of Justice (MoJ) has made significant progress on its programme to modernise New Zealand's court system infrastructure. Upgrades on the Manukau District Court and Waitakere District Court are complete, and other upgrades and refurbishments are currently in progress.

Corrections

The Department of Corrections' (Corrections) key challenge is how it provides a strategic response to the current and projected increases in the prison population. This will involve the consideration and, as appropriate, implementation of the recommendations from Corrections' review of the long-term sustainability of the prison network to 2025.

Health

Twenty DHBs recently undertook asset management maturity selfassessments – nine of these were selected for independent review by an expert practitioner.

These assessments will be used as a base for improving asset management maturity across the sector and will support the requirements of the new Cabinet circular on central government capital asset management.¹⁸ Across-DHB Health Asset Management Improvement Group has been established to coordinate and drive asset management improvement across the sector.

Education

The Ministry of Education (MoE) is focusing on using better information and data to inform effective investment decision-making. The Ministry's new asset management system, Helios, was launched in April 2016.

MoE is now using the Helios system for the management of all school infrastructure. The School Network Upgrade Project, an 11-year, \$280 million project that upgraded the internal ICT network infrastructure of all state and state-integrated schools, was completed in February 2016.

Eight-Point Plan for School Property

The eight-point plan gives MoE a defined set of priorities to improve its school property function and performance.

With the establishment of the Education Infrastructure Service in 2013, MoE is able to manage large and complex property projects on behalf of boards of trustees. Boards still get a say in the planning and design phases of their projects, but the Ministry takes responsibility for managing the complex works so schools can focus on teaching and learning.

Part of the eight-point plan was a focus on schools that require major redevelopments. A fund of around \$300 million over six years was announced to assist approximately 30 schools to deliver essential infrastructure and modernise their facilities. This month, funding was announced for the 30th school, with a total of \$530 million committed to redeveloping these 30 schools.

The housing challenge

The Social Housing Reform Programme is a cross-agency approach to increase the diversity and supply of social housing in New Zealand and provide better housing services to tenants. The goal is to provide more New Zealanders with quality and affordable housing. The programme is in part a response to the challenges facing our social housing infrastructure, where around one-third of the Housing New Zealand (HNZC) portfolio is in the wrong place or of the wrong type to meet current needs. The challenges reflect changes to population and family size from the 1950s and 1960s when much of the state housing network was built, as over 50% of the housing stock is over 42 years old.

In 2016, the new Emergency Housing Funding Model was implemented, which includes a new Emergency Housing Special Needs Grant available since 1 July 2016, \$1.9 million funding to 14 existing providers to provide 337 emergency housing places and further funding contracts to new providers for emergency housing places.

Alongside social housing is the challenge of affordable housing and its impact on the national economy. In October 2015, the New Zealand Productivity Commission released its final *Using Land for Housing* report, which examined why housing supply in many of New Zealand's high-growth areas was struggling to keep pace with demand. The Commission identified the lack of responsiveness of the planning and infrastructure system, along with the underlying incentives of the local political system, as the key reasons that inhibit the supply of land for housing. While the *Using Land for Housing* report made recommendations within the existing planning framework, the Commission highlighted the need for a deep, more fundamental review of the planning system, which prompted their latest inquiry, *Better Urban Planning*. The draft *Better Urban Planning* report, released in August 2016, takes a "blue skies" approach to potential reform of the planning system, which is shaped around the three core functions of the planning system (ie, managing externalities, provision of public goods and overcoming coordination issues).

The Commission's latest report focuses on the longer-term "game" as there have been a number of developments in recent months that are expected to influence the housing market in the short to medium term, such as:

- > The NPS-UDC¹⁹—which focuses on ensuring that planning enables development through providing sufficient development capacity for housing and businesses, to meet both current and future demand – is being developed. Public consultation has now closed and the Government is considering the findings.
- > The Housing Infrastructure Fund – which supports high-growth, financially constrained councils to bring forward trunk infrastructure projects needed to unlock residential development and meet capacity targets under NPS-UDC. Councils will be able to submit proposed infrastructure projects for funding assistance in 2017.
- > Finally, Auckland Council accepted the majority of the Independent Hearing Panel's recommendations for the Unitary Plan. Unless successfully appealed, the Unitary Plan will enable substantially more commercial and residential development capacity in Auckland than previously provided for.

Focus on Auckland



Strong progress has been made for managing growth and better aligning land use with infrastructure to support Auckland's rapid growth, which contributes to and achieving Plan goals.

Auckland Council's adoption of the Future Urban Land Supply Strategy, the final report and process used for ATAP and the Council decisions on the Auckland Unitary Plan all have strengthened the relationship between Council and government and set the scene to deliver the change in approach required in our largest and fastest growing city. Alongside this, major projects are progressing, including New Zealand's largest and most ambitious roading project, the \$1.4 billion Waterview connection due to open in early 2017 and over \$300 million of investment announced for Auckland schools since July 2015 to manage growth pressures.

The year

Auckland continued to experience strong growth both in population and as New Zealand's largest international gateway. Estimates are of a further increase of 740,000 people by 2043 while in the last reporting year Auckland International Airport saw 8.8 million international passenger movements (excluding transits, an increase of 8.1%) and Ports of Auckland move just over 900,000 containers. The Plan recognised that in this high-growth context, well-designed urban form and integrated land-use planning with infrastructure is critical to deliver good outcomes.

Over the past year, significant progress has been made on strategy and advancing major infrastructure projects. Considering a combined planned spend of over \$18.7 billion on infrastructure in the next 10 years, the relationship and coordination between government and Council continues to develop and strengthen.

At the strategic level, the Auckland Council's decisions on the Auckland Unitary Plan create feasible development capacity for over 420,000 dwellings across the region. The Transport for Future Urban Growth and Future Urban Land Supply Strategy provide direction on the sequence and development transport network for greenfield areas.

The process and final report from ATAP has set out a 30-year strategic direction and emphasised the importance of demand management to delivering long term transport outcomes. Also, the Port Future Study recommended a long-term strategy for sea-based trade in and out of Auckland. Additionally, Watercare has completed a 20-year asset management plan and released an improved and updated forward capital works programme for the next five years.

Progress of projects:

- > Enabling works for the CRL (project cost of \$2.8 billion to \$3.4 billion) have started and a Heads of Agreement has been signed between government and Council with government funding 50% of the project. Reflecting international best practice for a project of this scale, the project will be delivered via a Special Purpose Vehicle²⁰.
- > The continued rollout of the new public transport network with South Auckland, Pukekohe and Waiuku introduced in September 2016.
- > The impending completion (in early 2017) of the Waterview connection (\$1.4 billion), New Zealand's largest and most ambitious roading project.
- > The selection of Northern Express Group to partner with the New Zealand Transport Agency (NZTA) to construct the Puhoi to Warkworth Road of National Significance, with construction expected to start in 2017.
- > Progression of the East West Link (\$1.25 billion to \$1.85 billion) with applications for consent due to be lodged in the next few months.
- > The 154 past and present Special Housing Areas (SHAs) with an estimated final development capacity of almost 62,500 dwellings once fully developed.
- > Tāmaki Redevelopment Company issued an Expression of Interest for the Large Scale Redevelopment Programme on 10 August 2016.

- > The establishment of Panuku Development Auckland and the progression of framework plans for two large transform areas – Onehunga and Manukau.
- > The announcement of the \$1 billion Housing Infrastructure Fund, open for applications from Auckland Council (and other councils in the high-growth areas), where roads and water infrastructure is a constraint to new housing supply.
- > \$300 million of investment in schools since July 2015 to manage growth pressures.
- > The establishment of #BuildAKL by Auckland's construction and infrastructure sector employers, in partnership with Auckland Tourism, Events and Economic Development (ATEED), that aims to get Auckland's young people into employment and address a serious skill shortage in the industry.

Looking ahead

With a number of strategic projects and plans all completing over the past year, the challenge is to look across all of these and ensure that all are well aligned. This is especially the case given the decisions made on the Auckland Unitary Plan as this completes the appeals process and becomes operational. At the highest level, the refresh of the Auckland Plan is an opportunity over the next 12-to-18 months to tie all foundational work together into a refreshed strategic vision. It will also be important that the refreshed Auckland Plan aligns to Auckland Council's 2018 Long-term Plan, which provides an opportunity to address funding constraints on delivering the infrastructure required.

Successfully implementing and delivering on the new and large projects and policies will be a challenge. Sequencing and good market engagement is key and an opportunity to increase the levels of collaboration across procurers (Council and government) to generate scale and innovation and to deliver outcomes from a large and long infrastructure programme.

The strengthening relationship between Council and government needs to continue, across all levels. ATAP was a significant step forward in progressing the demand management strategy.



Focus on Christchurch



Greater Christchurch has entered a new phase following the 2010–11 earthquakes as it transitions from recovery to regeneration. The groundwork has been laid for local partners to develop a vibrant region. The Government is monitoring progress, as it is important that the recovery momentum of the past five years continues.

The year

The Government's forecast financial commitment to greater Christchurch has increased to over \$17 billion, based on the *Budget and Economic Fiscal Update 2016*. This is around \$700 million more than signalled in the previous Budget. It includes government spending on the repair of homes, rebuilding roads and underground infrastructure, schools and central city anchor projects.

The Canterbury Earthquake Recovery Authority was disestablished in April 2016, with residual central government responsibilities transitioning to other agencies' day-to-day work. The Canterbury Earthquake Recovery Act 2011 expired in April 2016, and the Greater Christchurch Regeneration Act 2016 came into force with stronger consultative processes to ensure powers are exercised in a way that reflects shared, locally driven regeneration objectives and to support effective decision-making processes.

Eleven public sector agencies are responsible for 64 rebuild projects totalling \$6.84 billion. As at June 2016, 31% (\$2.106 billion) of the public sector rebuild programme has been delivered.

In September 2016, the Treasury published the *Major Projects Performance Report – July 2016*²¹ which reported on nine major Canterbury Recovery Projects. This includes confidence assessment dashboards on major projects such as the Convention Centre Precinct and East Frame Residential.

Looking ahead

Following the earthquakes, Christchurch and Canterbury experienced above average economic growth, partially attributed to high levels of construction activity in the region. Construction is expected to continue at a high pace until mid-2017, as the rebuild shifts from residential to commercial-focused activity and the Stronger Christchurch Infrastructure Rebuild Team's programme wraps up in December 2016.

As rebuild activity starts to slow, it is expected that sectors like manufacturing and professional, scientific and technical services will once again come to the forefront of the local economy. The innovation precinct is an example of the opportunities that are emerging through the city's regeneration.

Supporting local institutions

Hon Gerry Brownlee finalised the Transition Recovery Plan in October 2015. It set out the pathway for local leadership and joint cooperation between local and central government to drive greater Christchurch's regeneration over the next five years. The Greater Christchurch Group within the Department of the Prime Minister and Cabinet (DPMC) (formed on 1 March 2016) is leading and coordinating central government's ongoing role in the regeneration of greater Christchurch. Its focus is on supporting the transition to local leadership.

Implement credible, sustainable strategies

The Land Use Recovery Plan has been pivotal in providing direction for the recovery of greater Christchurch. In April 2016 the Minister made amendments to the Plan following Environment Canterbury's Review of the Plan which found very few amendments were required.

The Greater Christchurch Urban Development Strategy 2007 was key in allowing quick and sound land use planning decisions post-earthquakes. The strategic partners (Te Rūnanga o Ngāi Tahu, Environment Canterbury, Christchurch City Council, Waimakariri District Council and Selwyn District Council), with support from NZTA and DPMC, recently updated the Strategy to reflect the significant changes that have occurred over the past nine years, and to focus on current and future generations.

Capacity, capabilities and tools

Two new entities have been established, with support from the Government, to achieve regeneration outcomes: a joint Crown-Council entity, Regenerate Christchurch, which will be working with the community, iwi, businesses and local groups to plan and drive development in key areas (for example, the Christchurch residential red zones); and a Crown company, Ōtākaro Limited, which will complete and have oversight of defined major anchor projects.

The Greater Christchurch Regeneration Act 2016, provides a legal framework to support regeneration over the next five years. Regeneration Plans, a planning instrument under the Act, allow strategic partners and Regenerate Christchurch to have an increased role in special processes in planning, resource management, local governance and land use.

Framework for long-term partnership

A new leadership forum will be held at least annually between relevant Ministers and the Christchurch mayor and councillors. It will consider issues relevant to Christchurch and not be limited to regeneration.

This platform will also support a long-term conversation between the Crown and local authorities and provide opportunities for public input into planning decisions. Strategic partners can either lead or provide comment on the development of Regeneration Plans.

\$32 billion

estimated total value of earthquake construction

59%

total progress against construction (as at 30 June 2016)

31%

of the public sector rebuild programme expenditure has been delivered (as at 30 June 2016)

\$1.4 billion

total value of work within the Stronger Christchurch Infrastructure Rebuild Programme



Report Back on Action Plan



Transport

Progress/milestones achieved

Implementation of the National Airspace & Air Navigation Plan: The plan enables the introduction of new technologies and will ensure major and provincial aerodromes are collaborating on demand forecasting and the airport infrastructure necessary to support this demand.

Modernisation of the aviation system will bring an additional \$2 billion to the economy by 2025. Policy advice in 2015; implementation of necessary regulation and introduction of new technologies in 2016–2018; full use of new technologies 2019–2023.



In progress

Ministry advice in August 2016 included an update on the regulatory changes. It advised that the Civil Aviation Authority (CAA) has completed two rounds of targeted consultation to support Ministry development of policy for rules on navigation and surveillance. Draft rules will be published for comment by December 2016.

Lead: Ministry of Transport (MoT)

Timeframe: 2015–2016 2017–2019 2020+

Intelligent Transport Systems (ITS) Technology Action Plan 2014–18 outlines the Government's strategic approach to encouraging and enabling ITS in New Zealand. The Action Plan contains 42 government actions that will play a major part in enhancing the operation, use and experience of the transport system, and contribute to the Government's objectives for safer, more efficient, more resilient and more sustainable transport systems.



In progress

A number of actions have been completed and all remaining actions have been started. A significant achievement has been the completion of the scan of transport legislation to identify unnecessary barriers to the continued deployment of ITS.

Lead: MoT

Timeframe: 2015–2016 2017–2019 2020+

Partnership between LGNZ and NZTA to ensure consistent investment and service levels across the country's roading network. This has included work on the Funding Assistance Rates (FAR) review (2014) and establishment of the One Network Road Classification (ONRC) to standardise data and create a classification system that identifies the level of service, function and use of road networks and state highways.


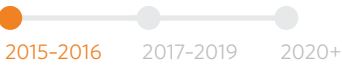



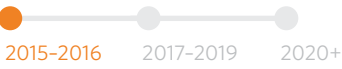














In progress









A review of FAR for land transport activities was completed in 2014 and work on implementing the established ONRC continues across the local government sector.









Lead: LGNZ/NZTA









Timeframe: 2015–2016 2017–2019 2020+

Progress/milestones achieved	
<p>The Auckland Port Future Study: A Stakeholder Reference Group is being formed to carry out the study, and will include representatives from a range of sectors such as business, marine recreation and heritage groups, environmental organisations and Māori. Over the next 12 months, these stakeholders will consider the social, environmental, economic, and cultural impacts of a wide range of options for the Port's future development. This will include understanding the wider context of the role of the Port in relation to Tauranga and Northport.</p>	<div>  <p>Complete</p> </div> <p>The Consensus Working Group finalised recommendations for a long-term strategy for the provision of port facilities to serve Auckland in July 2016. The Consensus Working Group's recommendations are a package and can be viewed on the study's website http://www.portfuturestudy.co.nz.</p> <p>The recommendations have been received by Auckland Council and will be considered by the incoming council in the next local government term.</p> <p>Lead: Auckland Council</p> <p>Timeframe: </p>
<p>The continued negotiation of new air services agreements, both bilaterally and multilaterally, to provide more access to our key and future trade markets.</p>	<div>  <p>In progress</p> </div> <p>In 2015/16, MoT negotiated eight new air services agreements, and amended three existing agreements. MoT negotiated new agreements that will assist with the objective of making New Zealand a hub between Asia and the Americas including within ASEAN (Laos) and Central America (Panama). Agreements were also put in place with countries providing code-share opportunities such as Portugal.</p> <p>Lead: MoT</p> <p>Timeframe: </p>
<p>The maintenance of the National Freight Demand Study to provide up-to-date forecasts to guide freight infrastructure investment and land-use planning decisions across the public and private sectors.</p>	<div>  <p>Complete</p> </div> <p>National Freight Demand Study has been completed and updated through Freight Information Gathering system.</p> <p>Lead: MoT</p> <p>Timeframe: </p>
<p>The accelerated Regional Roding Package includes the construction and investigation of 12 key regional state highways.</p>	<div>  <p>In progress</p> </div> <p>Projects in the Crown-funded Accelerated Regional Transport Programme remain on track and investment has begun in a new regional improvements activity class.</p> <p>Lead: NZTA</p> <p>Timeframe: </p>

Progress/milestones achieved	
<p>The Auckland transport package announced in 2013 included accelerating projects within three key motorway corridors and announcing next steps on the top three transport priority projects in the Auckland Plan.</p>	<div>  <p>In progress</p> </div> <p>The projects in the Accelerated Auckland Transport Programme remain on track.</p> <p>Lead: NZTA</p> <p>Timeframe: </p>
<p>Evaluation of the Public Transport Operating Model (PTOM). A new framework for the operation of public transport services is being implemented in New Zealand, intended to increase competition and the commerciality of public transport services and drive innovation. The MoT will report on implementation in December 2015 and on how it is operating in 2017.</p>	<div>  <p>Implementing</p> </div> <p>In late 2015, the Ministry reported to the Minister of Transport on stakeholder views on the PTOM implementation to date. The Ministry is to provide a final report back in September/October 2019 on the PTOM implementation and operation, and a competition assessment.</p> <p>Lead: MoT</p> <p>Timeframe: </p>
<p>Tairāwhiti Roads – a joint collaboration between NZTA and Gisborne District Council to manage roads as one network.</p>	<div>  <p>Complete</p> </div> <p>The Tairāwhiti Roads collaboration between NZTA and Gisborne District Council has been established.</p> <p>Lead: IPWEA</p> <p>Timeframe: </p>
<p>Northern Transport Alliance – a joint collaboration between Whangarei and Kaipara District Councils, Northland Regional Council and NZTA.</p> <p>(New – not published in 2015 Plan)</p>	<div>  <p>Implementing</p> </div> <p>Memoranda of Understanding were in place on 1 July 2016.</p> <p>Lead: IPWEA</p> <p>Timeframe: </p>
<p>Preparation for the GPS on Land Transport 2018 involves continued work on understanding patterns in demand, as well as sector and regional needs. GPS 2018 will make use of many other transport actions including the domain plan, ITS, and performance monitoring.</p>	<div>  <p>In progress</p> </div> <p>The development of GPS 2018 process is currently underway. The state of the sector is currently being reviewed. A draft GPS is expected to be released at the end of 2016 for engagement and a final GPS to be ready for release by June 2017.</p> <p>Lead: MoT</p> <p>Timeframe: </p>

Progress/milestones achieved	
<p>Thirty-year vision for state highways. NZTA is developing a 30-year vision for state highways, taking into account expected growth in Auckland and other regions.</p>	<div>  <p>In progress</p> </div> <p>NZTA has developed a long-term 30-year view of the land transport network to help identify the issues and opportunities that may emerge. This will guide future planning and investment in the land transport network.</p> <p>Lead: NZTA</p> <p>Timeframe: </p>
<p>Development of a Transport Domain Plan: Domain Plan will identify the gaps in knowledge required to answer key enduring questions about transport. It will then make recommendations about what is needed to address those gaps. Publication in 2015.</p>	<div>  <p>Complete</p> </div> <p>The domain plan was completed and launched on 27 July 2016.</p> <p>Lead: MoT, Stats NZ</p> <p>Timeframe: </p>
<p>City Centre Integration Project: A combination of transport infrastructure and service improvements is required to improve access to and within Auckland's city centre in a way that supports Council's vision for the city centre. This includes the CRL, an optimised new bus network supported by high-quality bus interchanges and much higher quality cycling and walking facilities.</p>	<div>  <p>Implementing</p> </div> <p>Enabling works for the CRL are underway across the city centre, with large-scale construction to relocate underground utilities and allow for the rail tunnels. Detailed investigations are nearing completion for several key bus projects, including the Wynyard Quarter and Learning Quarter facilities, in support of the planned New Network improvement to bus services across Auckland. The planning and delivery of several Urban Cycleway Fund projects is also underway, including the recently opened Nelson St and Quay St cycleways. Greater efforts are also underway into monitoring and management of traffic flows around the city centre construction activity, to maintain city centre access.</p> <p>Lead: Auckland Council</p> <p>Timeframe: </p>
<p>A Research strategy will be developed for the transport sector by November 2015. This will outline the priorities for research in the transport sector as a whole as well as providing a framework for commissioning new research that reaches the sector's goals. It will also put in place a structure from which the Domain Plan can be implemented.</p>	<div>  <p>Complete</p> </div> <p>Research strategy was completed and launched on 27 July 2016.</p> <p>Lead: MoT</p> <p>Timeframe: </p>

Progress/milestones achieved	
<p>The Transport analytics governance group has been established and is building a roads metadata standard for implementation across New Zealand.</p>	<p></p> <p>In progress</p> <p>An Australasian road metadata standard is being developed with input from NZTA and from New Zealand local authority representatives. A business case for its adoption was presented to the Austroads Board in July 2016. The project aims to deliver an implementation ready standard in 2017.</p> <p>Lead: NZTA, councils</p> <p>Timeframe: </p>
<p>Roading Infrastructure Management Support Group (RIMS) Body of Knowledge review and update.</p>	<p></p> <p>In progress</p> <p>Working on the RIMS Body of Knowledge review and update is ongoing.</p> <p>Lead: IPWEA</p> <p>Timeframe: </p>
<p>Climate change work programme: A programme of work to provide advice to Ministers and other departments about potential opportunities to reduce greenhouse gas emissions from the transport sector.</p>	<p></p> <p>In progress</p> <p>The Ministry is progressing work to better understand the choices New Zealand has to reduce transport emissions over the long term. This work will inform advice to Ministers on future policy and investment settings. Currently the key priority is to implement the Government's electric vehicle package. Other key initiatives include the Energy Efficiency and Conservation Authority's (EECA's) review of the Heavy Vehicle Fuel Efficiency Programme to improve the effectiveness of this initiative.</p> <p>Lead: MoT</p> <p>Timeframe: </p>
<p>Implementation of the National Land Transport Programme 2015-18, giving effect to the GPS on land transport for 2015/16-2024/25. The NLTP was released in June 2015 and is the programme of investment managed by NZTA in partnership with local government. The NLTP signals the potential activities for land transport investment over a three-year period.</p>	<p></p> <p>In progress</p> <p>Implementation of the National Land Transport Programme 2015-18 continues to give effect to the GPS on Land Transport 2015/16-2024/25.</p> <p>Lead: MoT/NZTA</p> <p>Timeframe: </p>

Progress/milestones achieved	
<p>Review of NZTA's Investment Decision-Making system: identify areas for improving the transparency and confidence of the current investment decision-making process. The Investment Decision-Making Review is intended to give stakeholders confidence that the investment decision-making process, and considerations within it, is fit for purpose, aligned with international best practice and will deliver the right transport outcomes for New Zealand. The review is a collaborative effort with the Treasury, MoT and representatives of local government. Recommendations are due in October 2015.</p>	<div>  <p>Complete</p> </div> <p>An interagency review of NZTA's investment decision-making system was completed in 2015. A number of recommendations have been made which NZTA will take into account in responding to the next GPS for Land Transport (2018) and the design of the Investment Decision Making System for the 2018/21 National Land Transport Programme.</p> <p>Lead: MoT, NZTA, the Treasury</p> <p>Timeframe: </p>
<p>A demand management and road pricing project is planned for 2015/16. The objectives are to improve the estimation of demand for infrastructure, and optimise the use of infrastructure.</p> <p>The first phase will be completed in 2015/16 and is likely to focus on problem analysis including consultation. Advice will go to Ministers on the feasibility and design of a heavy vehicle trial in 2015/16.</p> <p>The second phase will be completed in 2016/17, and is likely to focus on objectives and refined problem analysis following consultation.</p>	<div>  <p>In progress</p> </div> <p>Pending the outcome of the Auckland Transport Alignment Project</p> <p>Heavy Vehicle Demand Management Trial Investigation – Draft Report for Infrastructure Ministers was completed in April 2016. The Ministry's current demand management and road pricing project is on hold pending the outcome of the ATAP. Following ATAP, we will consider the most appropriate programme of road pricing work going forward.</p> <p>Lead: MoT</p> <p>Timeframe: </p>
<p>Improving vehicle productivity by reviewing Vehicle Dimension and Mass rules, supporting High Productivity Motor Vehicles. This is expected to be completed late in 2016.</p>	<div>  <p>In progress</p> </div> <p>Yellow draft consultation closed on 12 August 2016. MoT is currently analysing submissions. Recommendations of final changes will be in September 2016.</p> <p>Lead: MoT</p> <p>Timeframe: </p>
<p>Review of the Civil Aviation Act 1990 and the Airports Authorities Act 1966: a review of the Acts to ensure that a number of economic, safety and security issues relating to these Acts are fit for purpose and meet New Zealand's future needs.</p> <p>Recommendations will go to Cabinet in November 2015 with a Bill introduced to the House mid-late 2016.</p>	<div>  <p>In progress</p> </div> <p>MoT provided final advice to the Minister of Transport in February 2016 on proposals to amend the Civil Aviation Act and Airport Authorities Act. MoT has prepared a Cabinet paper to seek policy approval for amendments to these Acts. Following Cabinet consideration, amendments will be progressed in a Civil Aviation Reform Bill.</p> <p>Lead: MoT</p> <p>Timeframe: </p>

Progress/milestones achieved

NZTA will explore innovative revenue, pricing and financing approaches over 2015-16 that enhance the value delivered by land transport investments.



In progress

NZTA has developed an internal revenue and financing framework that enables it to better plan its financial initiatives and to action them. The principles within the framework are being applied to test options for accelerating land transport projects in Auckland and may be applied across New Zealand.

Lead: NZTA

Timeframe: 2015-2016 2017-2019 2020+

The ATAP will be established, as a joint project between Auckland Council and central government, to identify a preferred approach for developing Auckland's transport system over the next 30 years. (New – not published in 2015 Plan)



In progress

An interim report was released in June 2016, which contained the initial findings and set out the emerging strategic approach. The final report will include a recommended package of transport projects for Auckland over the next 30 years and is expected to be publicly released in September 2016.

Lead: Auckland Council, central government

Timeframe: 2015-2016 2017-2019 2020+



Telecommunications

Progress/milestones achieved

Coordinating the cross-agency Digital Economy Programme to ensure that government is focusing on the right areas to enable New Zealand to become a leading Digital Nation – a nation with a thriving digital sector, where our businesses, people and government are all using digital technology to drive innovation, improve productivity and enhance the quality of life for all New Zealanders. (Scope of action amended from 2015 Plan)



Implementing

The Digital Economy Programme has been developed through engagement with the tech sector, testing with government agencies and presentation and feedback from Ministers.

The programme includes a set of initiatives that will be carried out over the next 12 months, as well as some longer-term initiatives, focusing on four areas:

- > supporting the growth of a thriving Digital Sector
- > improving business productivity through business uptake of digital tools
- > ensuring New Zealanders are confident and able to function safely in the digital world, and
- > accelerating a Digital Government.

Lead: MBIE

Timeframe: 2015-2016 2017-2019 2020+

Extension of the UFB and RBI programmes and the Mobile Black Spot Fund. (Scope of action amended from 2015 Plan)



In progress

Commercial negotiations are underway to extend the UFB network. Policy settings are in place for the RBI and the Mobile Black Spot Fund, with a tender process due to commence in late 2016.

Lead: MBIE

Timeframe: 2015-2016 2017-2019 2020+

Set longer-term targets for broadband connectivity in New Zealand beyond 2020 taking account of requirements for regional economic development and other public interest imperatives.



Complete

On 6 October 2015, Communications Minister Amy Adams announced a set of rural broadband connectivity targets that, by 2025, 99% of New Zealanders will have access to 50Mbps peak speeds, and the remaining 1% will have access to 10Mbps.

Lead: MBIE

Timeframe: 2015-2016 2017-2019 2020+



Not started



Initiating



In progress











Ongoing

















Implementing



Complete









Progress/milestones achieved	
<p>Regular reporting on infrastructure deployment under the UFB and RBI programmes. Quarterly reports are published by MBIE showing progress with the deployment of facilities funded under the UFB and RBI programmes.</p>	<div>  <p>Implementing</p> </div> <p>Quarterly updates on UFB and RBI are publicly available.</p> <p>June 2016 update: http://www.mbie.govt.nz/info-services/sectors-industries/technology-communications/fast-broadband/documents-image-library/june-2016-quarterly-broadband-deployment-update.pdf</p> <p>Lead: MBIE</p> <p>Timeframe: </p>
<p>Develop a publicly accessible database tool which displays information by location on all types of broadband available (fibre, copper and wireless).</p>	<div>  <p>Complete</p> </div> <p>On 23 July 2015, Communications Minister Amy Adams launched the national broadband map to allow New Zealanders to source the best broadband options available to them (https://broadbandmap.nz/).</p> <p>Lead: MBIE, Internet NZ</p> <p>Timeframe: </p>
<p>Develop an Emergency Services Resiliency Framework to support the greater robustness of ICT facilities through which emergency services are delivered. This is a joint project across Police, Civil Defence, and other emergency service providers. The Framework is expected to be finalised in 2015.</p>	<div>  <p>Complete</p> </div> <p>This item has been completed with approval of the Framework by the Officials Steering Group for Emergency Services.</p> <p>Lead: Police</p> <p>Timeframe: </p>
<p>Develop a plan detailing the future role and requirements for the initial answering of 111 emergency calls.</p>	<div>  <p>In progress</p> </div> <p>MBIE has sought feedback from Emergency Service Providers (Police, Fire, St John and Wellington Free Ambulance) regarding their experiences of the current operation of the Initial Call Answering Point (ICAP) and their views on the future requirements for ICAP.</p> <p>Lead: MBIE, Emergency Service Providers</p> <p>Timeframe: </p>

Progress/milestones achieved	
<p>There is increasing reliance on international data cables for digital connectivity which is critical to linking New Zealand with the rest of the world. Monitor and report on the capability of international cable systems to fulfil the public interest requirements of New Zealand for international digital connectivity in relation to security, capacity and resilience.</p>	<div>  <p>Implementing</p> </div> <p>Monitoring is ongoing. During the past year:</p> <ul style="list-style-type: none"> > Southern Cross has announced a capacity increase in the Southern Cross cables. > laying of the Tasman Global Access cable (trans-Tasman) has commenced. This cable is expected to be put into service in 2017, and > “contracts-in-force” has been announced for the Hawaiki (trans-Pacific) cable. This cable is expected to be put into service in 2018. <p>Lead: MBIE</p> <p>Timeframe: </p>
<p>Undertake market research to identify the drivers of UFB demand and barriers to uptake from a demand-side perspective. Complete research in 2015.</p>	<div>  <p>Complete</p> </div> <p>MBIE funded the Auckland University of Technology to undertake a survey and produce a research report into the attitudes and uptake of UFB as part of the World Internet Project NZ. MBIE received the report in April 2016 and has made the report available to the public.</p> <p>Lead: MBIE</p> <p>Timeframe: </p>
<p>Telecommunications Carriers Forum (TCF) industry guidelines to foster national consistency of practices for property owner consenting to land access which supports efficient UFB connection.</p>	<div>  <p>In progress</p> </div> <p>In June the Government introduced the Telecommunications (Property Access and Other Matters) Bill which will facilitate access to third-party property for the purposes of installing UFB lead-ins to consumers down rights of way and multi-dwelling units. TCF is currently developing a code which will ensure that industry best practice reflects the provisions of the Bill. The Code will be operational by the time the Bill is enacted.</p> <p>Lead: TCF/MBIE</p> <p>Timeframe: </p>

Progress/milestones achieved	
<p>Reviewing the telecommunications regulatory regime. A discussion document on proposed regulatory changes is expected to be released in 2015. A key focus of the review is the price-setting arrangements for wholesale broadband services.</p>	<p></p> <p>In progress</p> <p>The review of the telecommunications regulatory regime is underway.</p> <p>On 12 July 2016, the Government announced the release of an options paper, which seeks feedback on the proposed “utility-style” framework for regulating fixed line communications services after 2020.</p> <p>On 14 April 2016, the Government announced a series of high-level policy decisions on the future regulation of the communications sector.</p> <p>On 8 September 2015, Communications Minister Amy Adams released the discussion paper “Regulating communications for the future to look at ways to future-proof New Zealand’s communications regulation and establish a durable and flexible framework to support ongoing innovation and investment after completion of UFB rollout post 2020”.</p> <p>Lead: MBIE</p> <p>Timeframe: </p>
<p>Review of the National Environmental Standard for Telecommunications Facilities. Amendments are proposed to expand the activities covered by the standard to increase national consistency in environmental controls for a greater range of telecommunications facilities, and to refine existing standard requirements.</p>	<p></p> <p>In progress</p> <p>MBIE continues to work with the MfE on proposed amendments to the National Environmental Standards for Telecommunication Facilities. Targeted exposure drafts of the regulations were released to stakeholders in 2016.</p> <p>Lead: MBIE</p> <p>Timeframe: </p>
<p>Reviewing regulatory arrangements to enable efficient land access for telecommunications connections.</p>	<p></p> <p>In progress</p> <p>The Telecommunications (Property Access and Other Matters) Amendment Bill was introduced to the House on 29 June 2016. It creates a new consenting process that telecommunications companies must follow when installing networks such as UFB. The Bill will also better protect homeowners through providing recourse to a disputes resolution scheme.</p> <p>Lead: MBIE</p> <p>Timeframe: </p>
<p>The Emergency Response System: Mobile Caller Location Project will enable the best available caller location information to be sent to any emergency service provider when a 111 call is made from their smartphone. (Scope of action amended from 2015 Plan).</p>	<p></p> <p>In progress</p> <p>The project is progressing and procurement activity is underway.</p> <p>Lead: MBIE/Police</p> <p>Timeframe: </p>



Energy

Progress/milestones achieved	
Promotion of regional renewable energy hubs.	 <p>Implementing</p> <p>Since 2014, five schools and two medium energy users (a dry-cleaning group and a tannery) have converted to wood energy, creating annual carbon reductions of 530 tonnes.</p> <p>Lead: EECA</p> <p>Timeframe: </p>
Promotion of petroleum and minerals exploration and development.	 <p>Implementing</p> <p>The Government runs an annual tender for exploration permits (known as Block Offer). Invitation for bids for Block Offer 2016 closed on 7 September 2016. A petroleum exploration data pack, which features a large selection of open-file seismic and well data, interpretation projects, reports and studies, was released to accompany the Block Offer.</p> <p>Lead: MBIE</p> <p>Timeframe: </p>
The New Zealand Energy Strategy 2011-2021 incorporating the New Zealand Energy Efficiency and Conservation Strategy 2011-2016 (NZECS) was published in August 2011. By February 2016 the Minister determines whether to refresh NZECS.	 <p>In progress</p> <p>The Minister announced his decision to refresh NZECS in March 2016. A draft new strategy is being developed.</p> <p>Lead: MBIE, EECA</p> <p>Timeframe: </p>
Smart Grid Forum (led by MBIE and the Electricity Networks Association (ENA)) considering challenges and opportunities for New Zealand's electricity system, which faces changing demand patterns and new technologies.	 <p>In progress</p> <p>The Smart Grid Forum is a forum for information sharing and dialogue between stakeholders. It has organised public lectures and published several reports on "smart grid" topics.</p> <p>Lead: MBIE, ENA</p> <p>Timeframe: </p>

Progress/milestones achieved

Investigate the impact that current pricing methodologies and other regulatory requirements have on incentives for efficient investment in new generation, storage and demand management technologies.



In progress

Consultation on the implications of evolving technologies for the pricing of distribution services was released in November 2015 (the “distribution pricing review”).

A project to identify aspects of the Electricity Industry Participation Code 2010 (Code) and its market processes that may contain implicit biases towards particular technologies has also been undertaken.

Lead: EA

Timeframe: 2015-2016 2017-2019 2020+

Low Carbon Auckland sets out a 30-year pathway and a 10-year plan of action to transform towards a greener, more prosperous, liveable, low carbon city, powered by efficient, affordable, clean energy and using resources sustainably. The plan addresses travel, the built environment, green infrastructure, waste, forestry and agriculture.



Implementing

Some of the key highlights for 2015/16:

- > Transport: Diesel commuter rail fleet replaced with 57 electric trains, equating to 17 million passenger journeys per annum, and saving over nine million litres of diesel fuel every year.
- > Energy: Auckland Transport has replaced 12,500 streetlights with LEDs, working towards the target of 45,000 by 2018, achieving a 72% operating energy reduction and is expected to see net savings of \$32 million over the 20-year design life of the LEDs. Vector has installed a Tesla utility-scale 1MW battery in Glenn Innes that can supply the peak electricity demand of approximately 500 homes.
- > Built environment: The Retrofit Your Home programme has supported the improvement of 10,000 homes since 2011. In 2015/16, a total of 2,183 homes received financial assistance from the programme and a further \$9 million in repayable financial assistance will be available in the forthcoming year.
- > Waste management: The seven regional waste management services were integrated into a single city-wide waste management system with associated efficiencies. Council is enhancing ratepayer education around waste reduction opportunities and using innovative methods to process the collected waste so less ends up in landfill. Waste reduction is also being encouraged through right-sizing of refuse bins and pay-as-you-throw pricing.

Lead: Auckland Council

Timeframe: 2015-2016 2017-2019 2020+



Not started



Initiating



In progress













Ongoing





















Implementing












Complete

Progress/milestones achieved	
Support continuous improvements in asset management planning practices by gas and electricity lines businesses through review of asset management plans and analysis of related information.	 <p>Ongoing</p> <p>Gas pipeline asset management plans (AMPs) were subject to a review in 2015 with the aim of facilitating future improvements. The Commission intends to undertake and publish periodic analyses of asset owners' AMPs and their self-assessments of asset management maturity.</p> <p>Lead: Commerce Commission</p> <p>Timeframe: </p>
The National Policy Statement for Renewable Electricity Generation 2011 includes recommendations to monitor, evaluate and report on its effectiveness by May 2016.	 <p>Complete</p> <p>An evaluation was completed in mid-2016.</p> <p>Lead: MfE, MBIE</p> <p>Timeframe: </p>
ENA members use the model "Transform" and other methods to help better understand the future investment environment.	 <p>Complete</p> <p>Development of the Transform model was completed in 2015. All participating Electricity Distribution Businesses' can use the model to compare traditional engineering approaches with innovative "smart grid" or hybrid approaches in network planning.</p> <p>Lead: ENA</p> <p>Timeframe: </p>
The Electricity (Hazards from Trees) Regulations 2003 were designed to protect the security of the supply of electricity, and the safety of the public by prescribing rules and responsibilities for managing trees in the proximity of electricity conductors. MBIE will investigate the effectiveness of the regulations governing management of trees near power lines.	 <p>Not started</p> <p>Investigation of effectiveness due to start mid-2017.</p> <p>Lead: MBIE</p> <p>Timeframe: </p>
<p>Implement the new extended reserve arrangements to help improve the management of the risk of blackouts by December 2015.</p> <p>Review low and high voltage fault ride-through Asset Owner Performance Obligations to ensure they are fit for purpose with the changing generation mix, and implement any necessary changes.</p>	 <p>In progress</p> <p>Considerable effort was made to finalise the operational details of the new extended reserve regime. Consultations on the selection methodology and technical requirements schedule are expected to commence in 2016/17.</p> <p>Go live is scheduled for March 2018.</p> <p>Lead: EA</p> <p>Timeframe: </p>

Progress/milestones achieved	
<p>Review stress testing arrangements designed to demonstrate spot price risk to consumers arising from electricity system stresses.</p>	<p></p> <p>In progress</p> <p>EA is reviewing the stress testing regime with consultation and decisions due in 2016/17.</p> <p>Lead: EA</p> <p>Timeframe: </p>
<p>Further review the operation of the spot electricity market to:</p> <ul style="list-style-type: none"> > ensure slow-start forms of generation are treated equally with fast-start generation (slow-start thermal generation can be a key source of energy supply during dry year events), and > improve opportunities for consumers to vary their demand in response to wholesale electricity prices. 	<p></p> <p>In progress</p> <p>Completed a review of whether the wholesale spot market should move to settle on real-time prices as part of work to remove barriers to the effective implementation and use of demand and supply management tools.</p> <p>In August 2016 EA published its decision to develop the details of a “look-ahead” dispatch-based price (option B from the information paper published in April 2016).</p> <p>Further consultation to be undertaken in 2016/17, if required.</p> <p>Lead: EA</p> <p>Timeframe: </p>
<p>Review whether there are long-term net benefits for consumers from introducing cap contracts in the electricity futures market to achieve robust and transparent pricing of generation and demand-response capacity and improve the resilience of generation and demand-response capacity.</p>	<p></p> <p>Implementing</p> <p>Completed a high-level review which concluded that transparently traded cap products on the futures market could provide useful information.</p> <p>EA is working with the Australian Securities Exchange to design and set up a cap product with robust and frequent pricing. As at August 2016, ASX are about to establish initial project and application to Australian Securities and Investments Commission for listing of \$130 and \$300 caps.</p> <p>Lead: EA</p> <p>Timeframe: </p>
<p>Continue to implement actions that Cabinet agreed to following the Oil Security Review 2012, including developing an Oil Emergency Response Handbook, and improving transparency of regional storage capacity by December 2015.</p>	<p></p> <p>In progress</p> <p>MBIE is reviewing operational arrangements for oil emergency response to a significant fuel supply disruption. Regional oil storage capacity will be published in late 2016.</p> <p>Lead: MBIE</p> <p>Timeframe: </p>

Progress/milestones achieved	
Identify opportunities to reduce dependency on imported liquid fuels.	 <p>In progress</p> <p>NZEECS is being refreshed. The Government's Electric Vehicles programme, which is now being implemented, will also contribute to reducing dependency on imported liquid fuels.</p> <p>Lead: MBIE</p> <p>Timeframe: </p>
Review the National Civil Defence Emergency Management Fuel Plan, which provides a readiness planning framework and response operations for fuel sectors and Civil Defence and Emergency Management (CDEM) in New Zealand – Review complete by December 2016.	 <p>In progress</p> <p>MCDEM is working with MBIE to consider the review of the national CDEM fuel plan alongside the review of the Oil Emergency Response Strategy to ensure there is alignment.</p> <p>Lead: MCDEM</p> <p>Timeframe: </p>
Consider options for incorporating Transpower's demand-side response mechanism into the spot electricity market to ensure efficient response to Transpower's demand-side response mechanism, and implement preferred option.	 <p>In progress</p> <p>Deferred owing to resourcing constraints during 2015/16.</p> <p>The Authority expects to make substantial progress in 2016/17, and has been keeping abreast of work that Transpower is doing in this space.</p> <p>Lead: EA</p> <p>Timeframe: </p>
Develop Transpower's demand response programme for transmission investment deferral, which is used to defer investment in grid upgrades by paying participating consumers to reduce demand during critical peak periods when doing so defers transmission investment.	 <p>Implementing</p> <p>The current programme (2015–20) targets regions where demand may be constrained in the future. It has a focus on campus-based organisations with several hospitals and a university currently registered to participate. It is also targeting irrigation and dairying operations and the early-adopters of batteries.</p> <p>Lead: Transpower</p> <p>Timeframe: </p>
Gas industry development of a demand response solution to congestion management on parts of the gas transmission system.	 <p>In progress</p> <p>Congestion is much less of an issue following the closure of the Otahuhu B and Southdown power plants.</p> <p>Lead: Gas Industry Company (GIC)</p> <p>Timeframe: </p>

Progress/milestones achieved	
Development of minimum energy performance standards for electricity appliances to support demand management.	 <p>Standards are reviewed regularly.</p> <p>Lead: EECA</p> <p>Timeframe: </p> <p>2015-2016 2017-2019 2020+</p>
Review input methodologies for the economic regulation of gas and electricity lines businesses to ensure regulatory instruments remain fit for purpose and respond to changing market conditions.	 <p>The Commerce Commission published its draft decisions in June 2016 and the review is on track to be completed by December 2016.</p> <p>Lead: Commerce Commission</p> <p>Timeframe: </p> <p>2015-2016 2017-2019 2020+</p>
EA to review principles governing pricing of electricity transmission and distribution services, including the connection of distributed generation. Investigate the market impact of regulations requiring low fixed electricity tariff options for households.	 <p>Consultation on proposed changes to the guidelines Transpower uses to develop the methodology by which it charges for the transmission grid was released in May and closed in August 2016.</p> <p>In the same timeframe the Authority also consulted on proposed changes to the distributed generation pricing principles. The distribution pricing review incorporates the findings of the investigation into the competition, reliability and efficiency effects of the low fixed charge regulations, which was completed in 2015/16.</p> <p>Lead: EA, Transpower, Electricity Distribution Businesses</p> <p>Timeframe: </p> <p>2015-2016 2017-2019 2020+</p>
EA will promote competition in electricity markets by providing consumers with better access to information and tools to make decisions between retailers.	 <p>Continued the <i>What's My Number</i> programme, and implemented Code amendments to increase consumer engagement by making it easier for consumers to access and share data and information.</p> <p>Funding for the <i>What's My Number</i> programme and other projects targeting facilitating consumer participation runs until 30 June 2017. The Authority is currently assessing the future need for and options for this work beyond 30 June 2017. Options assessment will address potential costs, and funding.</p> <p>Lead: EA</p> <p>Timeframe: </p> <p>2015-2016 2017-2019 2020+</p>

Progress/milestones achieved	
Commerce Commission will conduct an analysis of Electricity Distribution Businesses' information disclosure.	<div><div></div><div>In progress</div></div> <div><p>A report on Electricity Distribution Business profitability was published in June 2016. Further summary and analysis of disclosed information is planned.</p><p>Lead: Commerce Commission</p><p>Timeframe: </p><div><div>2015-2016</div><div>2017-2019</div><div>2020+</div></div></div>



Three Waters

Progress/milestones achieved

Cross-boundary study between Hamilton City Council, Waipa District Council and Waikato District Council to determine how each council should manage water, waste water and stormwater services across the subregion. Recommendation is for a CCO for water and wastewater outsourced on a cost recovery basis, with councils retaining ownership of stormwater assets.

If the three councils agree to form a CCO, a public consultation process will be required. Should a CCO be formed, it will act as a waters Centre of Excellence with the potential to share expertise with other water authorities in the region on a cost recovery basis.



In progress

In June and July 2016, all three councils agreed on the shape and structure of a potential CCO, outlined in a publicly-available RoA. Should councils, newly elected in October 2016, agree to proceed, consultation around a proposed CCO is likely to be undertaken in 2017.

Lead: Hamilton City Council, Waipa District Council, Waikato District Council

Timeframe: 2015-2016 2017-2019 2020+

Implementation of new planning and reporting requirements in the 2015 Long Term Plans, including non-financial performance, asset value and asset management, and the first 30-year infrastructure strategies to support planning and dialogue and conversations with communities on future levels of service.



Complete

The 2015 Long Term Plans were the first to include the new requirements including 30-year infrastructure strategies.

Lead: Local authorities

Timeframe: 2015-2016 2017-2019 2020+

Analyse local councils' 2015 long-term plans including 30-year infrastructure strategies to assess investment plans for next 10 years, impact on levels of service, overall direction of travel and scope of issues unaddressed.






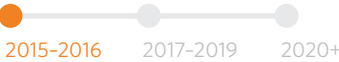




In progress

This work is currently being scoped and commissioned. DIA expects to complete this work by 30 June 2017.

Lead: Department of Internal Affairs (DIA)

Timeframe: 2015-2016 2017-2019 2020+

Progress/milestones achieved	
<p>The LGNZ 3 Waters project will lift the performance of potable water, wastewater and stormwater services and infrastructure. LGNZ will be releasing a position paper in 2015 to outline what a well-performing three waters sector should look like and propose options for a sector-led approach to improving performance in the future.</p>	<div>  <p>In progress</p> </div> <p>A position paper was released and consulted on in September 2015 with recommendations for progressing a co-regulatory approach with central government approved by the LGNZ National Council. Discussions are underway with Ministers on these recommendations and the wider alignment with other local government initiatives including the local government risk agency and disaster recovery funding.</p> <p>Lead: LGNZ</p> <p>Timeframe:  2015-2016 2017-2019 2020+</p>
<p>Land Information New Zealand (LINZ), several sector bodies and local councils will develop shared metadata standards for water infrastructure over 2015-16.</p>	<div>  <p>In progress</p> </div> <p>Draft New Zealand Asset Metadata Standards for three major asset classes, buildings, roads and the three waters, have been completed and peer reviews are underway. The business case for the implementation of the standards is due to be completed in November 2016. Key considerations include engagement with local government on designing an achievable implementation programme, alignment with other actions relating to the disaster recovery funding, 3 Waters Project and local government risk agency.</p> <p>Lead: LINZ, LGNZ, Water New Zealand, IPWEA, local councils</p> <p>Timeframe:  2015-2016 2017-2019 2020+</p>
<p>The University of Canterbury and Water New Zealand will develop Levels of Service Performance Measures for Seismic Resilience.</p>	<div>  <p>Complete</p> </div> <p>Published via Water New Zealand and integrated into guidelines being developed by Opus on the Seismic Resilience of Underground Infrastructure.</p> <p>Lead: University of Canterbury EQ Centre/ Water New Zealand</p> <p>Timeline:  2015-2016 2017-2019 2020+</p>
<p>Evidence-based investment decision-making for 3 Waters Pipe Networks. (New – not published in 2015 Plan)</p>	<div>  <p>Initiating</p> </div> <p>The University of Canterbury Quake Centre, Water New Zealand and IPWEA are leading work on developing a framework and guidance material to support investment decisions for water services that is consistent with the Metadata Standards. A scope of work has been developed likely to require substantial funding. An alternate staged approach is being considered.</p> <p>Lead: University of Canterbury EQ Centre/ Water New Zealand/IPWEA</p> <p>Timeframe:  2015-2016 2017-2019 2020+</p>

Progress/milestones achieved

The Treasury, MCDEM and DIA will review disaster recovery funding arrangements over 2015-16.



In progress

Initial phase of work is nearing the end of completion with a consultation document due to be released after the local body elections. Consideration is being given as to how this aligns with the actions relating to the local government risk agency, the 3 Waters Project and metadata standards work.

Lead: The Treasury, MCDEM, DIA,

Timeframe: 2015-2016 2017-2019 2020+

Rainfall, runoff, river channel flows, flood protection and related infrastructure are strongly correlated contributing to a wide range of outcomes including productive water requirements, urban water requirements and natural hazard risk management. The opportunities and threats are substantial. Concerns have been expressed across a broad spectrum, from governance to technical assumptions and community preparedness. The intent is to develop from previous work by central and local government, Crown research institutes and the private sector to establish a programme of activities to prioritise endeavours and coordinate across stakeholders.



Initiating

Discussions have been initiated across several government agencies and sector groups to consider the work required to advance this action plan item. A consistent approach to rainfall, runoff and flow data, and the methods by which they are used in water infrastructure and natural hazard management still needs to be determined. Further work is required to scope a programme of work which will enable this consistency and contribute to infrastructure and resource management outcomes. This scope is expected to be finalised by the end of 2017.

Lead: NIU, sector bodies, local government sector

Timeframe: 2015-2016 2017-2019 2020+



Not started



Initiating



In progress



Ongoing



Implementing



Complete



Productive Water

Progress/milestones achieved

The next stage of the freshwater reforms includes work on maximising the economic benefits from water that is available for use within limits, and addressing iwi/hapū rights and interests in water in appropriate ways. LAWf has been asked to:

- > provide advice to government on how to maximise the economic benefit of freshwater while managing within water quality and quantity limits, including transitional arrangements (September 2015), and
- > contribute to the further population of the National Objectives Framework and provide advice on ways to aid implementation of the National Policy Statement on Freshwater Management (NPS-FM) (September 2016).

LAWf will provide a review of the overall changes to water policy and its implementation, lessons learnt and the further work required to achieve the overall objective of improved water management in New Zealand in December 2017.



In progress

LWF provided recommendations to the Government in the "Fourth Report of the Land and Water Forum" (released on 27 November 2015) on maximising the economic benefits of freshwater while managing within water quality and quantity limits that are set consistent with the NPS-FM 2014.

LWF will contribute to the further population of the National Objectives Framework and comment on the overall implementation of the NPS-FM by November 2016.

Lead: LWF/MfE/MPI

Timeframe: 2015-2016 2017-2019 2020+

MPI, with support from MfE, has initiated the *National Collaboration Group for Farm Plans* project to support the successful development and implementation of farm plans. Three meetings were held in the first half of 2015 with stakeholders from across primary industries and related industries such as irrigation companies, training providers, regional councils, farmers and growers. A final report with practical actions and recommendations that will be supported and endorsed by members of the group is expected by mid-2015. A comprehensive Good Management Practice work programme will be implemented collectively by the relevant parties from end of 2015-17.



Ongoing

The Farm Environment Plan National Collaborative Working Group prepared its final report for stakeholders in November 2015.

Lead: MPI/MfE

Timeframe: 2015-2016 2017-2019 2020+



Not started



Initiating



In progress



Ongoing



Implementing



Complete

Progress/milestones achieved

Continue to develop collaborative regional approaches to water nutrient limit-setting including the economic implications (eg, Environment Southland Economic Project).



Ongoing

MfE and MPI continue to support regional authorities with collaborative planning including “exchanges” to share ideas and practices and provision of written guidance material and case studies.

Lead: Local councils, MfE

Timeframe: 2015-2016 2017-2019 2020+

MfE is providing support for regional councils, iwi and sector organisations to improve management of freshwater and setting limits on water quality and quantity, including through the development of tools, training and opportunities to share experiences and practices and guidance. Support for regional councils to build economic capability to undertake robust analysis of options for limits will continue over the next four years. Guidance for councils on outstanding freshwater bodies and dealing with over-allocation will be completed by 2017.



Ongoing

MfE and MPI are working with sector groups to develop tools to improve working within limits such as Good Management Practices, as well as supporting economic capability building with training courses, development of Cost Benefit Analysis tools and one-off case studies (initially with regional authorities). In addition, there is broader engagement with iwi, primary sector groups and environmental non-governmental organisations to identify areas for further support.

MfE and MPI are engaged with (a range of) Territorial Local Authorities on the implications from the NPS-FM on water infrastructure.

Lead: MfE

Timeframe: 2015-2016 2017-2019 2020+

MPI is working with regional councils, industry, and MfE to develop guidance material on the use of OVERSEER (a strategic management tool to manage nutrients on farms) by regional councils. The objective is to develop a nationally consistent approach for using OVERSEER in regulation, including protocols for data management and managing uncertainty in the outputs. This will provide guidance for councils on the principles of using OVERSEER rather than being prescriptive. The material produced will include information on OVERSEER's capabilities, assumptions and limitations, and will be written in easy-to-understand language for a non-technical audience.



In progress

The OVERSEER Guidance project has developed three reports:

- > a “plain English” technical description of OVERSEER for regional councils
- > a stocktake of regional councils’ use of OVERSEER, and
- > technical resources and recommendations on the appropriate use of OVERSEER in regional planning.

The first two reports are available at <http://overseer.org.nz/use-by-regional-councils>, and the third is due for release soon.

The next step for the project is to create web-based guidance modules for regional council staff using the recommendations from the third report. The project continues to be governed by a board comprising representatives from regional councils, industry, central government and OVERSEER Ltd.

Lead: MPI/MfE

Timeframe: 2015-2016 2017-2019 2020+



Not started



Initiating



In progress









Ongoing



Implementing



Complete

Progress/milestones achieved	
<p>Regional councils are giving effect to NPS- FM 2014 to set water quality and quantity objectives and limits. In some cases, communities are including water infrastructure in the options considered, to assist with meeting catchment objectives (eg, when water storage can reduce extraction pressure and improve water quality in groundwater and lowland streams). Incentives for adoption of efficient irrigation scheduling and application methods have increased in some cases (eg, where nitrogen discharges per hectare are capped in regional council rules to ensure quality limits are achieved).</p>	<p></p> <p>In progress</p> <p>A review of the implementation of the NPS-FM is currently underway and is expected to be published in 2017.</p> <p>Lead: MfE</p> <p>Timeframe: </p>
<p>The Resource Legislation Amendment Bill introduced in 2015 will include improved planning processes, clearer and more balanced national direction, the introduction of a national planning template, new consenting rules and processes to improve timeframes, and changes to ensure local authorities are enabling sufficient and responsive supply of land for urban development.</p>	<p></p> <p>In progress</p> <p>The final package of reforms to the Resource Management Act and associated legislation was introduced to Parliament on 26 November 2015 and had its first reading on 3 December. It was referred to the Local Government and Environment Select Committee. The Select Committee has now heard all submissions and is due to report back to Parliament on 7 November.</p> <p>Lead: MfE</p> <p>Timeframe: </p>
<p>MPI/MfE to support councils to implement the NPS-FM 2014 including the use of economic modelling approaches in understanding the impacts of choices made.</p> <p>Amendments to the NPS-FM 2014 will enable further population of the National Objectives Framework potentially in 2016 and 2019.</p>	<p></p> <p>In progress</p> <p>Initial consultation has been undertaken on the Government's proposed next steps for improving the management of freshwater in New Zealand, with further consultation planned for later in 2016.</p> <p>Lead: MfE/MPI</p> <p>Timeframe: </p>



Social Infrastructure

Progress/milestones achieved

MBIE is working with government agencies and Auckland Council to identify vacant or underutilised Crown land that could be developed for housing. MBIE then sells the land to iwi and private developers to undertake housing developments that meet government objectives around pace of construction and typology.

MBIE aims to achieve 20% social dwellings and 20% affordable dwellings from the housing yield across the programme. The social housing is available to both community housing providers and HNZC. (Scope of action amended from 2015 Plan)



Implementing

In May 2016 MBIE established a panel of developers to undertake development opportunities.

MBIE signed a Heads of Agreement with Fletcher Residential Limited in June 2016 for 196 homes on the first site at Moire Road, Massey. Earthworks at this site are expected to begin in October 2016 with the first homes available in August 2017.

Land has also been acquired at Great North Road, Waterview and New North Road, Mt Albert, for which development proposals are being prepared. Negotiation is continuing for the acquisition of a number of other sites.

Lead: MBIE

Timeframe: 2015-2016 2017-2019 2020+

As part of the National Policy Statement – Urban Development Capacity (NPS-UDC), MfE and MBIE are planning to develop a “development capacity model” or best practice guidance to help councils forecast their development needs. (Scope of action amended from 2015 Plan)



In progress

The NPS-UDC is planned for finalisation in late 2016. The central focus of the NPS-UDC is to ensure local authorities provide sufficient development capacity in the short, medium and long term.

Technical guidance will be developed throughout 2017, in consultation with local authorities, to assist them in giving effect to the requirements under the NPS-UDC.

Lead: MfE/MBIE

Timeframe: 2015-2016 2017-2019 2020+

Progress/milestones achieved

The Treasury's Social Housing Transactions Unit continues to closely with the Ministry of Social Development and HNZC to facilitate the growth of the community housing sector through the transfer of housing stock and subsidised tenancies to non-government providers.

This work, part of the Government's Social Housing Reform Programme, aims to improve social housing tenants' outcomes and grow the number and quality of social housing places. A key component of the Treasury's work is the creation of a market for social housing in which registered community housing providers participate alongside HNZC. (Scope of action amended from 2015 Plan)



Implementing

In 2015/16 the Government initiated two transfers of social housing from HNZC to community housing providers – one in Tauranga and one in Invercargill.

A preferred provider for Tauranga, Accessible Properties Limited, was identified in August 2016. If final negotiations are successful they will become the new landlord for approximately 1,124 properties in March or April 2017.

The Invercargill transfer is not proceeding. However, the Government has not ruled out initiating another transaction process there at some point in the future.

Lead: The Treasury

Timeframe: 2015-2016 2017-2019 2020+

Tāmaki Transformation Programme: In April 2015 the Government agreed to the transfer of 2,800 HNZC properties – and responsibility for tenancy and property management – to the Tāmaki Redevelopment Company (TRC), by 31 March 2016. As part of the next stage of TRC's rejuvenation of the Tāmaki area, these houses will be progressively redeveloped into 7,500 new social, affordable and at-market homes. The Government has also approved a \$200 million loan facility for TRC, to be made available to allow TRC to progress its planning and to take advantage of early development opportunities.



Implementing

The transfer was completed on 31st March 2016.

TRC issued an Expression of Interest for the Large Scale Redevelopment Programme on 10 August 2016.

TRC has established a community housing provider which, on 1 April 2016, began providing tenancy and property management for the transferred properties.

Lead: The Treasury, MBIE

Timeframe: 2015-2016 2017-2019 2020+



Not started



Initiating



In progress



Ongoing



Implementing



Complete

Progress/milestones achieved

In July 2015 the national Māori Housing Network was established in Te Puni Kōkiri with the key role of providing practical assistance for Māori housing projects and administering Crown funding for Māori housing programmes. Launched in October 2015, the Māori Housing Network supports the goals of the Government's wider Māori Housing Strategy. (Scope of action amended from 2015 Plan)



Implementing

Investment by the Network breaks down as follows:

- > Improving the quality of housing for whānau:
 - 243 homes being repaired
 - 11 projects funded providing on-the-ground support workers
 - 155 whānau houses being assessed for repair, and
 - 5 emergency housing projects supported.
- > Increasing the supply of affordable housing for Māori:
 - 42 affordable housing units for whānau funded to be built
 - 116 infrastructure to be built or installed for new homes, and
 - 79 whānau accessing housing facilitation support.
- > Building the capability of whānau, hapū and iwi within the Māori housing sector:
 - 31 capability building projects underway
 - 35 papakāinga workshops funded, and
 - 7 housing workshops funded.

Lead: MBIE

Timeframe: 2015-2016 2017-2019 2020+

Progress/milestones achieved

Land supply has been identified as a key issue for affordable housing. The Housing Accords and Special Housing Areas Act (HASHAA) passed in 2013 created a framework for further housing developments with councils, by enabling streamlined consenting processes for residential developments in SHAs. Accords can also provide for cooperation on non-regulatory matters.



In progress

The Government has agreed Housing Accords with Auckland Council, Christchurch City Council, Wellington City Council, Queenstown-Lakes District Council, Tauranga City Council, Western Bay of Plenty District Council, Nelson City Council, Tasman District Council and Selwyn District Council. A total of 213 past and present SHAs enable approximately 70,000 dwellings in these districts.

One hundred and fifty-six SHAs have also required developers to build a proportion of dwellings within the development at affordable price points.

On 15 September 2016, HASHAA was extended for a further three years to allow additional SHAs to be established.

Of the 213 SHAs established before this date, only those where consents have already been lodged with the relevant council will continue to have access to the more permissive and streamlined consent process enabled by HASHAA.

Lead: MBIE

Timeframe: 2015-2016 2017-2019 2020+

On 27 June 2016 Cabinet agreed to the establishment of a new fund – the Housing Infrastructure Fund – to assist high-growth councils facing financial constraints to finance the roading and water infrastructure required to unlock residential housing development. (New – not published in 2015 Plan)



Initiating

Policy parameters are being developed and the Government has called for indicative proposals in September, and applications in 2017.

Lead: MBIE

Timeframe: 2015-2016 2017-2019 2020+

Continued deployment of the Eight-Point Plan to improve school property services. This includes better procurement to enable faster delivery of national programmes, providing schools with incentives to collaborate and providing greater transparency about the costs and condition of school property.



Implementing

One key benefit of having a centralised education infrastructure service is the ability to gain procurement efficiencies through the scale of national programmes and supplier negotiations. To this end, MoE is looking at how bundled packages of services could be developed so Communities of Learning have a menu of external providers in areas such as office administration, ICT, property and social services.

The Ministry is also realising greater efficiencies owing to the size of the overall portfolio. The national contract for modular buildings began operating last year, and the Ministry has done work to streamline and accelerate the process of upgrading existing teaching spaces, by developing reference designs for the upgrade of standard blocks.

Lead: MoE

Timeframe: 2015-2016 2017-2019 2020+



Not started



Initiating



In progress









Ongoing











Implementing



Complete

Progress/milestones achieved	
<p>MoE is proactively engaging with Auckland Council and with HNZA to identify demand from SHAs in Auckland.</p>	<div>  <p>In progress</p> </div> <p>As part of the Auckland Growth Plan, the MoE has been engaging with Auckland Council with regards to SHAs, the Auckland Unitary Plan and greenfield housing developments. This engagement has fed into the ongoing forecasting for new schools and roll growth classrooms in Auckland.</p> <p>Lead: MoE</p> <p>Timeframe: </p>
<p>MoE has conducted early stage work with some communities to address their declining populations and over- provision of infrastructure. The work is at a very early stage and focuses on student/community outcomes rather than network/service provision.</p>	<div>  <p>In progress</p> </div> <p>MoE has continued to discuss future schooling needs with the boards of schools in areas of population decline. The process and timeframe for each community is different according to their situation. This work is being undertaken alongside the formation of Communities of Learning, which is a collaborative initiative that sees schools form a pathway for students working together to raise achievement.</p> <p>During 2015/16 eight state schools closed. All of these were in areas of population decline.</p> <p>Lead: MoE</p> <p>Timeframe: </p>
<p>MoE will develop an estate strategic plan that considers broader government intentions; the initial work will be completed in 2015.</p>	<div>  <p>Implementing</p> </div> <p>The Long Term Investment Plan for school infrastructure, completed in December 2015, sets out the plan to invest around \$7.5 billion over 10 years (2015/16 to 2024/25) in accordance with the requirements and intentions established via legislation, government policies and strategic priorities.</p> <p>The Plan aims to manage normal lifecycle capital maintenance while meeting significantly changing demand and making progressive improvements to the functionality of the school infrastructure asset portfolio to increase the proportion of classrooms compliant with flexible learning spaces standards as part of providing innovative learning environments, and ensure schools are able to benefit from connection to UFB and are earthquake resilient. Also, where required, by providing environments supporting Māori to enjoy and achieve education success as Māori and for learners with special needs to enable them to participate and achieve within mainstream schooling.</p> <p>Lead: MoE</p> <p>Timeframe: </p>

Progress/milestones achieved	
<p>MoE's asset management system "HELIOS" is under development and will increase the accessibility of property data and the associated level of accuracy/assurance.</p>	<div>  <p>Implementing</p> </div> <p>The first release of the Helios system, providing core asset management functionality, went into production in April 2016, with a second release, providing additional financial functionality, in June 2016. MoE is now using the Helios system for the management of all school property. The delivery project has now completed its objectives and will close down at the end of August 2016.</p> <p>Lead: MoE</p> <p>Timeframe: </p>
<p>MoE is investigating the provision of property data to Open Data.</p>	<div>  <p>In progress</p> </div> <p>MoE has now implemented its new asset management system, Helios, and is looking to publish information contained within Helios online, in accordance with the New Zealand Open Data standards.</p> <p>Lead: MoE</p> <p>Timeframe: </p>
<p>The School Property Programme Business Case is developing the MoE's asset management maturity. It provides a whole-of-network approach and identifies a 10-year timescale of investment requirements.</p>	<div>  <p>Implementing</p> </div> <p>The School Property Programme Business Case focuses on increasing school network capacity in areas of high demand such as Auckland. It informs the Budget process on a yearly basis.</p> <p>Budget 2016 focused on addressing growth across New Zealand with a particular focus on Auckland, where the Government is acting now to get ahead of demand driven by the rapidly increasing population.</p> <p>Lead: MoE</p> <p>Timeframe: </p>
<p>MoE has launched the School Property Disposal Incentive Scheme to increase the rationalisation of surplus school property and free up funds that could be re-invested in modernising school facilities.</p>	<div>  <p>Implementing</p> </div> <p>Under the Scheme, schools with surplus property are encouraged to release it to the Ministry so it can be sold through the Crown disposal process. Once sold, schools receive some or all of the sale proceeds via their five-year agreement funding, which is provided to schools to upgrade, modernise or replace existing buildings.</p> <p>During 2015/16 there were 30 property disposals that resulted in an increase in 5YA funding. The increase in five-year agreement funding totalled \$3.9 million.</p> <p>Lead: MoE</p> <p>Timeframe: </p>

Progress/milestones achieved

MoE has established the National Transportables Framework to supply transportable classrooms for schools as and when required for student roll growth, temporary accommodation during building works, and during disaster recovery. This will yield greater conformity of transportable units and should achieve cost efficiencies compared to current arrangements, whereby schools procure their own transportable classrooms.



Implementing

In 2015, the MoE established a national contract for the supply of modern, high specification modular buildings to schools because they provide fit-for-purpose, high-quality, durable facilities that are easy for schools to maintain and have a minimum 50-year lifespan. These relocatable buildings meet the same standards and codes as new, permanent buildings and can be provided in shorter timeframes than most traditional construction projects. Modular buildings are being delivered through a long-term contract with a single supplier (with factories in Auckland and Christchurch) to deliver cost savings over time, as a high volume of goods delivered over an extended period enables the supplier to reduce costs and pass on savings to the Ministry.

Currently, modular buildings are being used to address roll growth expansion around the country, with around 100 teaching spaces due to be delivered by mid-2017. Over time these buildings will be available for use in redevelopment projects and new schools. Emergency units will also be available in both the North and South Islands.

Lead: MoE

Timeframe: 2015-2016 2017-2019 2020+

Defence will develop an Estate Plan to provide the detailed direction for regeneration, whole-of-government integration and maintenance of the estate out to 2030. This will increase transparency of the management and utilisation of the Estate, how it contributes to the generation of outputs, and its use by other agencies.



Complete

Cabinet has approved the Defence Estate Regeneration Programme Plan, which provides a 15-year plan for a \$1.7 billion capital investment and \$2.5 billion operational expenditure in the Defence Estate out to 2030.

Lead: NZDF

Timeframe: 2015-2016 2017-2019 2020+

The project to refresh infrastructure data across the Defence Estate has been completed. NZDF is advancing asset management maturity by introducing the Building Information Modelling principles (aligning with the MBIE), including: creating data standards, three dimensional modelling for larger projects, document control, linking systems to provide reporting functionality and maintaining data integrity.



In progress

Building Information Modelling is being trialled with capital projects at NZDF (for example, the Whenuapai Air Base Gym).

Lead: NZDF

Timeframe: 2015-2016 2017-2019 2020+

Progress/milestones achieved

NZDF is actively considering resilience in current planning. The analysis informing the planning is likely to consider interdependencies and community preparedness alignment with core resilience requirements on NZDF camps and bases.

Work is underway to identify resiliency threats across the Defence Estate (for example, seismic events, sea level rise, energy continuity, urban encroachment, bushfires, flooding and wind storms).

There is a long-term mitigation programme across the Defence Estate for earthquake-prone buildings.



In progress

NZDF has reviewed potentially earthquake-prone buildings. There are 49 buildings confirmed as potentially earthquake prone. Of these, some have already been vacated or contingency plans have been put in place because these buildings require immediate strengthening work.

Master plans (Estate Strategic Frameworks) have been completed (or are near completion) for all NZDF camps and bases. These considered the implications for resilience planning. Sea level rise, for example, has the potential to impact the North Yard and Ngataranga Bay at Devonport Naval Base. The implications of sea level rise are being considered in light of recent government guidance with a refresh of the master planning for Devonport Naval Base.

Energy continuity was considered with a review of the energy policy contained in Defence Force Order 32 in 2016.

Lead: NZDF

Timeframe: 2015-2016 2017-2019 2020+

There is currently a housing and accommodation assistance review being undertaken by NZDF. This review will help to confirm the future strategic direction for Defence housing and accommodation facilities.

Governance of the Estate is being aligned with the new NZDF Governance Framework. This will allow Defence to better manage the significant change in culture and practice from historic management and planning for individual camps and bases to one of management and planning for the Estate on a pan-Defence and whole-of-government basis.



In progress

The accommodation assistance review will be completed in the next quarter.

Lead: NZDF

Timeframe: 2015-2016 2017-2019 2020+

In 2014 Cabinet approved indicative capital and corresponding amounts of operating funding to recapitalise and regenerate the Defence Estate to ensure it is fit for purpose and compliant with health, safety and security requirements by 2030.

Different ownership models, increasing the number of multi-use facilities and greater use of commercial providers will be explored. Estate planning will be coordinated with major equipment replacement projects to ensure Capability and Estate initiatives are aligned.















Complete

Refer above to approval of the Estate Regeneration Plan.

Lead: NZDF





Timeframe: 2015-2016 2017-2019 2020+

Progress/milestones achieved	
<p>MoJ is continuing the development of a programme to modernise the court system.</p>	<p> Implementing</p> <p>Project milestones achieved include:</p> <ul style="list-style-type: none"> > Manukau District Court upgrade complete > Christchurch Justice and Emergency Services Precinct implementing > Waitakere District Court upgrade complete > New Plymouth High/District Court implementing, and > Dunedin High/District Court seismic upgrade implementing. <p>The 10-year capital plan is in progress – the purpose is to upgrade infrastructure, improve business processes (where required) and improve buildings.</p> <p>Lead: MoJ</p> <p>Timeframe: </p>
<p>MoJ is working to improve the flow of information through the justice sector – including between police and courts.</p>	<p> In progress</p> <p>This is part of MoJ's ongoing work programme.</p> <p>Lead: MoJ</p> <p>Timeframe: </p>
<p>The Investing in Justice programme supports MoJ's response to funding pressures over the next four years. Investing in Justice examines and modifies MoJ expenditure to ensure the Ministry is as efficient and effective as possible and is focused on further improving the value for money of the New Zealand justice system.</p>	<p> In progress</p> <p>The Ministry met the financial targets set for 2015/16 and is tracking to meet the 2016/17 set targets.</p> <p>Lead: MoJ</p> <p>Timeframe: </p>

Progress/milestones achieved	
<p>Corrections began a review in 2016 of the long-term sustainability of the prison network to 2025. This has resulted in progressing the addition of 341 new beds to the network through the expansion of double bunking in five prisons, additional reconfiguration of the facilities at one of those prisons and the addition of modular cells at two prisons.</p> <p>Alongside this, Corrections has developed a series of recommendations for larger-scale capacity expansion in a Programme Business Case to ensure the prison network can appropriately manage current and expected levels of demand. These recommendations will be considered by Government in October 2017 and may result in further network investment. (New – not published in 2015 Plan)</p>	<p></p> <p>In progress</p> <p>Lead: Corrections</p> <p>Timeframe: </p>
<p>Corrections is continuing to review the prison network configuration to maximise value for money, as part of its review of the medium to long-term prison capacity requirements to 2025.</p>	<p></p> <p>In progress</p> <p>Lead: Corrections</p> <p>Timeframe: </p>
<p>Twenty DHBs recently undertook asset management maturity self-assessments – nine of these were selected for independent review by an expert practitioner (AECOM). These assessments will be used as a baseline for improving asset management maturity across the sector and will support the requirements of the new Cabinet circular on central government capital asset management. A cross-DHB Health Asset Management Improvement group has been established to coordinate and drive asset management improvement across the sector.</p>	<p></p> <p>In progress</p> <p>Lead: DHBs</p> <p>Timeframe: </p>



Cross-cutting Initiatives

Progress/milestones achieved	
<p>Develop national metadata standards for roads, water and buildings to ensure a consistent base to build evidence, undertake forecasting and deepen capability.</p>	<p> In progress</p> <p>Draft New Zealand Asset Metadata standards for three major asset classes – buildings, roads and the three waters – have been completed and peer reviews are underway. The business case for the implementation of the standards is due to be completed in November 2016.</p> <p>Lead: NIU, LINZ, NZTA, MBIE, sector bodies, local government sector</p> <p>Timeframe:  2015-2016 2017-2019 2020+</p>
<p>Explore the establishment of regional Centres of Excellence or similar arrangements for collating and making available the data obtained through shared metadata standards. This initiative will also explore the costs, benefits, and funding implications of any new entity providing the necessary analytics to interrogate the data and support local decision-making.</p>	<p> In progress</p> <p>Work is ongoing in relation to enhancing collaboration and capability at a regional level. Current projects to support this include the Asset Metadata standards and the One Network Road Classification.</p> <p>As part of the New Zealand Asset Metadata standards business case due for completion this year (see above), arrangements for optimising the analytical capabilities across decision-makers are being explored.</p> <p>The Road Efficiency Group via EquiP has established regional Centres of Excellence using the One Network Road Classification to build a platform that shares data on customer outcomes and value for money.</p> <p>Lead: NIU, NZTA, MBIE, sector bodies, local government sector</p> <p>Timeframe:  2015-2016 2017-2019 2020+</p>

Progress/milestones achieved

Investigate options to support long-term integrated regional infrastructure plans, potentially with legislative recognition incorporating central and local government objectives.



In progress

There are multiple programme areas of current work that intersect with local government and the planning system. These include the Better Local Services programme and Bill currently in Parliament, the National Policy Statement on Urban Development Capacity, the response to the Productivity Commission Report *Using Land for Housing* and the current Productivity Commission *Enquiry on Better Urban Planning*. The Waikato Plan being developed by the Joint Committee and the Wellington Water work on resilience are locally driven examples of this integration.

Lead: NIU

Timeframe: 2015-2016 2017-2019 2020+

Collaboration across local and central government organisations to develop the Waikato Plan.



In progress

The primary objective of the Plan is for all councils and agencies to contribute to Waikato's social, economic, environmental and cultural wellbeing through a comprehensive and effective 30-year strategy for the region's growth and development. The Joint Committee established to develop the Plan is well advanced with consultation and engagement and drafting of the Plan and summary with a wider consultation draft expected by the end of 2016. The DHB, NIU and NZTA attend the committee meetings.

Lead: Waikato Mayoral forum

Timeframe: 2015-2016 2017-2019 2020+

The Future Urban Land Supply Strategy is being developed in order to maintain a pipeline of development capacity across Auckland. It will sequence structure planning and live zoning of the future urban areas to achieve the best outcomes for the provision of housing, employment, community facilities, open space and infrastructure, including transport. The strategy is being developed as a collaborative project including involvement by infrastructure providers recognising the importance of aligning infrastructure delivery with planning. The Strategy will be complete by October 2015 with implementation following.



Implementing

Auckland Council adopted the Future Urban Land Supply Strategy in November 2015.

A draft structure plan for Whenuapai, the first area sequenced for release under the Strategy, has been completed.

The Future Urban Land Supply Strategy will be reviewed to reflect the recommendations by the Independent Hearings Panel on the Auckland Unitary Plan.

Lead: Auckland Council

Timeframe: 2015-2016 2017-2019 2020+

Progress/milestones achieved

The Sport and Recreation Strategic Action Plan is a sector-wide plan for Auckland's sport and recreation sector. The Plan lays out the common vision for improving recreation and sport across Auckland, the actions to be taken to get there and the role the Council and other organisations will play. A key focus of the Plan is infrastructure – developing access to open spaces and harbours, coastlines and waterways and a fit-for-purpose network of facilities enabling physical activity, recreation and sport.



Implementing

Sixteen infrastructure initiatives are being implemented and the sector has prioritised a further nine for implementation over the next 10 years. The highlights since 2014 include:

- > Adoption of Auckland Council's Community Facilities Network Plan and the Open Space Provision Policy which adopt consistent service levels and inform investment decisions.
- > Since July 2015, acquisition by Auckland Council of a total of 767 hectares of open space.
- > Auckland Council investment in over 75 facility partnership projects over the past three years, with an investment of \$27 million towards total facility development of \$76 million.
- > School and community partnerships project established to improve utilisation of community and school facilities in partnership with Sport NZ, Active – Auckland Sport & Recreation and MoE.

Lead: Auckland Council

Timeframe: 2015-2016 2017-2019 2020+

Investigate options to tighten the link between financial planning and strategic asset management planning at the central and first local government levels, pending the effects of forthcoming central government asset management reforms and the first local government 30-year infrastructure strategies produced this year.



Not started

Work on this item has not yet started. NIU and DIA will look to build off work from analysing local councils' 2015 long-term plans to investigate closer linking of central and local government financial planning and strategic asset management practices from mid-2017.

Lead: NIU/DIA

Timeframe: 2015-2016 2017-2019 2020+

Develop an earthquake-prone buildings register to list all earthquake-prone buildings in 2015-16.











Implementing

On 1 July 2017, earthquake-prone building register to go live to coincide with implementation of regulation.

Lead: MBIE

Timeframe: 2015-2016 2017-2019 2020+

Progress/milestones achieved	
<p>IPWEA New Zealand and NIU will establish a programme to enhance the capability, productivity and leadership in asset management throughout the public sector in New Zealand.</p> <p>They will establish and lead a collaborative cross-sector programme to enable: increased understanding of asset management amongst public sector capital asset owners; the wide collection, development, synthesis and dissemination of exemplary practice standards, manuals, guidelines and other resources across the public works sector; the integration of investment and optimised decision-making processes and tools in asset management planning and long-term infrastructure planning.</p>	<p></p> <p>In progress</p> <p>IPWEA has established a three-year work programme to enhance the capability, productivity and leadership in asset management throughout the public sector in New Zealand.</p> <p>Lead: IPWEA/NIU</p> <p>Timeframe: </p>
<p>Update of the International Infrastructure Management Manual in 2015.</p>	<p></p> <p>Complete</p> <p>Fifth edition of the International Infrastructure Management Manual was published in 2015: http://www.ipwea.org/newzealand/home</p> <p>Lead: IPWEA NZ/NAMS with IPWEA Australasia</p> <p>Timeframe: </p>
<p>Update of the Property Manual in 2015.</p>	<p></p> <p>Complete</p> <p>Property Manual. Available at: http://www.ipwea.org/newzealand/home</p> <p>Lead: IPWEA NZ/NAMS</p> <p>Timeframe: </p>
<p>Update of the Valuation and Deprecation Guidelines in 2015.</p>	<p></p> <p>In progress</p> <p>Update of Valuation and Deprecation Guidelines delayed until 2017.</p> <p>Lead: IPWEA NZ/ NAMS</p> <p>Timeframe: </p>

Progress/milestones achieved

Hamilton City Council has developed a corporate improvement programme for asset management and is aiming towards creating a cross-organisational Asset Management 'Centre of Excellence'.

In order to allow developers to progress ahead of council timing, a growth funding policy has been adopted that allows developers to fund necessary infrastructure to advance their developments. Council also has a development contributions policy and model that allows it to recover a percentage of the costs of growth from development (approximately 50%).



Implementing

A 'Centre of Excellence' for asset management has been established to drive organisation improvement and uses a virtual team approach to provide support, guidance, shared learning, reporting and governance across the organisation. A cross-organisational improvement programme is being implemented. This includes developing an Asset Management Information Strategy that will act as a blueprint for development and investment in asset information, processes and systems.

Council continues to use its Growth Funding Policy to guide the development of Private Developer Agreements within Hamilton.

Lead: Hamilton City Council

Timeframe: 2015-2016 2017-2019 2020+

Wellington City Council has completed a preliminary economic yield analysis on core infrastructure assets. This is designed to maximise the use of existing assets. The potential savings in capital investments to maintain and grow its infrastructure base suggest very large financial benefits at this stage.



In progress

The preliminary analytical work has been completed for the economic yield of core infrastructure (three waters and roading assets). A peer review is required to validate the work to date. Considerations to the findings will be required once this work is completed.

Lead: Wellington City Council

Timeframe: 2015-2016 2017-2019 2020+

Guidelines to be published in 2015-16 on insuring public infrastructure assets against damage caused by natural disasters.



Complete

Guidelines published in 2015. Available at: <http://www.ipwea.org/newzealand/home>

Lead: IPWEA NZ/NAMS

Timeframe: 2015-2016 2017-2019 2020+

Progress/milestones achieved

Cyber security work led by the National Cyber Policy Office in DPMC and Government Communications Security Bureau (GCSB), to ensure that New Zealand's most significant information infrastructure – public and private – are protected from cyber risks. This includes providing targeted cyber protection, delivering timely mitigation advice, initiatives to improve the cyber security capability of the corporate sector, including critical national infrastructure, and ongoing engagement through the Connect Smart partnership (<http://www.connectsmart.govt.nz>).



In progress

Launch of refreshed Cyber Security Strategy and Action Plan, December 2015. The Strategy provides a framework for public-private sector collaboration to improve New Zealand's cyber security.

Budget 2016 approval of \$22.2 million over four years for the establishment of a national CERT by March 2017.

Ongoing delivery of CORTEX capabilities to counter cyber threats to organisations of national significance.

Inaugural New Zealand Cyber Security Summit in Auckland on 5 May 2016 attracts 300 chief executives, board chairs and business leaders and emphasises that cyber security is an executive-level responsibility.

Engagement with companies to ensure the security of ICS or SCADA systems through the National Cyber Security Centre's leadership of Control Systems Security Information Exchange, involving the sharing of best practice and information on the threat environment.

Lead: DPMC, GCSB

Timeframe: 2015-2016 2017-2019 2020+

LINZ is developing tools such as "Forward Works" and advanced geospatial sourcing and information systems to add to improved decisions on resilience.



In progress

National Forward Works Viewer has a Governance Board and extension in use of the viewer to Auckland and Wellington is progressing.

Lead: LINZ

Timeframe: 2015-2016 2017-2019 2020+

Complete the New Zealand Geospatial Research & Development Strategy to encourage appropriate geospatial research to support infrastructure and hazards management, March 2016.



Complete

New Zealand Geospatial Research and Development Priorities and Opportunities document released by Minister for Land Information, December 2015.

Lead: LINZ

Timeframe: 2015-2016 2017-2019 2020+

NIU to make available tools for businesses to ask their infrastructure service providers resilience questions and achieve more focused assessment of interdependencies and priorities.



Not started

This work has not commenced. Opportunities to link to existing work programme and discussions with Lifelines to be advanced in 2017.

Lead: NIU

Timeframe: 2015-2016 2017-2019 2020+



Not started



Initiating



In progress








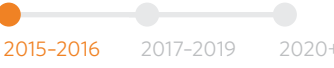


Ongoing











Implementing



Complete

Progress/milestones achieved	
<p>Lifelines to progress initiatives to improve resiliency in New Zealand:</p> <ul style="list-style-type: none"> > Work with sector co-ordinating entities and researchers to benchmark and improve network and organisational resilience. > Review status of Regional Vulnerability Assessments by December 2015. > Drive a more consistent approach across regional Lifelines groups with a unified methodology. > Work with MCDEM and New Zealand Lifelines Committee to improve the extent to which infrastructure service providers meet their obligations under the CDEM Act. 	<p></p> <p>In progress</p> <p>Lifelines working with MCDEM to re-mobilise sector coordinating entities and to coordinate researchers to improve network and organisational resilience.</p> <p>Status of Regional Vulnerability Assessments completed December 2015 and being maintained.</p> <p>Lifelines continuing to drive a more consistent approach across regional Lifelines groups.</p> <p>MCDEM and Lifelines proactively engaging with infrastructure providers as a reminder of CDEM Act obligations.</p> <p>Lead: Lifelines</p> <p>Timeframe: </p>
<p>Review the Government's National Civil Defence Emergency Management (CDEM) Strategy, which sets out the vision, values, principles and goals for CDEM in New Zealand for a period of 10 years – Review complete by December 2017.</p>	<p></p> <p>In progress</p> <p>The National CDEM Strategy review is currently in Phase 2 of six phases. The Strategy is on track for completion by 2018. Phase 4 formal consultation will be carried out in 2017.</p> <p>Lead: MCDEM</p> <p>Timeframe: </p>
<p>Review the Lifeline Utilities and CDEM Director's Guideline, which provides guidance to Lifeline utilities on meeting their requirements under the CDEM Act and supports collaborative partnership with CDEM groups.</p>	<p></p> <p>Complete</p> <p>The Lifeline Utilities and CDEM Director's Guideline was completed and published in June 2014. Guidelines are reviewed on average every five years and so another review will be scheduled to commence around 2018/19.</p> <p>Lead: MCDEM</p> <p>Timeframe: </p>
<p>Periodically review the CDEM Plan and supporting Guide, which set out the roles and responsibilities of Lifeline utilities and other entities across the 4Rs of risk reduction, readiness, response and recovery requirements.</p>	<p></p> <p>Complete</p> <p>A revised National Civil Defence Emergency Management Plan Order 2015 and supporting Guide were completed in 2015 and came into force on 1 December 2015.</p> <p>Lead: MCDEM</p> <p>Timeframe: </p>

Progress/milestones achieved	
<p>Resilience-related research projects progressing across New Zealand include QuakeCore, National Science Challenge, Resilience to Nature's Challenges and National Science Challenge Better Homes, Buildings, Towns and Cities.</p>	<p></p> <p>In progress</p> <p>QuakeCoRE, Resilience to Nature's Challenges and Better Homes, Towns and Cities are underway and all contain infrastructure-related elements from technical detailing through to interdependencies and economic optionality. Complementary and coordinated forward activity will be critical.</p> <p>Lead: Multiple agencies</p> <p>Timeframe: </p>
<p>The MBIE-funded Economics of Resilient Infrastructure project will be completed in 2015-16.</p>	<p></p> <p>In progress</p> <p>Substantially completed and in use on specific case studies around the country. Continuing development and operational deployment expected and various funding streams being applied.</p> <p>Lead: MBIE</p> <p>Timeframe: </p>
<p>MBIE will establish a nationally available Geotech Database, hosted by MBIE. MBIE intends working with the private sector and local government to continue to grow the Database to provide national coverage.</p>	<p></p> <p>In progress</p> <p>The National Geotech Database has been deployed and is being populated. MBIE is continuing to encourage use. The Database is achieving good buy-in from infrastructure and local government sectors to contribute data.</p> <p>Lead: MBIE</p> <p>Timeframe: </p>
<p>MfE will publish updated climate projections for New Zealand and updated guidance to local government on coastal hazards and climate change in 2015-16.</p>	<p></p> <p>In progress</p> <p>MfE has produced drafts of the updated local government guidance on coastal hazards and is consulting with stakeholders. The guidance is expected to be published in November 2016.</p> <p>Lead: MfE</p> <p>Timeframe: </p>
<p>The Department of Conservation (DoC) will conduct an effectiveness assessment of the NZ Coastal Policy Statement in 2015-16.</p>	<p></p> <p>In progress</p> <p>DoC's ongoing NZ Coastal Policy Statement work is available online and will be updated in late November 2016.</p> <p>Lead: DoC</p> <p>Timeframe: </p>

Progress/milestones achieved

Joint work between LGNZ and the Treasury to investigate the business case for a local government risk agency. The objective of the agency, if set up, is to improve the risk management maturity of local authorities, by providing a suite of risk management services. The business case and structure of the agency, if financially viable, will be completed by June 2016.



Complete

The business case was provided to the Government in June 2016 and is under active consideration and further discussion.

Lead: LGNZ, the Treasury

Timeframe: 2015-2016 2017-2019 2020+

The Natural Hazard Risk Management Action Plan is an Auckland Plan initiative to help build a city that is resilient to the effects of natural hazards. It will ensure that Auckland Council has a coordinated risk management approach embedded in its work practices while also delivering best practice solutions in a cost-effective manner.



In progress

The risk assessment results for all natural hazards considered within the Action Plan have been completed using a new, semi-quantitative risk assessment methodology which was developed specifically for the project. The methodology was extended to apply to all hazards considered within the CDEM Group Plan (natural, technological and biological hazards) and the complete results have since been included in the 2016-21 document which is currently being published.

Auckland Council has undertaken a series of mana whenua hui to further engage with Auckland's 19 iwi groups. In particular, regarding:

- > the significance of natural hazards to Tamaki Makaurau
- > the impacts of natural hazards to mana whenua and how they can be appropriately reflected in a risk assessment, and
- > embedding Māori aspirations throughout the Action Plan to reflect our ongoing partnership.

A small working group has since been formed and is contributing towards the writing of the revised document to ensure the above elements are substantially and accurately reflected.

Lead: Auckland Council

Timeframe: 2015-2016 2017-2019 2020+

NIU will report on the progress of the 2015 Plan through an annually published *State of Infrastructure* report.



In progress

The 2016 *National State of Infrastructure* report was released in October 2016. It reports back on 152 action items.

Lead: NIU

Timeframe: 2015-2016 2017-2019 2020+

Progress/milestones achieved

LGNZ is implementing the Local Government Excellence Programme which incorporates an independent assessment system that assesses how councils are performing and the value they are delivering. Councils will receive an overall performance rating from a team of independent assessors, with commentary on their performance. (New – not published in 2015 Plan)



In progress

The Local Government Excellence Programme was launched on 1 July 2016, with 21 councils from across New Zealand signed up to be involved in the first year.

Assessments of the first councils began in September 2016, with results anticipated to be released in early 2017.

Lead: LGNZ

Timeframe: 2015-2016 2017-2019 2020+

Equip, LGNZ's Centre of Excellence, delivers strategic consultancy services and professional development with a collaborative approach to sharing best practice, supporting governance and leadership excellence, and organisation performance. Equip has a suite of tools and services to assist councils in raising the standard of governance, performance and asset management. Equip offers diagnostic and service-level review tools that assess current performance levels, support service excellence best practice procurement and cultural change. Equip offers a broad range of professional development events, webinars, online learning and workshops for elected members and council officers with a focus on improving "best practice" governance and capability. (Scope of action amended from 2015 Plan)



Complete

Equip was launched in 2014, has assisted the Road Efficiency Group and NZTA with the successful implementation of the ONRC through its asset team, has delivered service-level, procurement and governance reviews sharing sector best practice.

A new Professional Development Strategy will be launched in October 2016 to coincide with the Elected Member Induction programme.

Lead: EquipP

Timeframe: 2015-2016 2017-2019 2020+

MfE and government agencies will conduct a review of planning legislation and alignment to ensure fitness for purpose.



In progress

Work being led by MfE (in conjunction with Natural Resource Sector agencies) is underway to review the existing resource management framework.

The review looks at issues concerning the broader resource management and planning system, such as legislative alignment, approaches to planning, participation and decision-making processes under the RMA. This work is closely connected to the draft Productivity Commission report on *Better Urban Planning*.

Lead: MfE, central government

Timeframe: 2015-2016 2017-2019 2020+



Not started



Initiating



In progress



Ongoing



Implementing



Complete

Progress/milestones achieved

The Resource Legislation Amendment Bill will be introduced in 2015 and improve the national planning framework and enable more responsive and efficient infrastructure and housing supply.



In progress

The final package of reforms to the RMA and associated legislation was introduced to Parliament on 26 November 2015 and had its first reading on 3 December. It was referred to the Local Government and Environment Select Committee. The Select Committee has now heard all submissions and is due to report back to Parliament on 7 November.

Lead: MfE

Timeframe: 2015-2016 2017-2019 2020+

MBIE is working on initiatives to deliver a single point of access to authoritative building code and related documents, and a building levy funded programme of standards development for those standards that are considered most important to the building code.



In progress

New online single authoritative source tool "Building CodeHub" under development, with a target launch date in the second quarter 2017.

Priority list for a rolling 7-10-year programme of building standards development was announced in June 2015.

An initial investment in seven building standards has been made, with investments in another 12 standards underway. A three-year look ahead to be signalled to the sector; further consultation in progress.

Lead: MBIE

Timeframe: 2015-2016 2017-2019 2020+

MBIE has carried out a current state assessment of the building consent system across New Zealand and has defined a package of interventions to resolve the problems identified. MBIE is considering improvements to the Regulator's capability to monitor the building performance system and respond to issues and risks.













Implementing

Risk-based consenting – Regulations to be passed by the end of 2017. Commercial working group established and working on commercial consenting process.

MBIE is working with councils and clusters of councils to determine which metrics are most critical to monitor building performance, and to establish the process for sharing data between councils with MBIE.

Lead: MBIE

Timeframe: 2015-2016 2017-2019 2020+

Progress/milestones achieved	
<p>The New Zealand Council for Infrastructure Development (NZCID) will commission research into the quality of environmental outcomes being delivered by the RMA with a view to further discussion on whether the RMA is achieving its core function.</p>	<div>  <p>Complete</p> </div> <p>The NZCID, the Employers and Manufacturers Association (Northern) and the Property Council of NZ jointly commissioned the Environmental Defence Society to undertake a review into the quality of environmental outcomes being delivered by the RMA system.</p> <p>The review has been completed and was launched in September 2016.</p> <p>Lead: NZCID</p> <p>Timeframe: </p>
<p>Strengthen the transparency and quality of infrastructure pipeline data through the annual production of the <i>Ten-Year Capital Intentions Plan</i> and increasing the level of detail available in years one to three, including timing and planned procurement methodology.</p>	<div>  <p>Implementing</p> </div> <p>The <i>Ten-Year Capital Intentions Plan</i> 2016 is planned to be released in October 2016. The <i>Capital Intentions Plan</i> is the third in the series.</p> <p>Lead: NIU, MBIE</p> <p>Timeframe: </p>
<p>Investigate options for enhanced procurement governance of large/significant procurements – developing scale and building capability – including market engagement, coordination, risk pricing and the use of more sophisticated procurement tools with a focus on innovation and outcomes.</p>	<div>  <p>Implementing</p> </div> <p>NIU and MBIE have developed initial advice to Ministers on various options in order to lift procurement governance. Further detailed policy work and advice to Ministers will be provided by the end of 2016.</p> <p>Lead: NIU, MBIE</p> <p>Timeframe: </p>
<p>Expand and develop the Trans-Tasman procurement market with Infrastructure Partnerships Australia and the Global Infrastructure Hub.</p>	<div>  <p>Implementing</p> </div> <p>ANZIP will be launched in late October 2016. ANZIP draws together information on potential upcoming projects from across Australasia for projects with a capital cost of more than \$100 million.</p> <p>Lead: NIU, MBIE</p> <p>Timeframe: </p>
<p>The third National Construction Pipeline report was released in July 2015 drawing on updated data from Statistics NZ, projections by Pacifecon NZ Limited based on their comprehensive database of non-residential building projects, and forecasts by the Building Research Association of New Zealand covering both residential and non-residential building.</p>	<div>  <p>Complete</p> </div> <p>The fourth National Construction Pipeline report was released in July 2016. The report can be found here: http://www.mbie.govt.nz/info-services/building-construction/skills-innovation-productivity/national-construction-pipeline</p> <p>Lead: MBIE</p> <p>Timeframe: </p>

Progress/milestones achieved

Develop procurement guidance for construction projects covering complexity and capability, contracting modes, use of Building Information Modelling, and balancing risk and benefits.



Complete

MBIE has published a suite of guidelines to help agencies intending to procure building and construction services. These guidelines include a range of options to determine and deliver built-infrastructure, including Public-Private Partnership, alliances, early contractor engagement and how to incorporate Building Information Modelling in the planning, delivery and maintenance of built-infrastructure.

These guidelines, along with the Government Rules for Sourcing, make clear the flexibility in procurement approaches for agencies. MBIE is also working with the Treasury to investigate options for improved governance of significant infrastructure procurements.

Lead: MBIE

Timeframe:  2015-2016 2017-2019 2020+

List of Abbreviations

AMP	Asset management plans
ANZIP	Australia New Zealand Infrastructure Pipeline
ATAP	Auckland Transport Alignment Project
ATEED	Auckland Tourism, Events and Economic Development
CAA	Civil Aviation Authority
CCO	Council Controlled Organisation
CDEM	Civil Defence and Emergency Management
CIIL	Crown Irrigation Investments Limited
Corrections	Department of Corrections
CRL	City Rail Link
DHB	District Health Board
DIA	Department of Internal Affairs
DoC	Department of Conservation
DPMC	Department of the Prime Minister and Cabinet
EA	Electricity Authority
EECA	Energy Efficiency and Conservation Authority
ENA	Electricity Networks Association
FAR	Funding Assistance Rates
GCSB	Government Communications Security Bureau
GIC	Gas Industry Company
GPS	Government Policy Statement
HASHAA	Housing Accords and Special Housing Areas Act
HNZC	Housing New Zealand Corporation
ICAP	Initial Call Answering Point
ICR	Investor Confidence Rating
IPWEA	Institute of Public Works Engineering Australasia
ITS	Intelligent Transport Systems
LAWF	Land and Water Forum
LGNZ	Local Government New Zealand
LINZ	Land Information New Zealand
MBIE	Ministry of Business, Innovation and Employment
MCDEM	Ministry of Civil Defence and Emergency Management
MfE	Ministry for the Environment
MoE	Ministry of Education

MoJ	Ministry of Justice
MoT	Ministry of Transport
MPI	Ministry for Primary Industries
NES	National Environmental Standards
NIU	National Infrastructure Unit
NLTP	National Land Transport Programme
NPS-FM 2014	National Policy Statement –on Freshwater Management 2014
NPS-UDC	National Policy Statement –on Urban Development Capacity
NZCID	New Zealand Council for Infrastructure Development
NZDF	New Zealand Defence Force
NZEECS	New Zealand Energy Efficiency and Conservation Strategy
NZTA	New Zealand Transport Agency
ONRC	One Network Road Classification
the Plan	2015 Thirty Year New Zealand Infrastructure Plan
Police	New Zealand Police
PTOM	Public Transport Operating Model
PV	Photovoltaic
RBI	Rural Broadband Initiative
RIMS	Roading Infrastructure Management Support Group
RMA	Resource Management Act 1991
RoA	Record of Agreement
SHA	Special Housing Area
Stats NZ	Statistics New Zealand
TCF	Telecommunications Carriers Forum
TRC	Tāmaki Redevelopment Company
UFB	Ultra-Fast Broadband