
PERFORMANCE IMPROVEMENT FRAMEWORK

Follow-up Review of Land Information New Zealand (LINZ) Toitu te Whenua

NOVEMBER 2014

State Services Commission, the Treasury and the Department of the
Prime Minister and Cabinet

Lead Reviewer's Acknowledgement

I am grateful to the LINZ staff, leadership team and the stakeholders and partners who participated in this Review. They each gave generously of their time and insights to contribute to improving the performance of LINZ so that it can continue to grow its contribution to New Zealand. Many thanks to Caron Mounsey-Smith and Bridget Coltman of LINZ for their support and assistance.

**Performance Improvement Framework
Follow-up Review: Land Information New Zealand**

**State Services Commission, the Treasury, and the Department of the Prime Minister and Cabinet
Wellington, New Zealand**

Published: November 2014

ISBN: 978-0-478-43428-6

Web address: www.linz.govt.nz and also available at www.ssc.govt.nz/pif

Crown copyright 2014

Copyright / terms of use



This work is licensed under the Creative Commons Attribution-Noncommercial-No Derivative Works 3.0 New Zealand licence. [In essence, you are free to copy and distribute the work (including in other media and formats) for non-commercial purposes, as long as you attribute the work to the Crown, do not adapt the work and abide by the other licence terms.] To view a copy of this licence, visit <http://creativecommons.org/licenses/by-nc-nd/3.0/nz/>. Attribution to the Crown should be in written form and not by reproduction of any such emblem, logo or Coat of Arms.

CONTENTS

Agency’s Response	2
Introduction.....	2
Desired Future State: Four-year Excellence Horizon	7
Environment	7
The Performance Challenge – Outcomes	7
Performance Challenge – Organisation	9
What will success look like?	12
What LINZ said it would do in response to the 2013 PIF Review	15
Progress since the 2013 PIF Review	16
Operational Improvements since the PIF	16
Organisational Improvements since the PIF.....	17
What more is needed?	18
Conclusion	22
Appendix A – Interviewees.....	23
Appendix B – Abbreviations used in the report	24

AGENCY'S RESPONSE

Introduction

This Performance Improvement Framework (PIF) Follow-up Review follows on from our 2013 PIF Review. Again, we welcome the opportunity the PIF process provides us to reflect on the contribution New Zealand needs from LINZ and, therefore, what our performance challenge is.

Acknowledgements

We would like to acknowledge the engagement process undertaken by our Lead Reviewer – Paula Rebstock – who again challenged our thinking and provided thoughtful insights. We would also like to acknowledge LINZ staff and our partners and stakeholders who took the time to engage in proactive conversations about our key performance challenges with our lead reviewer.

Moving from 'quiet achiever' to 'strategic leader' in location information

The 2013 PIF Review recognised that LINZ was building on past strengths and was a 'quiet achiever' in the land information and the property rights space. The Review noted LINZ had an opportunity to step up its leadership in the location area to deliver benefits from a spatially enabled New Zealand.

We have taken on this challenge through our new vision, *'the power of where' drives New Zealand's success*, in which we commit to leading the creation of a world-class location information system. More recently, we have 'upped the ante' and increased the stretch of our organisational goal, which is to increase by tenfold the value created for New Zealand through the use of location information.

The findings of the Follow-up Review confirm that our direction of travel is correct. It also acknowledges some of the progress made towards achieving our vision – an investment-ready 2013 Four-year Plan and operational and organisational improvements that strengthen the foundations of our vision.

The challenge now is to get some tangible results as we move from being a 'quiet achiever' to a 'strategic leader'. The Follow-up Review usefully highlighted the fact that some aspects of our location system work have characteristics similar in nature to those of an infrastructure provider. For example, the long lead times and capital investment required for new datasets. We have an opportunity to recognise these characteristics more explicitly as we create the business strategy and plan required to deliver our vision.

Over the next few months we will undertake work to better understand the characteristics of our business under our new vision (i.e. infrastructural, regulatory and service delivery components) and the most appropriate business model/s to achieve our outcomes. This work will also explore the future of commercial opportunities within the business (e.g. Forward Works Viewer).

We will use the findings of this work to be:

- clearer and more purposeful about our priorities over the next four years, i.e. where to focus our limited resources, and eliciting from others how they might work with us, or invest their focus, in ways that progress the development of the location system in a faster, collaborative and more coherent way

- clearer about the strategic choices sitting under our vision within the funding constraints of our baseline.

Peter Mersi
Chief Executive

INTRODUCTION

A Performance Improvement Framework (PIF) Review of Land Information New Zealand (LINZ) was conducted one year ago in mid 2013. While the review commented positively that the agency had continued to build on its past strengths and was widely regarded as a quiet achiever, it noted that LINZ had an opportunity to step up its leadership in the location or geospatial area to deliver an estimated additional \$500 million economic, social, environmental and cultural benefits, which would result from a spatially enabled New Zealand. Delivery of strong performance was required across the following priorities: increasing the reuse of location-based information, supporting the rebuild of Canterbury, better property services and Centre of Crown Property Centre of Expertise.

To achieve this, the 2013 PIF Review noted that a number of critical areas for success required significant improvement, including:

- a The Executive Leadership Team (ELT) needs to articulate its vision and direction to staff and external stakeholders and partners in a manner that is memorable, unifying, motivating and differentiating. LINZ needs to move from being a quiet achiever in land information and property rights to a strategic leader, driving an ambitious location-based system and infrastructure strategy.
- b Develop a ten-year strategy and location-based infrastructure plan that will deliver against the vision and expectations of stakeholders, including through demonstrating impact over the next four years.
- c Develop an infrastructure operating model that will help elicit stakeholders' priorities and willingness to co-invest and align business strategies to achieve results in the short term and over the Ten-year Plan – given the high costs and long lead times of developing location-based infrastructure.
- d To implement its vision, strategic plan and operating model, LINZ needs:
 - an increase in its strategic capability at ELT level
 - to enhance its economic analysis capability
 - to develop an effective external communications strategy
 - to improve business planning capability
 - a significantly stronger commitment to rigorous review to test for impact against business case objectives and to make ongoing business improvements.

Following discussions between LINZ and the central agencies, an agency response was drawn up to ensure timely action on the Lead Reviewers' findings. This Follow-up Review is an opportunity to check progress against the agency action plan and to test whether LINZ's direction of travel is still appropriate and if it is on track to achieve its Four-year Excellence Horizon.

Therefore, the scope of this Follow-up Review is to provide feedback on progress over the past 12 months, with particular focus on the following areas:

- whether LINZ's Four-year Excellence Horizon remains appropriate
- whether LINZ's direction of travel is right
- whether LINZ is on track to fulfil its Four-year Excellence Horizon

- is LINZ's long-term strategy (*'the power of where'*) clear and ambitious enough and is the Four-year Excellence Horizon challenging but viable?

Issues to be addressed include:

- Has anything happened in LINZ's strategic and operating environment to change either its strategic direction (*'the power of where'*) or the pace (ambition) it will require to achieve its strategic direction?
 - Will LINZ's 2013 Four-year Plan ensure it achieves its Four-year Excellence Horizon and at the most appropriate pace?
 - Are there any obvious amendments needed to LINZ's 2014 Four-year Plan to better achieve its Four-year Excellence Horizon?
- Has progress (both in developing the strategy and plan, and in progressing the latter) been reasonable? Issues to be canvassed include:
 - how is LINZ tracking against its formal Response in the 2012/13 PIF Review? Is the pace of progress and depth appropriate?
 - how well does LINZ's business planning reflect the pace and depth of the progress needed to achieve its strategy and plan?
- Are there any 'blind spots' – things LINZ should be doing but is not – which would help achieve the vision and plan?

Desired Future State: Four-year Excellence Horizon

The 2013 Review provided a description of the 'Performance Challenge' and 'Desired Future State: Four-year Excellence Horizon', which is still largely relevant. This Follow-up Review has taken the opportunity to update the Four-year Excellence Horizon in light of developments since the 2013 PIF Review. LINZ has taken steps to address, in part or full, many of the factors critical to its success.

While LINZ's direction of travel is appropriate, it will need to accelerate its pace to meet its Four-year Excellence Horizon and 10 Year Vision, *'the power of where'*. In particular, the areas requiring focus going forward include developing a prioritised strategic plan populated with measurable outcomes, building an explicit location-based business (operating) model that takes account of relevant infrastructure characteristics to allow LINZ and its partners to accelerate delivery of location outcomes, including through developing a customer-centric, citizen-facing, high-leverage model premised on much deeper collaboration. LINZ will need to change its internal operating model to drive new ways of operating. This includes empowering the third and fourth tier to manage the day-to-day business, working horizontally across LINZ and with public and private sector partners and aligning LINZ's people, culture and capability sharply to *'the power of where'*.

This Follow-up Review was undertaken in July 2014.

A list of interviews during the Follow-up Review is in Appendix A. A list of abbreviations used in this Report is in Appendix B.

Paula Rebstock
Lead Reviewer

EXECUTIVE SUMMARY

The aftermath of the global financial crisis and ongoing fiscal restraint, as well as the impact of the Canterbury earthquakes, continues to shape the environment in which LINZ operates. As a consequence, central and local government and the private sector will continue to strive to improve the delivery of services and infrastructure in better, more cost-effective ways. A key emerging tool is the use of location-based (geospatial) information in planning and decision-making for the provision of services and infrastructure and sustainable growth. New Zealand also has a number of pressing challenges that location-based information can assist with, such as climate change, biosecurity and increased demand for health, education and welfare spending as the population ages.

In this context it is not surprising that the LINZ vision, *'the power of where'* has strongly resonated with its stakeholders, partners and LINZ staff. To realise this vision, however, will require LINZ to accelerate progress by being clear about what defines success in measurable outcome terms and how it will get there. A business operating model and strategic plan is now critical to success. LINZ's Four-year Plan was a solid first effort, earning an investment ready rating. LINZ acknowledged, however, that the next iteration of the Four-year Plan must address the 'what' and 'how' questions in much greater clarity.

In the past LINZ has been seen as a quiet achiever in the land information and property rights space. It has done a number of foundation steps extremely well. Over the past 12 months, since the 2013 PIF Review, this has enabled LINZ to facilitate progress in significant policy priorities, such as through the Canterbury spatial data infrastructure projects, the Steward and Custodians Framework for fundamental datasets, further enhancing free access to location-based data through the LINZ Data Service (LDS) and achieving significant uptake of Crown Property Centre of Expertise services. Other priority areas are being positioned for progress, such as Better Property Services and through the Review of Te Ture Whenua Māori Legislation.

While LINZ's direction of travel is appropriate, there is more to do to become a strategic leader driving an ambitious location-based system and infrastructure strategy. The areas requiring accelerated progress include developing a strategic plan populated with measurable outcomes supported by a business operating model that explicitly takes account of the infrastructure business characteristics of the location system. There needs to be a clear line of sight between the activities of each staff member and the outcomes sought. To be effective LINZ must prioritise with its customers the location system infrastructure plan.

Taking these steps with urgency will help the agency move through its current business realignment to focus on those things that matter to its customers, who are seeking system-wide, outcome-driven leadership from LINZ.

DESIRED FUTURE STATE: FOUR-YEAR EXCELLENCE HORIZON

Note: The excellence horizon described in PIF Reviews is usually four years. In this case the Four-year Excellence Horizon needs to align with the ten-year period that LINZ took in developing its vision, 'the power of where', and to emphasise the need for LINZ to adopt a longer-term horizon in leading the New Zealand Location System (Geospatial) Strategy. It is vital that LINZ acts with urgency to operationalise a plan that ensures that key infrastructure building blocks and early outcomes are delivered.

Environment

The aftermath of the global financial crisis and the Canterbury earthquakes continue to shape the environment in which government agencies, such as LINZ, operate.

Ongoing fiscal constraint and the demand for better public services and more focused regulatory oversight are likely to be features of the environment for a considerable period.

As a consequence of these factors central and local government and the private sector, both domestically and internationally, will continue to strive to improve the delivery of services and infrastructure in better, more cost-efficient ways. A key emerging tool is the use of location-based (geospatial) information, the technical development of which has led to its increasing importance in planning and decision-making. In addition to these applications, New Zealand has a number of pressing challenges that location-based information can assist with, such as climate change, biosecurity and increased demand for health, education and welfare spending as the population ages.

Overall, there are increasing expectations that location-based information is readily accessible and accurate so it can be used to unlock other economic, social, environmental and cultural benefits. LINZ took some bold steps a decade ago with the development of Landonline, a world class property rights system, but must now be at the vanguard to ensure we have more comprehensive, nationally available location-based infrastructure and freer access to location data to realise the benefits available going forward.

As industry and agriculture experience the ongoing fall-out of world economic conditions, the public will continue to seek assurances that the Overseas Investment Act 2005 is protecting New Zealand's long-term interests through the operation of the Overseas Investment Office.

The Performance Challenge – Outcomes

The challenge facing LINZ is to respond to the demands and opportunities inherent in this environment. Its opportunity is to lead the development of the location-based system needed to increase by tenfold the value created for New Zealand through the use of location information to capture as yet unrealised economic, social, environmental and cultural benefits from a spatially enabled New Zealand. Despite having a strong platform to lead from, it is unlikely LINZ's performance challenge can be met by simply doing more of the same or through incremental improvements to its current business strategy and operating model. The Executive Leadership Team (ELT) must now add value at the all-of-government level, partnering with local government and the private sector. Failure to do so poses risks to the organisation but also substantial lost or delayed opportunity for New Zealand.

LINZ is tasked with overseeing the policy framework that supports the New Zealand Geospatial Strategy. It has two roles – to provide leadership of the Strategy and to be a centre of excellence. Better use of location-based information can significantly improve private and public sector efficiency through better decision-making and resource allocation, leading to sustainable development and increased economic, social, environmental and cultural benefits.

In the future location-based information and infrastructure will underpin much of government planning and decision-making to provide improved services, safe communities, strong economic growth and sustainable development. Better decisions on health, education, transport, the environment, etc, will be made earlier in a spatially enabled environment. Currently, many of New Zealand location-based applications are one-off; however, nationally integrated applications are necessary to get the full benefit of a spatially enabled system.

To achieve these benefits, a collaborative approach to the capture, structure, maintenance and use of location-based data is required. Further, central and local government and industry must collaborate and co-invest to enable and develop the infrastructure necessary to underpin these outcomes. This will only happen if a medium-term, ten-year location-based infrastructure strategy is led credibly and effectively. There will be a need to demonstrate pace and the value to be gained through the location (geospatial) system and infrastructure.

LINZ could adopt the outcomes of major users of geospatial infrastructure and location-based information, as well as its own outcomes, as a starting point to develop a coherent, prioritised infrastructure strategy and plan. Many central government agencies have well specified outcomes as a result of Better Public Services initiatives and the Business Growth Agenda. This should assist LINZ to prioritise its actions for short-term impact.

To gain momentum and credibility, there are a number of initiatives aimed at intermediate outcomes, already identified or under way, that create a good starting place for a location-based system and infrastructure strategy, including:

- progressing stewardship and custodian arrangements to develop the 10 fundamental data themes identified as underpinning the Geospatial Strategy and, specifically, focusing on the following LINZ dataset initiatives:
 - standardising addresses
 - coordinating aerial imagery procurement access and standards
 - replacing the survey and title system, Landonline, with the next generation Advanced Survey and Titles System (ASaTS) and improving the digital cadastre and geodetic system.
- further developing and improving the Canterbury Spatial Data Infrastructure (SDI) projects, which will be used to help with the rebuild of Canterbury and to shape the national SDI
- the LINZ Data Service – providing free online access to 40 LINZ databases
- assisting Auckland in development of its spatial plan
- extending the LINZ Crown Property Centre of Expertise
- responding to the opportunities that may arise from the review of Te Ture Whenua Māori Legislation
- progressing the Better Property Services initiatives.

Performance Challenge – Organisation

To realise these opportunities, LINZ needs to shift from being a quiet achiever in land information and property rights to a strategic leader driving an ambitious location-based system and infrastructure strategy. It needs a motivating sense of purpose that demonstrates the economic, social, environmental and cultural value to be captured from a spatially enabled New Zealand. Its business strategy and business (operating) model must bring this purpose to life in ways that generate pace and confidence and therefore commitment from key stakeholders.

i. Purpose and Targets

In 2014 LINZ restated its purpose is to lead the creation of a world-class location information system, used to provoke better decisions and inspire innovation. It has specified its goal is to increase by tenfold the value created for New Zealand through the use of location information. This is to be achieved by creating an integrated, seamless location system and connecting participants across it.

LINZ had traditionally taken a more technical and operationally focused view of its work and, as a consequence, tended to focus on its role contributing to intermediate outcomes rather than the outcomes that location-based infrastructure needs to enable: safer communities, improved health, employment and growth, environmental, cultural and recreational outcomes. Going forward, it is vital LINZ identifies and articulates the impacts it seeks to achieve, as well as the interdependencies with the private sector and local and central government agencies.

Not only does LINZ need a coherent, unifying and motivating purpose (as reflected in *‘the power of where’*), it needs a business strategy that helps it decide what it needs to be in ten years’ time and what it will do at pace to demonstrate impact over the next four years. A ten-year timeframe is necessary, given the high fixed costs and long lead times needed to build a location-based system and infrastructure. Each person in the organisation needs to have a direct line of sight between what they do every day and the contribution this makes to real outcomes.

Clear targets and a system for managing performance against these are essential to bring LINZ’s purpose to life. It must be clear about priorities and what to stop doing; creating a sense of urgency and the need to deliver for a bigger purpose. It has set a target of increasing by tenfold the return from location information economic, social, environmental and cultural benefits that would result from a spatially enabled New Zealand. This in turn would need to be anchored in meaningful and measurable sub goals that frame expectations over the next four years.

ii. Business Strategy

The business strategy describes what the organisation needs to do to meet the expectations of its stakeholders. LINZ needs to think about this in at least two ways:

- building on its comparative advantage by developing a deep understanding of property rights systems, land information markets and location-based infrastructure assets, particularly in the New Zealand context
- developing a ten-year strategy (including a location-based system and infrastructure plan) that will deliver against the expectations of stakeholders through time, including demonstrating impact over the next four years.

The following criteria are likely to be relevant in shaping the ten-year strategy and location-based system and infrastructure plan:

- In sum, the components of the strategy and plan are large enough to comfortably achieve the top-down target of increasing by tenfold the value of economic, social, environmental and cultural benefits to be leveraged from the location system and infrastructure by 2023.
- The strategy and plan are built on a solid understanding of initiatives that other major partners, as well as LINZ itself, are planning to invest in and that need to be enabled by location-based infrastructure. The initiatives will have a range of time profiles critical to understand and prioritise; some will demonstrate impact over the next four years.
- The strategy will include a range of best practice and enduring foundation core activities, ensuring LINZ's key operating platforms continue to be fit-for-purpose and demonstrate best practice over time.
- The strategy and plan are optimised to gain momentum, manage risk at the agency and all-of-government level and reflect the importance of achieving priorities across economic, social, environmental and cultural dimensions.
- Initiatives are outward-focused on delivering low cost, timely, customer-driven improvements and opportunities that enable others to align their strategies and co-invest to realise benefits more quickly.
- Delivery against current government priorities is ensured.

The ten-year location-based system and infrastructure plan becomes the essence of the business strategy and is likely to reflect the requirements of many of the current Better Public Services targets, which will help to prioritise areas of immediate focus and impact.

iii. Business (Operating) Model

The business (operating) model describes how the organisation will operationalise and deliver its business strategy. There is an opportunity for LINZ to build a coherent business strategy and business model that reflects an understanding of the value proposition that some of its activities and opportunities are akin to a core infrastructure, networked business.

It is critical the business (operating) model has the following characteristics:

- it reflects the requirements of the business strategy – delivering on a location system strategy and plan. Incorporating some components of an infrastructure operating model might assist in the following ways, by:
 - recognising that infrastructure assets are characterised by long lead times for asset development and high fixed costs structure
 - aligning business planning and developing co-investment strategies with major partners to capture value and reduce risk and uncertainty
 - helping to reveal preferences and willingness to partner
 - attracting new partners and internalising the need to be influential
- the value of core functions and platforms is accentuated in a business (operating) model that takes account of infrastructure characteristics, thereby ensuring they get appropriate focus

- strategic leadership from ELT to engage external stakeholders and partners effectively with the strategy
- it reflects the co-dependency LINZ has with key stakeholders in its bid to unlock significant economic, social, environmental and cultural value through location-based infrastructure
- a results-driven culture with an outward-looking focus on being responsive to the priorities and needs of stakeholders/customers
- a strong risk management strategy that manages risk at the all-of-government and departmental level, recognising that investment in long-lived assets always involves risk
- a continuous improvement cycle that allows adjustments as circumstances change.

Overall, a business operating model that explicitly takes account of LINZ's infrastructure characteristics will help elicit stakeholders' priorities and willingness to co-invest and align business strategies to achieve results in the short term and over a considerable period of time – given the long lead times and high costs of developing location-based infrastructure.

iv. Change Capability and Implementation

LINZ's change capability and ability to implement effectively is supported by a number of key strengths indicating it has a strong platform to lead from, including:

- the fifth highest overall rating in the State Sector Gallup staff engagement survey (July 2014). While this rating is less favourable than a year ago staff still consistently describe the culture of LINZ in similar and positive terms and many articulate the need to use this platform to further shift from an inward to a more outward focus. Generally, LINZ appears to be a resilient agency
- the recent restatement of the LINZ Purpose, *'the power of where'* has been seen as a positive way to capture the purpose and strategic direction of LINZ, and most recognise it could assist in shifting LINZ from being a 'quiet achiever' to a 'strategic leader'
- customers and stakeholders value LINZ's technical expertise and often invite it to take a wider strategic governance/stewardship role, particularly in leading the delivery of geospatial strategy for New Zealand
- Ministers' confidence in LINZ. It is seen as responsive, tidy and increasingly delivering on government priorities
- risk management and finance functions are increasingly shifting from a compliance and audit approach to include a risk and assurance approach. There is focus on strategic alignment, the need to identify opportunities and risk and plans to improve the ability to drive improved business performance through the finance function
- evidence of good forward thinking in a number of important core areas, such as the future development of ASaTS (to replace Landonline), where LINZ is focusing on what customers need and the technology to support it
- strong performance levels in its core regulatory responsibilities, where regulations are widely seen as effective and efficient and its statutory officers are respected for their expertise and independence.
- its ability to deliver high-quality services to the public and other stakeholders, as demonstrated by the World Bank recently ranking New Zealand second in the world for ease of registering property.

To be confident about its ability to meet its performance challenge LINZ needs to consider:

- increasing the strategic focus of ELT and its collective leadership responsibility to lead the location-based system. It is critical ELT focuses its collective energy on the strategically important opportunities open to the agency and the strategically important issues confronting its performance
- empowering the third and fourth tier to manage the day-to-day performance
- accelerated development of a strategic plan populated with measurable outcomes supported by a business operating model that explicitly reflects the infrastructure characteristics of the location system. There needs to be a clear line of sight between the activities of each staff member and the outcomes sought. To be effective LINZ must prioritise with its customers the location system plan
- aligning its external communications strategy to its business strategy and improving its internal communications
- improving its business planning capability to support the timely and appropriate development of location-based infrastructure, including better use of project office capability, gateway targets, procurement capability and benefit realisation
- a significantly stronger commitment to rigorous review to test for impact against business case objectives and to make ongoing business and programme improvements.

What will success look like?

In four years' time the ultimate measure of success is that the critical building blocks have been laid to enable the location-based system and infrastructure to increase the value created for New Zealand through the use of location information and thereby unlock economic, environmental, social and cultural benefits by tenfold over the next ten years.

The results of this will be:

1. The Geospatial Strategy having delivered the umbrella location-based infrastructure assets enabling New Zealand to unlock other potential benefits. LINZ will be recognised for its strategic leadership in delivering the first four years of its ten-year business strategy for the location system, based on a portfolio of agreed priorities/investments, which will be aligned with the planning and investment priorities of its critical partners in the State services, local government and the private sector.
2. Following the success of the Canterbury SDI in supporting the rebuild of Christchurch, the development of a national SDI will be progressed ensuring benefits from a national infrastructure can be captured in a timely way.
3. Significant progress towards a virtual one-stop, location-based property information service will be made. The goal is that customers will eventually be able to access all of the rights, restrictions and responsibilities of any property and be provided user-friendly, seamless access to all of the documentation consents or services needed in respect of that property. LINZ is partnered with local government to ensure interoperability of location information (zoning, rating, address and utilities) ownership interests and permits and consenting services. Progress towards all three types of land tenure (Land Transfer Act 1952 land, Māori land and Crown land) coming under the umbrella of one property rights system will have been progressed. The review of Te Ture Whenua will have helped unlock the latent potential of communally owned Māori land.

4. ASaTS will be well developed to provide a timely upgrade of Landonline and an improved geodetic system developed to help deliver these improvements. As a consequence of these initiatives, the public will have a high degree of confidence in the property rights system and its regulation and stakeholders will have a high degree of satisfaction with LINZ's operation and respect for the integrity of its regulations.
5. The Crown Property Centre of Expertise, which contributes expertise on Crown land acquisition, management and disposal across the government sector, will be the property manager of choice by other agencies. Utilisation of economies of scale in one centre of operation will have helped drive efficiencies and greater economic benefits from Crown land assets.
6. LINZ will have developed a clear strategy for managing its large portfolio of Crown land having identified the rationale for holding or disposing of land it manages, the associated timeframes for disposal and the economic, social, environmental and cultural objectives in relation to the land it retains for the medium or longer term.
7. LINZ will have worked effectively with iwi to support their post-Treaty settlement decision-making.
8. A high degree of public confidence in the application of the Overseas Investment Act will have been achieved, ensuring New Zealand interests are protected with respect to the acquisition of sensitive land, significant business assets and fishing quota. Confidence that consent conditions are complied with and breaches remedied will have been maintained. As a consequence, New Zealand will be receiving greater benefit from overseas investment.
9. LINZ will have continued to provide access to high-quality location-based data services and retained respect for its technical capability.
10. LINZ will have continued to be at the forefront of regulatory risks, communicated regulatory requirements clearly, provided consistent enforcement and ensured policy frameworks were fit-for-purpose and have undertaken systematic reviews to test the impacts. It will have continued to be respected for the independence and expertise of its statutory officers, as well as its regulatory policy advice.

In four years, LINZ will have:

1. Articulated a unifying, differentiating, motivating ten-year purpose and business strategy and adopted measurable targets to crystallise the size of the performance challenge, as well as the prize for success.
2. Developed a ten-year location-based (geospatial) business strategy and business model that facilitates the specification and alignment of sector priorities and elicits other players to commit to priority areas in terms of senior leadership engagement, co-investment and collaboration. As a result, it is recognised by government as able to drive strategic priorities of national importance.
3. Aligned its business strategy and priorities with key partners to maximise co-investment and accelerate the achievement of outcomes.
4. Adopted a business model that recognises that a location-based system and infrastructure involves high fixed costs and long investment horizons and therefore may require infrastructure-planning methods that reduce uncertainty and risk and elicit priorities, co-investment and commitment from key partners. Sustainable, long-term funding methods would be operable.

5. Ensured there are clear linkages between the business strategy and implementation, with individual and team accountability for outcomes. Horizontal collaboration across LINZ and with its partners is the way it does business.
6. Fully integrated the New Zealand Geospatial Strategy at an organisational and strategic level. Clarity of structure, roles and responsibilities at all levels will have allowed it to effectively lead and contribute to achieving substantial outcomes from this initiative. Clarity of purpose, roles and responsibilities across agencies for this will have allowed it to set an ambitious pace. This would have been a feasible option because LINZ would have substantially improved its strategic leadership over this programme of work.
7. Developed an outward-focused culture, with supportive behaviours and values. *'the power of where'* will have been brought to life reflecting this focus. Not only has LINZ shifted from a 'quiet achiever' to 'strategic leader', it has become a confident leader of New Zealand's location (geospatial) system and infrastructure.
8. Developed governance structures needed to lead its all-of-government initiatives to join with other major partners to maximise outcomes where co-dependencies are strong.
9. Continued to provide timely and highly competent technical support and advice on government priorities.
10. Adopted a strategy that segments its stakeholders, recognising some need timely access to technical advice, others are looking for strategic engagement and leadership from ELT, while a more intermediate group may require a different response entirely.
11. Developed induction, training and development programmes to support an outward-looking business model. Deep technical capability, as well as strategic capability to position the agency as an influencer and enabler, has been fundamental to achieving its success. Good performance is consistently recognised and rewarded and poor performance is consistently managed.
12. Adopted a programme management approach to ensure performance measures are identified and set at the outset of a project or initiative; agreement is reached on how progress will be tracked towards achieving its outcomes, results and impacts; processes are specified and used to review and evaluate effectiveness and impacts; and outcomes are reviewed against those in the original business case.
13. Used financial and resource management functions to drive business performance, as well as to meet compliance requirements.

Ultimately, LINZ will know it has made a difference to the long-term wellbeing of New Zealanders because it will have been successful in leading and partnering to ensure a spatially enabled New Zealand that is unlocking substantial economic, social, environmental and cultural benefits.

WHAT LINZ SAID IT WOULD DO IN RESPONSE TO THE 2013 PIF REVIEW

In response to the 2013 PIF LINZ accepted the challenge of being a strategic leader driving an ambitious land information strategy. To advance the achievement of this strategy, LINZ undertook to develop a 10 Year Vision by September 2013. This view was intended to articulate a motivating sense of purpose that demonstrates the economic, social, environmental and cultural value to be captured by a spatially enabled New Zealand. LINZ undertook to work collaboratively with strategic partners, in particular local government and the private sector, in developing and implementing its 10 Year Vision.

LINZ committed to then use the 10 Year Vision to develop a Four-year Excellence Horizon identifying what needed to be achieved in the next four years to progress its longer-term view, taking account of:

- the environment in which it operates, in particular the use of location-based information
- the Government's and Minister's priorities and the Government's outcomes, such as safe communities, improved health, employment and growth, environmental, cultural and recreational outcomes
- leveraging its property rights, location-based information and Crown land management functions
- the opportunity to lead the development of location-based infrastructure to enable the capture of an estimated \$500 million of benefits from a spatially enabled New Zealand.

LINZ identified the need to develop a high-level Action Plan as a road map for the implementation of its Four-year Excellence Horizon by October 2013.

The Action Plan would also form the basis of its triennial *Statement of Intent* and Four-year Plan required by the Treasury. The Action Plan was to include the following practical steps to realise its Four-year Excellence Horizon:

- review existing organisational building blocks, i.e. business strategy, outcomes framework (and associated performance measurement framework), operating model and 'Our Place' and other enabling strategies, for example, People Strategy
- confirm future work programmes, i.e. the work it will undertake and the performance measures that will be used to demonstrate success (the impact of its work)
- initiate business improvement initiatives relevant to the findings of the PIF Review, i.e. develop processes to ensure benefit realisation, undertake continuous improvement and adopt a whole-of-organisation approach to evaluation and review.

LINZ committed to developing its leadership role around location-based information, not only through the New Zealand Geospatial Office but also by taking a stewardship role in fundamental data. Achievement of the Action Plan was premised on the basis of LINZ maintaining solid performance in core business.

PROGRESS SINCE THE 2013 PIF REVIEW

Significant operational and organisational progress has been made over the past year since the 2013 PIF Review as discussed below.

Operational Improvements since the PIF

i. Management of Location Information

LINZ has made significant progress on the range of projects that will make up the Canterbury SDI (and a key part of the National SDI) to be completed in 2016. There have also been extensive improvements to making data readily available through the LDS. In addition, advances have been made on improving the collection and availability of aerial imagery. LINZ has worked across government to coordinate investment and management of nationally important location datasets. In particular, stewardship and custodianship responsibilities have been clarified of fundamental datasets.

These datasets are: Imagery Data, Addresses, Geographic Names, Administrative Boundaries, Transport Network Data, Cadastral and Property Data, Land Use and Land Cover, Water Datasets, Elevation and Depth Data, and The Positioning System. LINZ has taken up stewardship of five of the fundamental data themes. A range of other specific initiatives have been advanced, for example, hydrographic work in New Zealand's charting area in the South West Pacific, updating the vertical datum and investigating digital parcel improvements.

ii. Leadership of the Location Information System

LINZ has developed a 10 Year Vision that puts location information and the development of a world-class system of integrated, seamless location information at the centre of the LINZ long-term strategy. *'the power of where'* is widely acknowledged both externally and internally as providing a challenging but achievable vision for the location information system. Leading the building of the location system and the national Spatial Data Infrastructure that is central to it, has focused LINZ's need to partner across government to achieve it. For more detail, see below under *Organisational Improvements since the PIF*.

iii. Management of Property Rights

LINZ has focused on the early planning for the development and delivery of next generation ASaTS, to provide an upgrade to Landonline in 2016. Effort to improve the overall coordination, interoperability and accessibility of property-related services is increasingly being channelled through this work. The ASaTS work represents LINZ's most significant contribution to the Better Property Services workstream.

As part of LINZ's contribution to the rebuild of Canterbury, it has been focused on adjusting data in the land transaction (survey and title) system after geodetic projects are completed.

The Overseas Investment Office has competently and efficiently dealt with high volumes of applications over the period, including complex investigations. It has found new ways to support peak activity in the face of staffing caps and a 43% increase in applications.

iv. Management of Crown Land

Improving the acquisition, use, management and disposal of Crown-owned and used land has been a priority focus for LINZ since 2013. LINZ provides Crown agencies with advice and assistance in relation to Crown Land, using a centre of expertise model. In particular, there has been a quick uptake of LINZ management and administration of properties for disposal purposes, with seven agencies receiving assistance from LINZ. Memorandums of Understanding (MOUs) in operation cover many large property-owning departments, including the Department of Corrections, the Police, the Ministry of Primary Industries, the Ministry of Justice, the Department of Internal Affairs, the Ministry of Defence and the Ministry of Education. Performance standards are being achieved.

In Canterbury, LINZ has assumed greater management/maintenance responsibility for up to 8,000 suburban red zone land parcels. The review of Te Ture Whenua Māori Act 1993 has potential to require future changes to LINZ's business model. LINZ successfully completed the implementation of the South Island High Country earning capacity rent policy. In particular, the new pastoral rent system has provided savings for government and leasees, and all of the rental disputes that developed prior to the new system have been resolved.

Organisational Improvements since the PIF

i. 10 Year Vision and Four-year Plan

In 2013 LINZ refreshed its vision and developed a 10 Year Vision, *'the power of where'*. LINZ aims to increase by tenfold the value created for New Zealand through the use of location information over the next decade. The 10 Year Vision sets out the growth drivers and develops the key concepts of location information and the value that can be created through the location system. At the core of the location system are the fundamental data themes that offer the highest value in terms of enabling productivity in the economy and society. The 10 Year Vision discusses how LINZ will drive for a seamless location system by working on the system as a whole, while continuing to deliver high-quality services inside the location system.

The 10 Year Vision has met the need for a motivating, unifying and challenging vision that serves as a strong call to action. LINZ engaged widely with key stakeholders, partners and staff in building the 10 Year Vision and this is reflected in the buy-in it has achieved through this foundation work.

LINZ does not have a business strategy as such. LINZ's Outcomes Framework (OF) is used to tell its performance story. As part of continuous improvement, and with its refreshed vision in mind, LINZ revised some parts of its existing OF that now forms the basis of its Four-year Plan and *Statement of Intent (2014-2017)*. A fuller review is planned for 2015/16. While minor amendments were also made to performance measures for the 2014/15 Estimates, a comprehensive review is also due in 2015/16.

LINZ's Four-year Plan (2014-2017) was commented on favourably by central agencies as a first round effort and was graded as investment ready. Its focus in the first round was to identify the key capability shifts required and the financial risks and requirements it faces. While LINZ has identified its key activities and services, the detail that needs to sit behind them is still under development.

ii. Business (Operating) Model

LINZ's articulation of its business model is represented as a diagram that has its purpose in the centre, with seven bubbles around it, and the following headings: stakeholders and customers, culture and values, people and capability, key activities and services, finance and assets, systems and processes, structure and governance, and people and capability. These 'how' elements are covered in various projects under way across LINZ that are at varying degrees of specificity and development. The shifts required by the new purpose and 10 Year Vision have informed the design principles of the 'alignment' (organisational design) review under way during this Follow-up Review. Work has also commenced in a number of other areas, including the People Strategy, the Stakeholder Strategy, Customer Strategy, Finance and Procurement Strategy, ISSP Strategy and Continuous Improvement. In the case of the Stakeholder Strategy, LINZ has made some progress in doing business with Māori, which was identified as a top priority in 2013.

The review of the second and third tiers and the Alignment Review have brought new capability into the business, addressed span-of-control issues and appears to have resulted in a more sustainable structure.

In sum a great deal of important organisational development work is under way, however, LINZ will need to develop more deeply its business strategy to give definition to an appropriate business model that fully reflects the requirements of the business strategy. Understanding the fundamental nature of the business LINZ is in, and therefore the type of business model that will best support it to deliver on its purpose, is vital (see below, *What More is Needed?*).

What more is needed?

i. Business Strategy and Targets

In its recent Four-year Plan LINZ commented on the need to answer the 'what' and 'how' questions, now that it has completed work on its 10 Year Vision. It needs a strategic plan to bring its vision to life. It is imperative for LINZ to promptly undertake work on a business strategy with measurable outcomes, simultaneously iterating top-down and bottom-up views to make timely progress. Defining measurable outcomes and targets, as well as timelines and programmes for delivering these are critical to success and represent the next game changer for LINZ. Those defined outcomes will drive LINZ's long-term strategic plan and the medium and short-term plans, including location infrastructure, arising from it. LINZ will then have a clear view for the land information system of:

- what its overall objective is (purpose) and where the system is going (vision)
- what success will look like (measurable outcomes)
- a roadmap of how LINZ is going to get there (the strategic plan from which the long-term, Four-year plan and annual plan are derived)
- how it is tracking and how far it has to go.

Unless LINZ has clearly articulated the targeted outcomes from which everything else drives, the location information management system risks being piecemeal and not as effective nor delivered as efficiently as it needs to be. There is a real risk of doing the wrong things or doing things in a suboptimal sequence. Defining outcomes, timeframes and programmes will serve as LINZ's call to action, connecting key stakeholders, including LINZ staff, within a whole-of-system approach to location information management so each understands the contribution they make to achieving system outcomes. Future key performance indicators (KPIs) under the change programme needed

to deliver on the Long Term View needs to be based on lead indicators to drive the business, rather than lag indicators.

LINZ's biggest challenge is to prioritise the things that create the most value across the system. Business planning needs to improve, shifting from compliance and reporting focused to outcome focused. To do this far greater information from customers and partners needs to feed into decision-making. This will require new planning capability and techniques.

ii. Business (Operating) Model to support Delivery of Business Strategy

LINZ needs an operating model capable of delivering on its business strategy and 10 Year Vision. The operating model itself needs to reflect a deep understanding of what LINZ's business is and help the agency identify value drivers and differentiate/prioritise between competing demands on its resources. There is an opportunity for LINZ to build a coherent business strategy and operating model that reflects an understanding of the value proposition that comes from having some of the characteristics of a core infrastructure business. Much of what is written in the section, Four-year Excellence Horizon under *Business (Operating) Model* remains relevant, though addressing it has become more urgent. Advancing these matters will underscore the dual importance of LINZ's enduring functions as the critical building blocks, as well as the significance of the New Zealand Geospatial Office (NZGO) component to supporting a mature location infrastructure system.

An appropriate business (operating) model for LINZ will need to be able to deliver on a location-based system and infrastructure plan and will need to accommodate a number of components of typical infrastructure operating models. Specifically, it will need to be a high leverage, co-investment model owing to the existence of high fixed costs and network effects and the capital intensity of the infrastructure. The operating model will put a premium on long-term investment and funding certainty and an end-to-end system view. A customer/partner-centred operating model must be focused on the drivers of value, achieve pace and encourage innovation across the location system.

iii. Governance, Delegations and Accountabilities

While the 'alignment' review was completed during the Follow-up Review, a number of related governance, delegations and accountabilities issues require early attention or there is a risk that progress will stall. These include:

- the governance structures within LINZ to support its achievement of its vision, including defining expectations and behaviours
- a refresh of LINZ's 'Our Place' picture and integrating culture and values
- the second tier needs to focus on collective leadership and be focused up and out. To do this ELT must empower the third and fourth tier to take responsibility for the day-to-day management of LINZ. The third tier needs to contribute heavily to the next steps in developing the Four-year Plan, including answering the 'what' and 'how' questions, i.e. the strategic plan and associated location system infrastructure plan and developing the business operating model for ELT's consideration. It has a critical role to play in driving the organisational change process on culture and behaviours
- while the alignment exercise replaced one vertical structure with another, the most significant gains will come from developing horizontal linkages and collaborating across LINZ and with external partners and stakeholders; and
- each staff member having a clear line of sight between what they do at the work group level and their contribution to the strategic plan and the 10 Year Vision and this needs to form the basis of their performance expectations.

iv. Financial Management

The LINZ Four-year Plan identified five major themes to its financial position, including the:

- volatility of third party funding with 90% generated by the survey and title system
- treatment of data as capital expenditure (previously treated as operating expenditure) and the fact that new datasets would be considered non-depreciating as they would not have a determinable useful life i.e. how will we fund new assets
- increased cost of moving from independent information and communications technology (ICT) providers to the all-of-government Government Chief Information Officer (GCIO) ICT infrastructure platform
- additional funding required in out-years for new activities required for improvements to the location system.

While the LINZ Four-year Plan was rated as investment ready, there is an ongoing need to find a sustainable long-term funding strategy to support the future ten-year location system infrastructure plan. LINZ recognises that benefit realisation is an area requiring a high capability shift and its Four-year Plan reflects the need for significantly improved programme management.

v. Evaluation and Review

While there are examples of regular reviews of policy settings and regulatory interventions, LINZ recognises there is still much to do to identify the issues identified in the 2013 PIF in the evaluation/review space. This includes:

- a programme management approach to ensure that performance measures are identified and set at the outset of a project or initiative
- agreement being reached on how progress will be tracked towards achieving its outcomes, results and impacts
- processes are specified that will be used to review and evaluate effectiveness and impacts
- outcomes are reviewed against those specified in the original business case, rather than just against high-level statements of programme objectives.

vi. Change Capability and Implementation

A number of steps would assist LINZ to accelerate its pace once it has a well specified business strategy and operating model, including:

- building horizontal ways of working end-to-end through the information system by explicitly designing support systems to enable and reward new ways of working. Ensure KPIs are not just top down through vertical lines but also apply to horizontal ways of working
- using 90-day implementation and reporting cycles to ELT on the key drivers of value
- ELT needing to raise the profile of LINZ
- making far greater use of the depth of knowledge and capability of LINZ's three regulators, who are close to customers and think in a system framework. Generally there is unrealised potential to tap into technical people and translate it into wider value, if people with complementary skills are brought alongside them

- leveraging the New Zealand Open Government Partnership to a far greater degree by ensuring that central government sets the benchmark for what can be achieved through truly open access to information
- ensuring the customer strategy is more than a long list of activities developed by the corporate centre. Embed customer focus and stakeholder engagement explicitly into each team's KPIs and ways of operating. Be far more deliberate and coordinated at the interface with customers and partners
- leaders, who set an example, setting the culture. It is critical for all leaders to walk the talk. Enlist the third and fourth tiers to identify and drive the culture change required to land the 10 Year Vision
- using explicit methods internally, such as innovation hubs, to help grow new ways of operating and encouraging people to find opportunities for improvement that can be tested in a fast fail, fast trial manner
- getting partnership programmes going quickly externally. Take learnings from Christchurch into new areas. Empowering the private sector, giving them space to innovate and create and grow value
- running the corporate centre in an increasingly business-like manner. A drive for efficiency should start with corporate overheads, streamlining corporate functions, making them more professional and focused on what drives value in the business
- because prioritisation is a challenge, giving people new tools to enable them to have hard conversations
- utilising internal and external communications far more strategically and ensuring communications strategies are an integral part of rolling out any operational or organisational change
- accelerating the integration of NZGO into LINZ and ensuring horizontal linkages are strong. NZGO needs to be much more connected internally and externally, which may require changes to capability
- carefully balancing the demands of ASaTS with other initiatives – building new platforms while still building and running other applications
- implementing the new SMART Procurement Strategy.

CONCLUSION

The direction LINZ is pursuing is consistent with its Ten-year Plan, *'the power of where'*. While its Four-year Excellence Horizon remains largely relevant, LINZ needs to accelerate operating pace to achieve it. Looking forward, the biggest risk to LINZ achieving its vision is a failure to identify the business strategy and business (operating) model that can help it deliver its strategic vision. Without these being addressed, LINZ will struggle to prioritise and gain momentum. The business model needs to have a number of important characteristics often associated with infrastructure businesses. Culture and behaviours need to be aligned to this operating model. Staff need a clear line of sight between what they do every day and the contribution this makes to achieving *'the power of where'*. ELT will need to provide collective leadership of LINZ and be outward focused. The third and fourth tier must manage the day-to day operations and take a much stronger role in prioritising investments and leading the culture change required to underpin success.

APPENDIX A – INTERVIEWEES

Minister for Land Information

External Chair, Risk and Audit, LINZ

GNS Science

Opus

e-Spatial

Māori Trustee

Critchlow Ltd

New Zealand Institute of Surveyors

The Treasury

State Services Commission

Environment Canterbury

Landcare

Ministry for the Environment

Ministry of Business, Innovation and Employment

New Zealand Police

Spatial Industry Business Association

Statistics NZ

Cooper

NIWA

APPENDIX B – ABBREVIATIONS USED IN THE REPORT

The following abbreviations and acronyms are used in this report:

ASaTS Advanced Survey and Titles System

ELT Executive Leadership Team (Chief Executive and 2nd Tier Managers)

ICT Information and communications technology

KPIs Key performance indicators

LDS LINZ Data Service

LINZ Land Information New Zealand

NZGO New Zealand Geospatial Office

OF Outcomes Framework

PIF Performance Improvement Framework

SDI Spatial Data Infrastructure