



THE TREASURY

Kaitohutohu Kaupapa Rawa

Our People Our Country Our Future

Living Standards Framework:

Background and Future Work

4 December 2018

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Disclaimer

This paper reflects the current views, conclusions and recommendations of the New Zealand Treasury. All views expressed in this document are those of the Treasury.

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Foreword

The New Zealand Treasury is the Government's lead economic and financial adviser, driven by our vision to be a world-leading Treasury working towards higher living standards for New Zealanders. In alignment with this role and vision, we have developed the Living Standards Framework (LSF) to improve the depth, breadth and quality of our advice.

The LSF is a high-level framework for measuring and analysing intergenerational wellbeing, covering current wellbeing, future wellbeing, and risk and resilience across a range of economic, social and environmental outcome domains. It sits alongside and does not replace more sector-focused or subpopulation-focused wellbeing frameworks used in the public sector.

The LSF builds on 30 years of New Zealand and international theory and evidence on wellbeing, including discussions with a range of New Zealanders and consultation with domestic and international experts. The LSF also draws on the Organisation for Economic Co-operation and Development's (OECD's) wellbeing approach to enable international comparability.

To support the implementation of the LSF, we have developed a Dashboard of indicators that provide an integrated system for measuring wellbeing: the LSF Dashboard. The selection of indicators has been informed by valuable public feedback and consultation with a range of experts in New Zealand and overseas, including within government agencies.

The LSF and its Dashboard add to the Treasury's toolkit strengthening the quality of our fiscal and economic advice to Governments, in order to ensure responsible fiscal management and stable macroeconomic policy to support sustainable growth. We have begun the process of augmenting existing Budget management tools, such as Cost Benefit Analysis (CBA), to include the LSF. We have also started using the LSF Dashboard to assess social, economic and environmental circumstances in New Zealand for the purposes of advising on government priority-setting. It is not prescriptive about whether or how governments should intervene in response to the wellbeing situation the LSF Dashboard depicts.

The LSF Dashboard aims to capture a comprehensive and balanced range of important wellbeing outcome indicators, within a practical and manageable structure. By doing so, it intends to accommodate a range of worldviews about what matters for wellbeing in New Zealand. Of course, it is clear that no single set of indicators can ever capture all that matters for each person, family, whānau and community in New Zealand.

This first version of the LSF Dashboard is a positive early milestone amid a long-term work in progress. As can be expected, there remain a number of limitations and gaps, partly reflecting data availability and quality limits, and partly a need for the Treasury to better understand the relevant concepts. Further work is needed on, for example, fuller and richer representations of Te Ao Māori perspectives, children's wellbeing and New Zealand cultural identity. We plan to undertake a comprehensive review of the LSF and its dashboard in 2021.

The Treasury will keep developing the LSF Dashboard as we gain a deeper understanding of what is important to the people of Aotearoa, as scientific knowledge about wellbeing increases, and as we learn more about how the tool can be used most effectively in practice as we work towards higher living standards for New Zealanders.

A handwritten signature in black ink, appearing to read 'G. Makhlouf', with a horizontal line underneath.

Gabriel Makhlouf
Secretary to the Treasury

1. Introduction

The New Zealand Treasury is the Government's lead economic and financial adviser. The Treasury has developed the Living Standards Framework (LSF) to enhance the quality of its advice about lifting broad living standards. This is through improved analysis and measurement of intergenerational wellbeing and the support the LSF provides to the Treasury's core economic and fiscal advice processes.

The LSF builds on more than 30 years of New Zealand and international research and evidence on wellbeing, including a range of public feedback and domestic and international expert advice. With this work we aim to ensure that the LSF reflects what matters to New Zealanders and supports a New Zealand policy-making environment. In addition, to allow for international comparison, we have drawn on the approach used in the Organisation for Economic Co-operation and Development's (OECD's) [How's Life?](#) initiative.

The LSF is a framework on intergenerational wellbeing spanning a broad range of economic, social and environmental outcome domains at a high-level. It complements, and does not replace, more specialised wellbeing frameworks used in the public sector, such as those that focus on particular sectors or population groups.

To support the implementation of the LSF, the Treasury has developed the LSF Dashboard, a structured database of indicators that provide an integrated system for measuring wellbeing outcomes. The LSF and its Dashboard enhance our current suite of fiscal and economic analysis tools, such as those for Social Cost Benefit Analysis and better business cases. Together, the LSF and its Dashboard aim to provide a balanced and comprehensive view of wellbeing outcomes suitable for use in the Treasury's policy advice processes.

The LSF Dashboard, released with this document, is the first version and is one milestone in an iterative process of developing measurement and analysis tools to improve the Treasury's advice. No single set of indicators can capture all that matters for every person, family, whānau and community in New Zealand. Further work is needed to ensure future versions improve on areas where we know there are gaps and limitations, frequently owing to data availability constraints or conceptual and methodological issues still to be resolved. These areas include further work to more fully and richly express and represent Te Ao Māori perspectives, children's wellbeing and New Zealand cultural identity. The Treasury will keep developing the LSF Dashboard as we gain a deeper understanding of what is important to New Zealanders, as scientific knowledge about wellbeing increases and as we learn more about how the tool can be used most effectively in practice.

This document and its appendices provide information about the LSF and its Dashboard, including the process of development and further work needed. Section 2 explains the Living Standards Framework. Section 3 provides an overview of the approach we have taken to developing the LSF and its Dashboard, including the public and expert engagement undertaken. Section 4 explains how the LSF and its Dashboard will be used and describes a number of gaps and limitations of the current version where future work will be useful.

Further information is provided in the appendices to this document:

- Appendix 1 – describes in detail the 12 wellbeing domains and the four capitals that support current and future wellbeing.
- Appendix 2 – presents the indicators and data used in LSF Dashboard.
- Appendix 3 – summarises the feedback received through consultation.

2. The Treasury’s Living Standards Framework

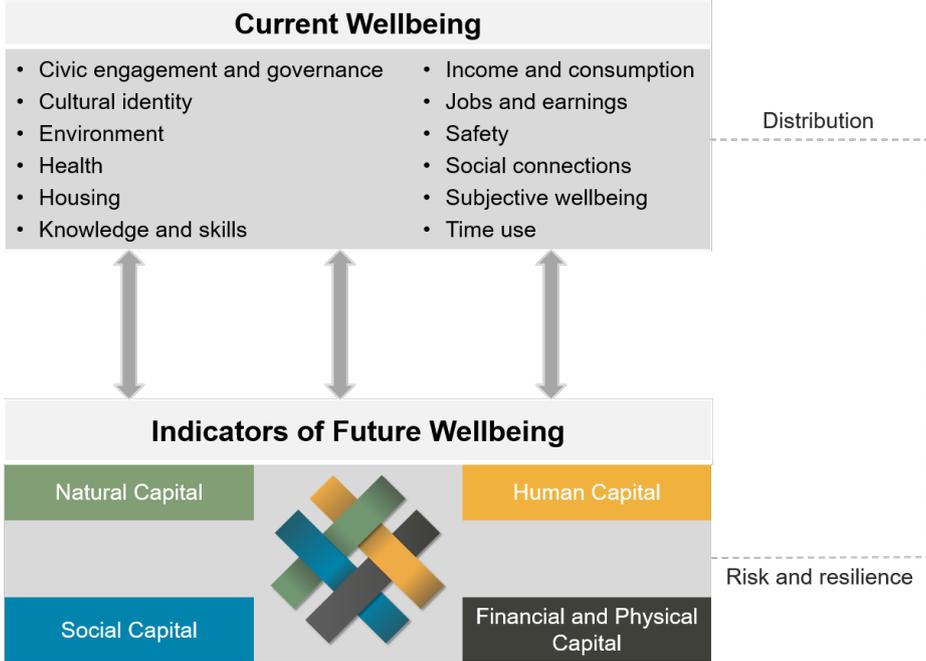
The elements of the LSF, as depicted in Figure 1, are:

- the domains of current wellbeing
- the capitals that combine to generate current and future wellbeing
- risk and resilience.

The LSF is a practical application of [national](#) and international research around measuring wellbeing. To distil and structure this knowledge, as well as to ensure international comparability, we have drawn from the [Organisation for Economic Co-operation and Development’s \(OECD\)](#) internationally recognised approach.

We have designed the LSF to be as relevant to New Zealand circumstances as possible and applicable in the Treasury’s policy advice work. This has included engaging with domestic and international experts through public consultation and discussions. One specific element of New Zealand representation is the cultural identity domain, which aims to reflect aspects of culture pertinent to New Zealanders.

Figure 1: The Treasury’s Living Standard Framework



The LSF Dashboard operationalises the LSF empirically. It is a structured database of indicators that provide an integrated system for measuring wellbeing outcomes. The indicators provide evidence to show how different aspects of wellbeing are changing over time, how they differ by population groups and how they compare to other countries.

Neither the LSF nor its Dashboard are prescriptive about whether or how governments might choose to intervene in response to the depictions of wellbeing in the Dashboard. Instead, their purpose is to improve transparency and systematic consideration of all the various outcomes that research suggests are important elements of wellbeing. They support the use of existing tools in the Treasury’s fiscal and economic advice toolkit, which are used to analyse and compare options for government intervention.

The process for selecting indicators is discussed in more detail in Section 3 of this document.

The remainder of this section describes the three core elements of the LSF: the current wellbeing domains; the future wellbeing capitals; and risk and resilience. For further information, detailed definitions and descriptions of the domains and capitals can be found in Appendix 1, whilst the definitions of indicators and data sources used in the LSF Dashboard are provided in Appendix 2.

Defining current and future wellbeing

Current wellbeing domains

Current wellbeing is divided into 12 domains, as defined in Table 1. The domains of current wellbeing reflect wellbeing at a “point in time” and are based on research about what is important for people and their wellbeing (see (Smith, 2018) also (Stiglitz, Sen, & Fitoussi, 2009)).

The diversity of New Zealanders means that what any individual, family, whānau or community values and places relative importance on will vary. No single framework will capture *all* that matters for everyone. However, we believe that the 12 domains capture elements of wellbeing generally important to people in New Zealand. Ongoing work will test and refine the degree to which the LSF is comprehensive in this respect.

Table 1: The 12 domains of wellbeing

Domain	Definition
Civic engagement and governance	People’s engagement in the governance of their country, how “good” New Zealand’s governance is perceived to be and the procedural fairness of our society.
Cultural identity	Having a strong sense of identity, belonging and ability to be oneself, and the existence value of cultural taonga.
Environment	The natural and physical environment and how it impacts people today (this is different from the natural capital stock, which is measured elsewhere).
Health	Our mental and physical health.
Housing	The quality, suitability and affordability of the homes we live in.
Income and consumption	People’s disposable income from all sources, how much people spend and the material possessions they have.
Jobs and earnings	The quality of people’s jobs (including monetary compensation) and work environment, people’s ease and inclusiveness of finding suitable employment and their job stability and freedom from unemployment.
Knowledge and skills	People’s knowledge and skills.
Safety	People’s safety and security (both real and perceived) and their freedom from risk of harm, and lack of fear.
Social connections	Having positive social contacts and a support network.
Subjective wellbeing	Overall life satisfaction and sense of meaning and self.
Time use	The quality and quantity of people’s leisure and recreation time (that is, people’s free time when they are not working or doing chores).

The foundations of future wellbeing: The four capitals

The four capitals, described in Table 2, are the foundations of wellbeing that together generate wellbeing now and in the future. New Zealand’s capital stocks include the skills and knowledge of our people, the natural environment we live in, the social connections, community and institutions we have as well as the buildings and machines we use.

These capitals combine to generate wellbeing, both now and in the future. Current levels of the capital stocks and changes over time influence our sustainability and our ability to achieve future wellbeing.

Table 2: The four capitals

Capital	Definition
Natural capital	All aspects of the natural environment needed to support life and human activity.
Financial and physical capital	The country’s physical, intangible and financial assets that have a direct role in supporting incomes and material living conditions.
Human capital	People’s knowledge, physical and mental health that enables them to fully participate in work, study, recreation and society.
Social capital	The social connections, attitudes, norms and formal rules or institutions that contribute to societal wellbeing.

Risk and resilience

Risk and resilience is the third element of the LSF. It can be thought of at individual or national levels, but can also be considered at family, whānau and community levels. Risk and resilience relate directly to the capital stocks. The quality and quantity of the capital stocks, which can be degraded and in some cases actively drawn down, influence the ability of our people and the country to withstand shocks. Mitigation of risks and promoting resilience are discussed further in the [Resilience and Future Wellbeing](#) discussion paper.

3. The Treasury's approach when developing the LSF

A wide variety of approaches to wellbeing exist.¹ The Treasury's approach reflects our role to provide effective economic and financial advice to the Government of the day, and anticipates the advice needs of future governments. The development of the LSF has thus been driven first and foremost by the obligation to ensure that our advice on improving living standards is as good as it can be. The LSF contributes to our advice toolkit through improved measurement and analysis of intergenerational wellbeing.

This section explains the influences that have guided the Treasury's approach when developing the LSF. This has led us to develop the LSF Dashboard, which is summarised in the final part of the section. We expect to continue developing the LSF and its Dashboard. Potential areas for future work are discussed in Section 4.

Influences that have shaped the LSF

The Treasury's strategy for developing the LSF has been strongly influenced by the evolution of economic thinking, increasingly evident in a range of jurisdictions and recent literature. Thinking in this area now suggests that continued and sustainable economic development requires a broadened focus beyond growth in Gross Domestic Product (GDP) and market outcomes. The LSF also responds to the need for more comprehensive advice about the wide and diverse range of outcomes that governments wish to achieve, while remaining consistent, coherent and anchored in evidence.

In our role as a public service agency, this advice needs to be transparent, objective and impartial. Our advice tools need to support the full range of current and future government priorities as far as can reasonably be anticipated.

The approach taken is similar to that underlying the use of empirical and theoretical frameworks to support the familiar Treasury products conveying our macroeconomic analysis – the Half-Year and Budget Economic and Fiscal Updates (HYEFU, BEFU). The EFUs (Economic and Fiscal Updates) support government decision-making by describing, in rich detail, current and prospective macroeconomic and fiscal conditions. To produce the EFUs, the Treasury uses the best available data from Statistics New Zealand (Stats NZ) and other sources. We use our professional judgement to generate impartial macroeconomic and fiscal assessments and forecasts. This is based on clear assumptions that may be questioned and which make clearer the macroeconomic and fiscal situation the Government faces, within which it makes its prioritisation and other decisions.

A wellbeing framework for New Zealand needs to recognise the diversity of beliefs, assumptions, values and ideas that shape New Zealanders' views of the world – in short, what they believe matters for wellbeing. These worldviews will be reflected and expressed through the political process and take the form of different governments expressing in general, different priorities as they come to power. The LSF needs to be both grounded in

¹ Third International Conference on Wellbeing and Public Policy, 5–7 September 2018 – Agenda https://www.confer.nz/wellbeingandpublicpolicy2018/wp-content/uploads/2018/09/CE_WBPP_Programme_DigiVersion.pdf

the wide range of available theoretical work and empirical evidence on wellbeing, and responsive to calls for advice on those various government priorities. Further work is needed to ensure the diverse worldviews of New Zealanders are sufficiently accommodated within the LSF. Work is underway to ensure these views are well-represented.²

The philosophical approach to wellbeing in the current LSF remains centred on the capability approach developed in the 1980s. The approach asserts that wellbeing should be considered in terms of the capability of people to live lives that they have reason to value (Sen, 2003). Applied economic work by organisations such as the OECD has employed a range of interpretations of the approach, which point to the life outcomes that should be considered in any theory of wellbeing and public policy (Stiglitz, Sen, & Fitoussi, 2009).

Scientific knowledge about wellbeing and how it relates to the objectives of public policy is still developing. Our empirical approach has been to focus on developing New Zealand-relevant and policy-relevant indicators of wellbeing that can be used in practice and applied in a “real-world” setting in a public sector policy institution (the Treasury). To organise these indicators, we have taken the advice of (Smith, 2018) and drawn on a version of multidimensional wellbeing influenced by the OECD’s [How’s Life?](#) approach, with a range of adaptations to reflect New Zealand circumstances. Data and methodological limitations have prevented us from including some indicators in this first version of the LSF Dashboard. Future work on addressing the limitations and gaps will be incorporated in future versions.

The structure and form of the LSF thus reflect the overarching conceptual and philosophical influences and the OECD’s broad taxonomic approach to the elements. The LSF Dashboard uses indicators and available data drawn from predominantly New Zealand sources to measure these elements of wellbeing. All aspects have been informed by a range of discussions and consultations with New Zealanders and domestic and international experts. Table 3 summarises examples of the choices in the current LSF and its Dashboard corresponding to the different elements, and examples of some alternatives to illustrate other possibilities at the LSF (theoretical) level.

² [Note on the Future Work on the Role of Culture in the Treasury Living Standards Framework; A Pacific Perspective on the Living Standards Framework and Wellbeing; An Asian Perspective and the New Zealand Treasury Living Standards Framework; He Ara Waiora / A Pathway towards Wellbeing.](#)

Table 3: Influences that have shaped the LSF and LSF Dashboard

	Level	Definition	Influences	Alternatives (examples)
LSF	Worldview	Overarching philosophical approach that motivates our work	The Treasury's strategy The capability approach The Treasury's role as a public agency	Sir Mason Durie's four pillars (Te Whare Tapa Whā) ³ Fuiomaono Karl Pulotu-Endemann's Fonofale Model of Health ⁴
	Elements	Conceptual elements of the wellbeing framework derived from the worldview	Domains, capitals and risk and resilience	Spirituality, family
LSF Dashboard	Indicators	What we measure to assess wellbeing	Numerical dashboard with measureable indicators (eg, unemployment rate)	
	Data	The technical definition and dataset for indicators	Statistic and source (eg, unemployed people as a percentage of the labour force, Household Labour Force Survey, Stats NZ)	

Development of the current LSF and its Dashboard

The Treasury has investigated a number of approaches to wellbeing since 2002 (Annesley, Christoffel, Crawford, & Jacobsen, 2002). As discussed in *Wellbeing Frameworks for the Treasury* (King, Huseynli, & MacGibbon, 2018), there is now a great deal of similarity across international and New Zealand-specific frameworks used to define and assess wellbeing. New Zealand specific versions have evolved from consultations that began with the 1972 Royal Commission report *Social Security in New Zealand* (Report of the Royal Commission of Inquiry, 1972). An extensive consultation for the Royal Commission in 1988 (Royal Commission on Social Policy, 1988) placed Te Ao Māori and the Te Tiriti o Waitangi (Treaty of Waitangi) at the forefront of the analysis. This led to the development of the General Social Survey (GSS), which has been an important data source for the LSF Dashboard.

The development of the Treasury's LSF over the past 18 months or so has occurred in four overlapping stages:

- **Developing the approach**

In mid-2017 an early version of the LSF was set out. This drew from previous Treasury work, other New Zealand work and international research, particularly OECD definitions to enable international comparability.

³ Sir Mason Durie - Whaiora: Māori Health Development

⁴ Fuiomaono Karl Pulotu-Endemann – Fonofale Model of Health

- **Discussion papers**

In the first half of 2018, we tested our ideas and encouraged wider debate on the LSF. [Discussion papers](#) were published which explored the four capitals, the relationship between the LSF and the United Nations Sustainable Development Goals; Te Ao Māori, Pasifika and Asian perspectives on wellbeing; and risk and resilience and future wellbeing. Appendix 3 discusses the feedback we received.

- **Dashboard consultation**

To develop the first versions of the LSF Dashboard, the Treasury commissioned Conal Smith, an independent wellbeing expert with extensive international experience, to propose a Dashboard for New Zealand. [This proposal](#) was released for consultation in June 2018 for feedback via an online survey and email submissions. The Treasury received approximately 500 survey responses and 60 large submissions from a range of private organisations from the business and non-governmental organisation (NGO) sectors, academics and individuals, and government agencies.

The Treasury also established a Challenge Group consisting of academic researchers, independent economists and experts on various aspects of wellbeing to critique the LSF and its Dashboard, as it was developed.⁵

- **Third International Conference on Well-Being & Public Policy**

In September 2018, the Treasury, together with Victoria University of Wellington and the International Journal of Wellbeing, hosted an international conference on wellbeing that attracted 300 participants from around the world. The conference provided a forum for robust discussion of research on measurement and policy pertaining to wellbeing. Conference discussion showed the considerable level of interest from around the world in New Zealand's experience as a leader in embedding concepts of wellbeing and associated tools at the core of government policy processes.

- **LSF and its Dashboard**

The Treasury has brought together these sources to produce the LSF and its Dashboard. The LSF Dashboard is a tool within the LSF that provides an integrated empirical view of living standards.

The LSF Dashboard presents indicators of intergenerational wellbeing that show high-level wellbeing outcomes data. Owing to the short development time frame and the availability of data, this version has a number of known limitations which we will work to address in the next version. These are described in detail in Section 4.

⁵ The LSF Challenge Group consisted of the following members: Dr Arthur Grimes, Dr Manuka Henare, Dr Viktoria Kahui, Linda Meade, Dr Ganesh Nana, Taimalieutu Kiwi Tamasese, Professor Marilyn Waring and Dr Bryce Wilkinson.

Summary of the feedback received

As noted above, the Treasury sought feedback in various forms throughout the development of the LSF Dashboard. Further feedback was received in response to the publication of [discussion papers on various topics](#).

Generally, there was wide support for the Treasury's work to develop the LSF and its Dashboard. However, as noted, the Treasury is aware of a range of gaps and limitations in this first version of the Dashboard. Further work on the LSF will address these gaps.

This section summarises some of the key themes that emerged. Further detail is provided in Appendix 3.

Feedback specific to particular topics

- **Te Ao Māori**

A large amount of feedback particularly in the submissions expressed concern that the LSF lacked Te Ao Māori perspectives of wellbeing and highly recommended incorporating these perspectives into the LSF. The Treasury has identified this as a key gap and acknowledges that the LSF must represent Te Ao Māori perspectives with integrity. The Treasury is committed to better embedding Te Ao Māori perspectives in future versions of the LSF. The Treasury will work with Te Puni Kōkiri (TPK) and other Māori experts to ensure this is undertaken with integrity.

- **Cultural identity**

Indicators relating to cultural identity that represent the unique aspects of New Zealand identity, in particular with regards to the ability to express and connect with one's culture, were suggested. The domain cultural identity is where we intend to capture aspects of culture pertinent to all New Zealanders. However, the LSF Dashboard does not have many indicators that capture cultural concepts specific to different social groups. This is one area where future work is required.

- **Children**

The representation of children's wellbeing in the LSF was frequently voiced as a gap, particularly from the Challenge Group. As discussed in Section 4, while certain wellbeing outcomes measured at the household level (for example, housing quality) serve to some extent as proxies for a number of aspects of children's wellbeing, there are other aspects where the relationship is less clear. Further work on direct measurement of children's wellbeing may be needed. The Treasury plans to work with relevant New Zealand agencies to strengthen the representation of children's wellbeing in future versions of the LSF Dashboard.

- **Health**

The inclusion of mental health measures was strongly suggested in feedback – in particular suicide rates. A non-communicable disease indicator was also suggested. Two measures of mental health, a self-reported measure and suicide rates, and a non-communicable disease measure have been included in the LSF Dashboard.

- **Environment**

A range of indicators was suggested – in particular, the inclusion of quantitative measures of water quality. Two quantitative measures of water quality have been included in the LSF Dashboard.

- **Housing**

The quality and affordability of houses were emphasised. The LSF Dashboard presents measures of housing quality and affordability.

- **Education**

Inclusion of an education domain or measures of educational attainment were suggested. Three measures of education have been included, two in the domain 'knowledge and skills' and one in 'human capital'.

- **Jobs and income**

There was strong desire for income measures, and for indicators of employment, unemployment and job security to be included. The LSF Dashboard includes measures of income and employment and unemployment rates. However, owing to data limitations and difficulties in definition, a measure for job security has not been included.

- **Safety**

Measures of safety – in particular for domestic violence – were suggested. To this end, two measures of violence – namely homicide rates and domestic violence – have been included.

- **Inequality**

Feedback strongly suggested including an equality domain or measures of inequality, particularly around gender and income. The LSF Dashboard can depict inequality through population breakdowns such as ethnicity, age, sex, region and family type.

- **Civic engagement**

Indicators of volunteering, trust and engagement in the political system were strongly emphasised. The LSF Dashboard includes measures of trust and engagement in the political system. However, a measure of volunteering was not included owing to methodological issues with the definition of volunteering and uncertainty about the interpretation of volunteering in terms of wellbeing.

- **Data disaggregation**

General requests for disaggregation of data were a common theme. The surveys and submissions strongly expressed a desire for regional and disability disaggregation of data in particular. For many indicators, data will be available by age group, region, ethnicity, sex, family type and area deprivation. Owing to data limitations, however, the LSF Dashboard cannot present the disability distributions.

- **Entrepreneurship freedom and rights**

Some feedback questioned whether values such as freedom and protection of rights, and the role of entrepreneurship in promoting wellbeing, were adequately captured in the Framework. As well as influencing wellbeing directly in New Zealand, freedom and rights are a key part of the institutions supporting the way in which the capitals work together.

Expressions of freedom such as the ability to start a business (entrepreneurship) are relevant aspects of productivity and economic performance, which relate to or influence multiple wellbeing domains (such as civic and governance, cultural identity, social capital and human capital), raising the question of where to place such measures. The area of institutions (similarly to culture) generally requires further conceptual work to illuminate the kinds of measures that would be most suitable for inclusion in the Dashboard, to capture this aspect of wellbeing.

The LSF Dashboard

The LSF Dashboard provides a “macro”, balanced and comprehensive view across social, environmental and economic conditions in New Zealand. The LSF Dashboard displays and tracks indicators under three sections, entitled *Our people*, *Our country* and *Our future*:

- **Our people** – describes the distribution of current wellbeing of New Zealanders aged over 15 and broken down by ethnicity, age, sex, neighbourhood deprivation, region and family type across nine current wellbeing domains. Wellbeing in these indicators came from questions asked in Stats NZ’s GSS,⁶ which surveys around 8,000 people every two years.
- **Our country** – describes the current wellbeing of New Zealanders at a national level with comparisons available within New Zealand population groups and with other OECD countries.
- **Our future** – shows indicators of the four capitals – resources that underpin the ability to sustain higher living standards in New Zealand in the future.

Each indicator in the LSF Dashboard is represented by a single measure at a national level. Where the national measure is not internationally comparable, an alternative measure will be used for international comparisons. For indicators of domains of current wellbeing, where the chosen indicator represents a point on a distribution (eg, median income), measures to give a sense of the rest of the distribution will also be presented (eg, income by decile). Additionally, where publicly available, there are also indicators for groups within the population, including: age group, sex, broad ethnic group, region, family type and area of deprivation. By presenting the data in different ways, the Dashboard can provide a more complete picture of the distribution of wellbeing and can highlight the wellbeing of groups in each domain.

This is an evolving process and the following section discusses future work needed. The Treasury is aware that the current indicator set is not complete, with some gaps that will take time and investment to fill. Where necessary, we have used proxy measures until better data are available. While the Dashboard can already support better policy advice and decision making, it will improve with time. It will develop and evolve as we learn more about what matters to New Zealanders, theoretical and empirical knowledge about the science of wellbeing grows and as we find out more about what is useful in practical policy advice processes.

⁶ http://archive.stats.govt.nz/browse_for_stats/people_and_communities/Well-being/nzgss-info-releases.aspx

4. The LSF and its Dashboard: Further work

The development of the LSF and its Dashboard has highlighted that we are at the beginning stages of providing robust evidence-based measures of broad wellbeing outcomes. Some of this work pushes at the bounds of knowledge about wellbeing. We are committed to reviewing the current version of the LSF and its Dashboard in 2021. That will be another milestone in what will be a long-term development process. For comparison, the first internationally accepted, practically usable System of National Accounts (SNA) was implemented in the late 1940s. The SNA continues to evolve today to reflect the changing economy and improving measurement techniques (Statistics New Zealand, 2018).

We have chosen 2021 for the review of the LSF as it provides an opportunity to incorporate learning after the current version of the LSF has been applied for three years in a policy advice environment, including two Budget cycles. It also provides time for research, consultation and discussion on issues requiring further work.

The developing state of knowledge in this field means that diverse perspectives and expertise will be necessary, including those outside government agencies, those with specialist skills or from organisations with a wider mandate to challenge institutions and comment on current practices.

In this section, we discuss how the LSF will be used. This is followed by a discussion of further work which will be needed as the Dashboard is developed. This work includes maintenance and routine updates as well as longer-term projects that may take several years to come to fruition.

How will the Treasury use the LSF?

As noted, the inception of the LSF and its Dashboard do not change the Treasury's fundamental role as economic and financial adviser to the Government. Rather, they are intended to improve our advice, and to complement our current suite of economic methods and tools for informing prudent fiscal strategy. The implementation of the LSF will mean that the Treasury more consistently measures, monitors and reports against the broad range of outcomes that New Zealanders value, and links its advice explicitly to those outcomes.

For the Treasury

In a practical sense, this includes developing our Cost Benefit Analysis (CBA) tools. This year, for example, we have adjusted the tool to include elements of the LSF. This process is still in development. Over time, we aim to bring the same level of analytical rigour to assessing the expected benefits (monetary and non-monetary) of policies and policy proposals that is currently applied to the fiscal costs. Such development of the CBA tools will provide more consistency and transparency in the advice we give across different areas of policy.

Embedding the LSF into our work also includes measuring and reporting on living standards through the LSF Dashboard and in more of our regular public finance management processes, including Budget guidance and Budget-related documents, and in our advice on Budget and non-spending (eg, regulatory) initiatives.

The LSF and its Dashboard do not in themselves replace the need for judgment when developing prioritisation advice, nor do they constrain the role of governments in making prioritisation decisions. As discussed in the previous section, it is Ministers' roles to express the priorities of each elected government, and to make decisions about actions to pursue those priorities. The Treasury and other public sector agencies are responsible for providing free and frank advice. The roles of the LSF and its Dashboard are to be empirically specific and provide us with a stronger wellbeing evidence base about the areas which governments might be reasonably expected to want to prioritise.

For Government and government agencies

The broad purpose of the LSF is to help the Treasury and, through the advice process, Ministers, assess and understand the wellbeing of New Zealanders and the potential impact of policies across the different dimensions of wellbeing. It is Ministers' and not the Treasury's role to make value judgements about the relative importance of these different dimensions, which influence their prioritisation decisions. Our role is to provide measures and analysis that help Ministers understand New Zealand's performance in each of those dimensions and the potential policy synergies and trade-offs involved in actions to promote better outcomes across those dimensions.

There is the potential for the LSF to be used more widely in the public sector where wellbeing approaches are relevant. As noted, the LSF is a complement, not a replacement for sector- or sub-population-specific frameworks and measurement systems. The LSF is distinct from those more granular frameworks in both disaggregation level and purpose. For instance, the Ministry of Education focuses on the people who use educational institutions, primarily children and young people, and has frameworks that help them manage their sector, the services it delivers and the sub-population that uses it.

The Treasury will work with agencies as it develops the LSF to improve alignment and coherence between these frameworks. In the mature system, living standards advice on wellbeing from the Treasury will cohere with domain-specific wellbeing advice from sector and population agencies that draws on their own frameworks and expertise. Both are needed to support Ministers to make better decisions *within* policy domains and *across* policy domains.

The distinction between the Treasury's high-level LSF and agencies' sector and population-focused frameworks, and the differing respective data needs, is one motivation for initiatives like Stats NZ's Indicators Aotearoa New Zealand data initiative. This will be a broad dataset, which is expected to supply many of the LSF Dashboard indicators, but also other more detailed indicators that will be used by agencies for their own internal and external reporting purposes.

Ensuring a New Zealand perspective and other development areas

Further work will be required to ensure that future iterations of the LSF Dashboard address notable limitations and gaps in this version of the Dashboard. This includes further work on Te Ao Māori perspectives, New Zealand cultural identity and children's wellbeing. Further scoping will be necessary for each issue, identified below, and engagement with stakeholders will continue to be important.

Te Ao Māori

The Treasury is committed to ensuring that the LSF expresses and represents Te Ao Māori perspectives with respect and integrity. Some indicators in the current LSF Dashboard relate to Te Ao Māori concepts. Where possible, data have been disaggregated so Māori outcomes are measured, but it is clear more work is needed.

Some work is already in progress or has been recently completed. For example, the Treasury commissioned a Te Ao Māori perspective on the LSF from Te Puni Kōkiri. Broader views on the LSF such as these suggest different interpretations on a range of aspects of wellbeing. Another example of recent work at the Treasury is He Ara Waiora, a discussion paper written by the Tax Working Group Secretariat released on 20 September 2018. He Ara Waiora provides a prototype framework that integrates the four capital stocks in the LSF with established principles of tax policy design.

New Zealand cultural identity

A persistent message from feedback was that a critical element supporting New Zealanders' living standards and wellbeing is expression of various aspects of New Zealand's cultural identity. In the LSF, this is part of the broad concept of culture. At a high-level, culture refers to the ways we see and represent ourselves in relation to others, including both our sense of commonality and our sense of difference (Frieling, 2018).

Culture supports a range of wellbeing aspects and the interpretation of outcomes. Existing indicators will be disaggregated in the LSF Dashboard to show outcomes for Māori, Pasifika and Asian New Zealanders, which provides information on outcomes for these groups and identifies distinct patterns. The LSF Dashboard does not yet have many indicators that capture cultural concepts specific to these groups which are distinct (in degree or kind) from concepts inherent to "New Zealandness" more generally. For instance, Māori and Pasifika perspectives emphasise spirituality and the quality of family relationships, which are currently not well represented in this version of the LSF and its Dashboard. Such concepts maybe important for interpreting patterns in the outcomes we see.

Child wellbeing

Much feedback, research and general logic suggest that the wellbeing of the youngest generation – children – is particularly pertinent to intergenerational wellbeing. The LSF Dashboard does not include direct measures of the wellbeing of children and young people. This is largely owing to children being mostly unrepresented in the survey-based data collections on which the Dashboard relies. OECD (2015) notes the measurement challenges faced when designing surveys to elicit responses from children that can be interpreted in a straightforward manner. This is one reason why family or household indicators are often used instead – but the assumption that, for example, parental resources are distributed

evenly and effectively across all household members is obviously open to question. Moreover, aspects of a child's wellbeing that could be important, such as experience at school, might not be very well captured in surveys targeted at the adult members of a household.

Work on the wellbeing of children specifically is currently being undertaken by a number of government agencies. The Treasury will work with these agencies to incorporate such work into future iterations of the Dashboard. In the current Dashboard, household-based measures of wellbeing such as housing quality can provide a proxy, to some extent, for the wellbeing of children. The family-type distributions in Our people can also support such analysis. For a more detailed explanation, refer to the [User Guide](#).

Risk and resilience

The LSF includes the results of early thinking regarding how to report on key risks and on the resilience of future wellbeing. It has not been possible to develop a satisfactory set of indicators to represent risk and resilience in this version of the Dashboard, but the discussion paper, [Resilience and Future Wellbeing](#), provides a starting point that can be built on in future iterations of the Dashboard.

Institutions

Institutions (the roles, rules and procedures that structure and support the resolution of society's collective action problems) play a significant role in supporting and sustaining wellbeing. Culture is also likely to be relevant to the formation, development and maintenance of certain institutions. Institutions are a form of social capital, and may be significantly and directly managed and supported by government action.

Further work is required to ensure that the quality of New Zealand's extensive set of institutions is appropriately captured in the LSF Dashboard, noting that measures of "trust in institutions" are not a direct measure of institutional quality. Additionally, there are likely to be other channels through which institutions impact on wellbeing that warrant further analysis.

Knowledge and skills/human capital

Further work is needed to address how non-qualification-based skills and on-the-job training can be included, including the increasingly important knowledge economy. Currently, no suitable data have been found to support this indicator of wellbeing.

Environment/natural capital

As noted in [Smith \(2018\)](#), there is a diverse range of environmental indicators that could be incorporated into the LSF Dashboard. Such indicators can be based on developing international frameworks (such as the [Common International Classification of Ecosystem Services](#)). However, in general, most candidate indicators pose scientific and conceptual challenges, which will need to be addressed to better understand natural capital dynamics and the impact of human activity and other forces on the environment. Currently, a limited number of environmental indicators are included in the environment domain and natural capital. Further work will be required to include other aspects of the natural environment, but this is expected to take time and require engagement with domestic and international communities that are also conducting work in this area.

Trade-offs

The LSF is yet to be rigorously tested over an extended period of time as a policy analysis tool. It requires thinking across many domains and contemplating aggregation across domains. CBA is our primary instrument at the moment for addressing trade-offs between domains and, although we are in the process of aligning the LSF with CBA, significant further work is needed on the theoretical and empirical basis for characterising trade-offs within the LSF.

International connections

The OECD New Zealand country report in 2019 will have a wellbeing focus. It is likely to offer insights on ways to improve the LSF and further develop our work.

Using the LSF Dashboard to illuminate particular aspects of wellbeing

As noted, the information gathered from the LSF Dashboard can be used in conjunction with agency-specific frameworks and reports on particular topics of interest, such as poverty or economic performance.

Poverty and inequality

The LSF Dashboard includes outcomes that are highly correlated with poverty, including income, health, mental health, housing quality, employment and subjective wellbeing. These indicators can provide a high-level picture of poverty and inequality in New Zealand, which can supplement other agencies' detailed poverty-specific reports and frameworks such as those of the Ministry of Social Development. The income distribution information under Our country can also support this analysis. For a more detailed description, refer to the [User Guide](#).

For future versions of the LSF Dashboard, we intend to investigate indicators of homelessness. However, at this point, issues around the definition of homelessness and data still need to be addressed.

Economic performance

The LSF Dashboard includes a range of indicators that together provide a high-level picture of New Zealand's economic performance, in most familiar form under Our country within domains such as income and consumption, jobs and earnings and time use. Under Our people, the indicator of financial wellbeing shows survey information on the extent to which New Zealanders have enough money to meet everyday needs, and Our future includes a specific productivity measure that captures the roles of both capital and labour in economic performance. The LSF Dashboard also includes indicators on the net wealth of households, the net worth of the New Zealand Government and New Zealand's net international financial position. These indicators can be supplemented with other agencies' detailed reports on productivity such as those by the New Zealand Productivity Commission, Ministry for Business, Innovation and Employment (MBIE), the Reserve Bank of New Zealand and the Treasury itself.

Improving the indicators and data

A wellbeing framework of this size requires a large amount of data that are available at a national scale, collected consistently over time and which can be disaggregated by population groups. For wellbeing to be incorporated into decision making consistently and durably, issues of wellbeing data collection will need to be addressed. In particular:

- Key economic statistics such as gross domestic product (GDP) are collected quarterly, whereas most wellbeing data are collected at intervals of two to 10 years. For wellbeing data to be integrated more fully into policy decision making, they may need to be collected more frequently.
- A sufficiently large sample size is crucial to our ability to draw reliable conclusions about the distribution of wellbeing. In order to capture relevant distributional information, data sources may need to involve larger and further-reaching samples.
- Some aspects of wellbeing such as time use require more work on exactly what information is needed to support analysis.
- Family- and community-level information are of some interest, since a range of policy assessments of wellbeing interactions and outcomes exist at this level.
- Further investigation is required to assess appropriate indicators to capture child wellbeing and source appropriate data.

Want to know more?

For further information, see the [Treasury's Living Standards website](#).

We are releasing several supporting documents with the LSF Dashboard. All are available on the [Treasury's Living Standards website](#) and described below.

[Living Standards Framework: Introducing the Dashboard](#) – a summary of the LSF Dashboard and information about how to use it.

[Living Standards Framework: Dashboard](#) – a web-based interface with graphs depicting the indicators in a user-friendly manner.

[Living Standards Framework: Dashboard User Guide](#) – guidance on using the LSF Dashboard, including how it can be used to obtain information about population sub-groups.

[Living Standards Framework: Our People – Multidimensional Wellbeing in New Zealand](#) – supports the Our people section of the LSF Dashboard by describing the approach and method used to construct the measures presented in that section. It presents estimates of current wellbeing across multiple domains, assesses the extent to which these domains relate to each other statistically and looks at the distributions of wellbeing across these domains according to a small set of population demographic and socio-economic characteristics.

To learn more about Stats NZ's Indicators Aotearoa New Zealand work, visit [Indicators Aotearoa New Zealand – Ngā Tūtohu Aotearoa](#).

For any further questions, contact CEA@treasury.govt.nz.

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THE TREASURY

Kaitohutohu Kaupapa Rawa

Living Standards Framework: Background and Future Work

Appendix 1 – Domain and capital definitions

Introduction

The current wellbeing domains and the capitals each represent a different aspect of wellbeing in New Zealand. Indicators show how different aspects of wellbeing change over time, differ by population groups and compare to other countries. The indicators present information about quality and quantity, and include objective and subjective measures.

This appendix contains a detailed description of each current wellbeing domain and capital. Initial indicators chosen to represent the domains and capitals in the LSF Dashboard are explained and indicator limitations are noted.

The indicators chosen were based on:

- suggested indicators in *Proposal for a Living Standards Dashboard*, (Smith, 2018)
- feedback received from the public and government agencies
- feedback from discussion papers published on [The Treasury website](#) which explore the four capitals, the relationship between the LSF and the Sustainable Development Goals; Te Ao Māori, Pasifika and Asian perspectives of wellbeing; and resilience and future wellbeing
- discussions with a Challenge Group established by the Treasury to critique the LSF and its Dashboard, consisting of academic researchers, independent economists and experts on various aspects of wellbeing.

The initial indicators chosen for each domain and capital in the Dashboard are likely to change in future versions. They represent both current thinking around aspects of wellbeing and the data available.

Current wellbeing domains

Civic engagement and governance

People's engagement in the governance of their country, how "good" New Zealand's governance is perceived to be and the procedural fairness of our society

Civic engagement is the ability to participate and contribute to a society, both at a community level and a broader society level. Civic engagement is about individuals recognising themselves as part of a society and taking some responsibility to improve the quality of life for others.

Civic engagement can take many forms, and a commonly used high-level measure is voter turnout in general elections. Voter turnout is only one form of political participation and does not include community-level participation. However, it provides a consistent and objective measure that is comparable internationally. Other forms of political participation can include writing or meeting with a Member of Parliament or taking part in public consultations.

When a government is trusted, political processes run more efficiently. Government institutions influence the wellbeing of a society by providing public services, such as security, infrastructure and income support (OECD, 2017). Having trust in the Government to act in the public's best interest enables effective policy-making, as it limits the need for lengthy negotiations when amending and setting policies. Trust in government institutions provides a subjective indicator of public trust in the New Zealand public service.

Trust can also be assessed by measuring levels of corruption. Corruption can undermine trust and confidence in the fair operation of the public service. The Corruptions Perception Index combines subjective and objective information to score countries based on their perceived corruption rates. It provides an internationally comparable and consistent indicator, enabling fluctuations over time to be assessed.

Indicators

- Voter turnout
- Trust in government institutions
- Perceived corruption

Cultural identity

Having a strong sense of identity, belonging and ability to be oneself and the existence value of cultural taonga

Culture refers to the customs, practices, languages and values that define social groups such as those based on nationality, ethnicity, regions or common interests. Cultural identity is the ability to express one's culture and identity and places intrinsic value on cultural taonga. Having a strong cultural identity is important for one's sense of self and overall wellbeing. For example, cultural identity influences the extent to which people feel a sense of belonging and therefore self-worth.⁷

The ability to express identity is a subjective indicator that looks at the ease with which people feel they can express their own identity in New Zealand society, without having to conform to others' cultural norms and values.

Intrinsic value may be attached to some aspects of culture; for example, the use of te reo Māori. Language is a central component of Māori culture and an important part of the broader cultural identity and heritage of New Zealand.

This domain is less comparable internationally than others, as there are no official sources of data using similar questions or broadly comparable content across countries. Additionally, while some countries collect information on indigenous languages, there has been little or no work across countries on developing common methodologies or indicators.

Indicators

- Ability to express identity
- Te reo Māori speakers

⁷ <http://socialreport.msd.govt.nz/cultural-identity.html>

Environment

The natural and physical environment and how it impacts people today (this is different from the natural capital stock, which is measured elsewhere)

Accessing, viewing and interacting with a healthy and safe environment are important to wellbeing. The health benefits of positive interactions with the natural environment are widely recognised, whilst negative interactions (for example, breathing polluted air) can lead to serious health problems. The quality of the outdoor environment and quality of our interactions with it are considered within this domain.

The natural environment is diverse and difficult to capture in a few indicators. Two broad subjective indicators provide information about environmental quality and accessibility.

Two specific objective measures that affect health and recreational opportunity are included. Air quality, specifically the presence of particulate matter (PM₁₀), is associated with heart and respiratory diseases (OECD, 2013). This air quality indicator is internationally recognised and available on a consistent basis. It does not capture concentrations of other pollutants or greenhouse gases in the atmosphere, but there is evidence that particulate matter poses a substantial risk to human health.

New Zealanders' perceptions of being able to access green spaces in their local area provides an indicator of environmental accessibility. For example, green space that is nearby and is easy and safe to travel to and interact with is one aspect of accessibility. This indicator only considers access to green space and not blue space (ie, rivers and lakes). It also does not capture actual interaction with the environment. Although someone may feel able to access a green space, in practice they still may not choose to visit.

Feedback strongly suggested that the ability to swim safely in rivers was of importance to New Zealanders' wellbeing. We have included the percentage of rivers that are considered swimmable as an indicator. This indicator does not provide information about accessibility, but it does provide a consistent and objective safety measure.

The quality of the environment is measured by New Zealanders' perception of environmental quality. This is not objective evidence about environmental conditions since perceptions are likely to be based on highly populated environments with a focus on surface-level quality indicators, such as presence of litter. That said, this indicator provides the diverse dimensions of public perceptions of environmental quality in a single consistent measure.

Indicators

- Air quality (PM₁₀)
- Access to the natural environment
- Water quality (swimmability)
- Perceived environmental quality

Health

Our mental and physical health

Living a long and healthy life is one of the most important aspects of wellbeing, and both physical and mental health are considered in this domain. A person's health can affect other domains of wellbeing; for example, the ability to learn, work and earn.

A person's health can be affected by many external factors such as the accessibility and quality of healthcare, social connections and environmental hazards. In this domain, only outcome-based measures that include the current health of a person or population are considered.

Two subjective measures are used to capture the broad dimensions of health. The indicators contain information about the proportion of New Zealanders who consider themselves to be in good health (ie, health status) and the proportion who have experienced high levels of psychological distress (ie, mental health).

Two objective indicators – healthy life expectancy and suicide rates – are also included. Healthy life expectancy is the number of years a person can expect to live in good health, therefore capturing quality of life as well as length. Suicide rates, measured by deaths as a result of intentional self-harm, provides an objective measure of mental health. It should be noted that there are many aspects of mental health and suicide rates only capture the extreme.

Health can be perceived and defined in many different ways. These measures of health are broad, and although they capture many important aspects of health, they do not capture all.

Indicators

- Healthy life expectancy
- Health status
- Mental health
- Suicide rate

Housing

The quality, suitability and affordability of the homes we live in

Good-quality housing provides shelter and protection from the elements, personal space, security and privacy. Indicators of the suitability, affordability and quality of housing in New Zealand indicate the contribution of housing to wellbeing.

Reported need for immediate and/or extensive repairs to homes provides an indication of housing quality and the ability of housing to meet basic needs. It is a self-reported measure and what constitutes immediate repairs can differ by person.

Although a house could meet the basic need of providing security and shelter, it may not be suitable for the occupants or the number of occupants, limiting the level of privacy and personal space provided. Crowding is defined as needing one or more additional bedrooms and provides a high-level assessment of household crowding in New Zealand. It does not provide information about the suitability of communal rooms such as the kitchen or living area.

The suitability and quality of housing is likely to be influenced by housing affordability. Affordable housing is an important factor in people’s wellbeing, particularly for low-income families where housing costs may represent a relatively high proportion of total income. The housing cost indicator assesses the proportion of households with housing costs that are greater than 30% of household income.

- Indicators**
- Household crowding
 - Housing cost
 - Housing quality

Income and consumption

People's disposable income from all sources, how much people spend and the material possessions they have

Income enables households to meet basic needs, pursue other goals that are valued and protect against economic and personal risk (OECD, 2013). Household disposable income provides an indicator of household access to resources and potential living standards. It is common practice to use income as a proxy for material wellbeing (Ministry of Social Development, 2017).

Disposable income is defined as average household income after taxes, transfers and before housing costs, adjusted for household size and composition. A household can either consume this income in the form of buying goods and services, or can save income for consumption in the future. Disposable income is not a measure of total household wealth (refer to Financial and physical capital below). Households can also have other resources available that enable consumption (such as credit lines or other liquid assets).

To complement an income-based indicator, household consumption (as measured by expenditure) provides information about the amount of goods and services households are able and willing to consume. If real household expenditure is increasing, it is a sign that material wellbeing is improving. However, this indicator does not provide information about how expenditure is funded (eg, if it is enabled by borrowing).

To capture a general sense of whether basic needs are being met in New Zealand, a subjective financial wellbeing indicator is included. This indicator provides information about how many adults in New Zealand do not feel they have enough money to meet everyday needs.

Indicators

- Disposable income
- Financial wellbeing
- Consumption

Jobs and earnings

The quality of people's jobs (including monetary compensation) and work environment, people's ease and inclusiveness of finding suitable employment and their job stability and freedom from unemployment

Jobs are important for developing a person's skills and income, but having a job can also improve other aspects of wellbeing, such as social connection through opportunity for social and professional relationships, confidence and a sense of purpose.

Employment and unemployment rates provide indicators of job availability. Unemployment includes those who have no job, are within working age, are available for work and have looked for work in the past four weeks or will start work in the next four weeks. Unemployment, in particular long-term unemployment, is associated with negative health impacts and stagnation of skills. Unemployment rates can also highlight the exclusion of population groups from the labour market, as well as perceived job insecurity of those in work.

The quality of a job is also important and there are many aspects of job quality, including job security, flexibility of hours, the quality of the work environment, health and safety and other non-wage aspects. Hourly earnings provide an indicator of financial return from paid employment independent of the number of hours worked, providing information about one dimension of job quality.

Indicators

- Unemployment rate
- Employment rate
- Hourly earnings

Knowledge and skills

People's knowledge and skills

Acquiring knowledge and developing skills are intrinsically valuable for humans, fulfilling desires to learn and respond to changing environments (OECD, 2013). Knowledge and skills encompass all practical and cognitive skills that can be useful in employment but that are also needed to navigate day-to-day requirements.

Educational attainment provides an objective, consistent and internationally comparable measure of skill. Achieving qualifications is strongly associated with higher earnings and greater employability, positively affecting material wellbeing. Attainment of upper secondary education is a widely used measure to compare internationally and provides a proxy for various types of further education, such as apprenticeships, as it measures how the education system has built capability for further study. This has been complemented by attainment of a Bachelor's degree or higher because upper secondary education attainment levels are high and relatively stable in New Zealand.

Educational attainment only captures the skills required to obtain the qualification. Skills acquired without qualification are also important, although more difficult to measure. Average Programme for International Student Assessment (PISA) scores are used to provide an indication of cognitive skills at age 15, rather than the level of qualification attained. The PISA scores are in relation to reading, writing and science. Practical skills and social skills are still not captured.

Currently, there are no available data to capture these skills consistently within the LSF Dashboard.

Indicators

- Educational attainment (tertiary)
- Educational attainment (upper secondary)
- Cognitive skills at age 15

Safety

People's safety and security (both real and perceived) and their freedom from risk of harm and lack of fear

Crime can take various forms. It can affect the victim's mental and physical health and, in the extreme, lead to loss of life (OECD, 2013). Crime can also affect non-victims through feelings of worry, anxiety and generally feeling unsafe.

A subjective measure asking how safe adults feel walking alone in their neighbourhood after dark provides an indicator that captures the various forms of crime and the impact crime levels can have on wider community and society wellbeing. Feeling unsafe is not always a result of increasing crime rates – feelings can be amplified by media and other external influences.

Two objective measures of crime are included to indicate actual crime rates. A commonly used international indicator is the intentional homicide rate. The intentional homicide rate only measures the most serious of crimes. However, this crime leads to the ultimate loss of wellbeing – loss of life. It also provides a measure that is consistent and internationally comparable.

In feedback received, domestic violence was highlighted as an important type of crime to measure for New Zealand. The proportion of adults who are a victim of interpersonal violence by a family member is included to capture domestic violence. In the future, annual estimates will be available through the [New Zealand Crime and Victims Survey](#).

Indicators

- Intentional homicide rate
- Domestic violence
- Workplace accident rate
- Feeling safe

Social connection

Having positive social contacts and a support network

Close personal relationships, social contact and support networks are important for many aspects of wellbeing. Those who have strong support networks generally have better health, live longer and are more likely to be employed (OECD, 2013). Contact and relationships provide emotional and material support as well as resilience at individual, family and community levels.

Social network support and relationships are difficult to measure because types of support can vary and what constitutes a satisfactory level of support is subjective. Social network support is measured by the proportion of adults who had face-to-face contact with friends (who do not live with them) at least once a week. This indicator provides a general sense of the amount of contact New Zealanders have with friends. However, it does not capture family support or social support that takes place without face-to-face contact (eg, through voice and video calls).

Within Māori culture, social connection can be felt through connection to ancestral marae (meeting grounds). The indicator includes the proportion of Māori adults who feel strongly or very strongly connected with their ancestral marae.

The extent of loneliness in New Zealand can be thought of as an outcome-based measure, in the sense that a person who has strong social support is less likely to feel lonely. This is not always the case. For example, poor mental health can impact feelings of loneliness despite strong network support. Generally, however, wider social connection is captured with this indicator.

Discrimination affects the ability of New Zealanders to make social connections; therefore, it is included as an indication of barriers faced when making social connections.

Indicators

- Social network support
- Loneliness
- Discrimination
- Māori connection to marae

Subjective wellbeing

Overall life satisfaction and sense of meaning and self

Subjective wellbeing includes people’s overall judgement of their level of wellbeing and complements the picture provided by the other domains. This domain assesses more than current mood and emotion and provides an assessment of overall life satisfaction.

It includes two subjective measures – general life satisfaction and a sense of purpose in one’s life. In both cases, respondents are asked to score themselves on a scale of 0–10, in terms of how satisfied they are with their life and how worthwhile they feel their life to be, respectively. (OECD, 2013) notes that an ideal indicator would make it possible to identify how external circumstances affect life evaluations (eg, cultural differences). Neither of these indicators provides any assessment about why respondents have scored this way.

- Indicators**
- General life satisfaction
 - Sense of purpose in one’s life

Time use

The quality and quantity of people's leisure and recreation time (ie, people's free time where they are not working or doing chores)

The ability to maintain a work–life balance that enables time for leisurely activities is important for the wellbeing of individuals and households. In particular, children's wellbeing is strongly affected by the caregivers' ability to nurture them (OECD, 2013). Work in this instance includes both paid and unpaid, where unpaid work includes household work, childcare and purchasing goods and services.

Average time spent engaging in paid and unpaid work provides an indication of work–life balance. Time spent undertaking leisure and personal care activities (personal care includes sleeping, eating, personal hygiene and grooming) demonstrates the ability of individuals to take time for self-care and pursue other activities they value.

Indicators of time use can be difficult to interpret as what constitutes a necessary or unpleasant task is highly subjective and is influenced by factors such as culture and social preferences. Indicators also do not provide information about enjoyment of activities. For example, an individual may work in full-time employment out of necessity or because they enjoy their work.

Indicators

- Leisure and personal care
- Paid work
- Unpaid work

Future wellbeing capitals

Natural capital

All aspects of the natural environment needed to support life and human activity

Natural capital refers to all aspects of the natural environment needed to support life and human activity. It includes assets such as minerals, energy resources, soil, water and trees. It influences the services that ecosystems provide that benefit people, such as provision of food and materials, clean air and nice views. Our wellbeing depends on the condition and extent of our natural capital and the capacity of that capital to generate services.

Different types of natural capital have different characteristic drivers. For example, some types of natural capital may be renewable (eg, forests) while others are finite (eg, oil and gas); some are localised (eg, the unique landscapes of Fiordland National Park) while others are global in scale (eg, an atmosphere that enables life). Likewise, different types of capital provide different types of services. We benefit⁸ from services in three broad categories: provisioning (wild food, timber); regulating (storm surge protection, flood mitigation, carbon absorption); and cultural (recreation, sense of identity).

Five objective measures were chosen to provide information about ecosystem health and waste management. Ecosystem health has been defined using ecosystem service-based indicators. Natural capital measurement is a developing area and is generally more complex and undefined than the other capitals. As a result, a more rigorous process for initial indicator selection was completed where international frameworks⁹ were considered.

Indicators were initially prioritised based on their relationship to future wellbeing, investment required to develop the indicator, policy relevance, sensitivity to change and current investment. Further prioritisation was based on how informative the indicator is in telling a wellbeing story, how often it could be updated and data availability.

Indicators of ecosystem health included are sustainable food production, drinking water quality, biodiversity, climate regulation and natural hazard regulation.

Sustainable food production requires fertile and healthy soil. Therefore, soil quality is used to indicate the sustainability of food production. Good-quality soil is not the only input that is required for sustainable food production. However, generally speaking, decreasing soil quality can indicate unsustainable management practices, such as over-processing of the land or overuse of pesticides.

Drinking water quality is captured by the proportion of the population served with drinking water that meets standards. This indicator captures the service provided in delivering safe drinking water and it indicates water quality at water sources after treatment.

⁸ Benefits can be both positive and negative.

⁹ International framework included: [United Nations System of Economic-Environmental Accounting Experimental Ecosystem Accounting](#) (SEEA-EEA), [the Mapping and Assessment of Ecosystem Services](#) (MAES) and the [Common International Classification of Ecosystem Services](#) (CICES).

The ability of the ecosystem to support biodiversity reflects its condition. An indicator used to measure biodiversity is the number of threatened species in New Zealand. Species can be threatened for numerous reasons, but habitat loss and introduction of predators or invasive species are a common cause. The indicator provides the number of threatened species in New Zealand likely to benefit from ecosystem management.

Natural hazard regulation is the service natural capital provides in protecting against natural hazards, such as regulating water flow (flooding) and removing pollution. There are many services provided by natural capital to protect us from hazards. Owing to data limitations, only protection from storm surges and flooding is captured. To measure this, the change in the extent of land that mitigates against storm surges and floods (wetland) is included. A decrease in wetland area results in reduced capacity for the natural environment to protect against storm surges and flooding.

Further regulation provided by natural capital is provision of breathable air through carbon sequestration, the process of trees and vegetation removing carbon from the air and releasing oxygen. The amount of carbon stored in forest and soil biomass indicates the health and size of New Zealand’s forest and soil. Healthy trees and plants sequester more carbon from the atmosphere resulting in more oxygen, whereas damaged, unhealthy vegetation and soil release carbon into the atmosphere. If carbon stock is falling, this is a sign that the extent or condition of forest and soils in New Zealand is degrading.

Waste management provides an indicator of future risk to New Zealand’s natural capital. Higher waste rates (kilograms of waste produced per person) signal less efficient use of resources and a possible threat to the environment when the waste is disposed.

- Indicators**
- Natural hazard regulation
 - Climate regulation
 - Sustainable food production
 - Drinking water
 - Biodiversity and genetic resources
 - Waste management

Financial and physical capital

The country's physical, intangible and financial assets that have a direct role in supporting incomes and material living conditions

The country's financial, intangible and physical assets have a direct role in supporting incomes and material living conditions. Tangible fixed assets include factories, machines and equipment. Intangible fixed assets include knowledge-based capital created by research and development, software and databases, mineral exploration and evaluation. Financial assets include cash, both in New Zealand dollars and foreign currency, and stocks and shares.

Financial and physical capital can be accumulated by saving some income. Households own most of the net wealth of the economy and financial assets of households provide resilience to unexpected life events as well as income for retirement.

Changes in productivity are also considered within financial and physical capital. For example, growth in multifactor productivity (MFP) reflects improvements in the ways in which both labour and fixed assets are combined to generate goods and services.

The Government's fixed assets in the form of schools, roads and hospitals help deliver public services and support the private capital stock by generating goods and services. The Government's overall net worth provides a buffer to economic cycles and shocks such as natural disasters.

Financial and physical capital is linked to the rest of the world and is increased through global economic institutions, trade agreements and other connections that enable New Zealand to earn more from exporting and investment. The net international investment position indicates the balance of New Zealand claims over other countries' capital stocks and other countries' claims on New Zealand capital stocks.

Indicators

- Total net fixed assets
- Net intangible fixed assets
- Household net worth
- Multifactor productivity (MFP) growth
- Net international investment position
- Total Crown net worth

Human capital

People’s knowledge, physical and mental health – human capital enables people to fully participate in work, study, recreation and society

Human capital is an individual’s skills, knowledge and mental and physical health that enable them to participate fully in work, study, recreation and society more broadly.

People build their knowledge and skills through training (formally and informally) and their health through healthy habits and the use of health services. There can be structural barriers, or other circumstances, that may prevent people from acquiring or using as much human capital as they otherwise might.

New Zealand’s connection to other countries can build human capital through flow of ideas, expertise and people. When people migrate to New Zealand, they increase the total stock of human capital, and when people leave, the total stock of human capital decreases.

As with the current wellbeing domain of knowledge and skills, educational attainment provides a proxy measure of the average skill level of the adult population in New Zealand. Both upper secondary and tertiary (Bachelor degree or higher) educational attainment are included as indicators. Attainment of upper secondary education is a widely used measure to compare internationally and provides a proxy for various types of further education, such as apprenticeships, as it measures how the education system has built capability for further study. Average PISA scores of 15-year-olds provide an indication of future cognitive skills embodied in young people who have not yet entered the labour force. Expected educational attainment further incorporates a future-looking indicator and provides information about the number of years in education that a child aged five can expect to undertake.

Life expectancy at birth estimates the average time a person has to accumulate and apply these skills. A person’s health provides an indication of one’s ability to obtain human capital and use skills. Non-communicable diseases, also known as chronic diseases, are often good predictors of future health. Non-communicable diseases, particularly common types such as cardiovascular diseases, cancers, respiratory diseases and diabetes, tend to be of long duration and can cause a range of ongoing complications that can affect one’s physical and mental health.

Indicators

- Educational attainment (tertiary)
- Educational attainment (upper secondary)
- Expected educational attainment
- Life expectancy
- Cognitive skills at 15
- Non-communicable diseases

Social capital

The social connections, attitudes, norms and formal rules or institutions that contribute to societal wellbeing by promoting the resolution of collective action problems among people and groups in society

Social capital includes the social connections, attitudes, norms and formal rules or institutions that contribute to societal wellbeing by promoting the resolution of collective action problems among people and groups in society.

The different elements of social capital interact and can help reinforce each other. Pro-social norms encourage social connections. Institutions, both general (eg, the court system) and more specific (eg, the set of rules concerned with protecting privacy), play an important role in supporting the overarching social norms of fairness, tolerance of diversity and respectfulness.

Government policies influence the growth and decline of social capital through their care and maintenance of New Zealand's formal institutions, and their effects on a range of wellbeing outcomes.

Social capital directly relates to social connection and civic engagement and governance, in the current domains of wellbeing. Relevant indicators in these domains are included to also provide an intergenerational perspective.

Indicators

- Trust held in others
- Perceived corruption
- Discrimination
- Trust in government institutions
- Sense of belonging



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Appendix 2 – Indicator definitions and data

Indicator definitions and data sources used in the LSF Dashboard

Our people

Current multidimensional wellbeing indicator sources and definitions of low and high wellbeing

All data are sourced from the New Zealand General Social Survey (GSS), which is updated every two years, although only years 2014 and 2016 are used in the Our people analysis. All units in the Dashboard are given as a percentage of the population.

Three states of wellbeing have been applied; ‘medium’, ‘low’, and ‘high’. These three states of wellbeing are based on an assumption that a large proportion of the population are doing quite well on each domain, with a minority experiencing some level of difficulty, and a minority doing especially well. While this is to some extent an arbitrary decision, it does reflect the way people in NZ generally report satisfaction with their life. For example, in the 2012 GSS, 54 percent of people reported being satisfied with their life overall, while 33 percent were very satisfied, and the remaining 13 percent reported some level of dissatisfaction.¹⁰

In general, ‘low’ wellbeing reflects a respondent reporting at least one (or sometimes more than one) aspect of their life that is not going well in a particular domain. ‘High’ wellbeing, on the other hand, reflects a person reporting positively on every aspect of wellbeing measured for that domain.

For more information please refer to the [Our People – Multidimensional Wellbeing in New Zealand](#) analytical paper.

Table A2.1: Our people indicator definitions

Domain	Indicator	Definition of high and low wellbeing
Civic and governance	Trust in people	Low: Trust in most people in New Zealand 0–4 out of 10, where zero is “not at all” and 10 is “completely” High: Trust in most people in New Zealand 7–10 out of 10
	Trust in institutions ¹¹	Low: Low trust in more than one out of five institutions (0–4 out of 10), where zero is “not at all” and 10 is “completely” High: High trust in at least four out of five institutions (7–10 out of 10)
Cultural identity	Able to be yourself in New Zealand	Low: Very hard, hard, or sometimes easy, sometimes hard High: Very easy

¹⁰ This group also includes those who said they were neither satisfied nor dissatisfied with their life.

¹¹ Institutions included are the courts, education and health systems, parliament and police.

Domain	Indicator	Definition of high and low wellbeing
Health	Mental health	Low: <36 on Mental Health Index High: >54 on Mental Health Index Note: Mental Health Index is from zero (worst) to 100 (best)
	Physical health	Low: <36 on Physical Health Index High: >54 on Physical Health Index Note: Physical Health Index is from zero (worst) to 100 (best)
Housing	Condition	Low: Immediate repairs or maintenance needed High: Only minor repairs or maintenance needed
	Cold problem	Low: House always too cold in winter High: House never too cold in winter
	Mould problem	Low: Major dampness or mould problem High: No dampness or mould problem
	Crowding	Low: Bedrooms needed High: No bedrooms needed
Income and consumption	Material wellbeing	Low: Material Wellbeing Index 0–7 High: Material Wellbeing Index 18–20 Note: Material Wellbeing Index is from zero (lowest) to 20 (highest)
	Income sufficiency	Low: Not enough money to meet everyday needs High: Enough or more than enough money to meet everyday needs
Knowledge and skills	Knowledge and skills – qualifications	Low: No qualification High: Bachelor’s degree or higher
Safety and security	Feeling unsafe	Low: Feels unsafe at home alone at night, walking home after dark, using public transport or doing online transactions High: Feels safe at home alone at night, walking home after dark, using public transport and doing online transactions
	Victim of crime	Low: Victim of crime in past year High: Not a victim of crime in past year
	Neighbourhood crime	Low: Problem with vandalism, burglaries, assaults, harassment or drugs in neighbourhood High: No problem with vandalism, burglaries, assaults, harassment or drugs in neighbourhood
Social connections	Loneliness	Low: Lonely most or all of the time High: Never lonely
	Friend and family contact	Low: Not enough/too much contact with friends or family High: Right amount of contact with friends and family
	Discrimination	Low: Discriminated against in past year High: Not discriminated against in past year.
Subjective wellbeing	Life satisfaction	Low: General life satisfaction 0–6 out of 10, where 0 is not at all satisfied and 10 is completely satisfied High: General life satisfaction 9–10 out of 10

Our country

Current wellbeing indicators representing current quality of life and material condition indicators

Table A2.2: Our country domain indicators

Note: *P* denotes where the indicator was recommended in Smith's *Proposal for a Living Standards Dashboard* (Smith, 2018). Indicators in this table may differ from those in the proposal due to data availability and further discussion. *F* indicates where indicators were chosen based on feedback received (see Appendix 3).

Domain	Indicator	Statistic	Data source
Civic engagement and governance	Voter turnout	P Percentage of enrolled electors who voted in the general election	Electoral Commission data reported by Stats NZ
		International statistic: Percentage of the population registered to vote who cast a ballot in a national election	<i>How's Life?</i> OECD
	Trust in government institutions	F Percentage of adults who, overall, trust the public service	Kiwis Count Survey, State Services Commission
	Perceived corruption	F Corruption perceptions index score on a scale of 0 (highly corrupt) to 100 (very clean)	Corruption perceptions index, Transparency International
Cultural identity	Te reo Māori speakers	P Percentage of people who can converse about a lot of everyday things in te reo Māori	Census, Stats NZ
	Ability to express identity	P Percentage of adults who said it was easy or very easy to express their identity in New Zealand	New Zealand General Social Survey, Stats NZ
Environment	Air quality (PM ₁₀)	P National annual average PM ₁₀ concentration	Stats NZ
		International statistic: Population-weighted exposure to PM _{2.5} concentrations, micrograms per cubic metre, 3-year moving average	<i>How's Life?</i> OECD
	Access to the natural environment	F Percentage of adults who said they could easily get to all or most of the green spaces in their local area	New Zealand General Social Survey, Stats NZ
	Water quality (swimmability)	F Percentage of tested river sites that are safe to swim in under normal conditions	Ministry for the Environment
	Perceived environmental quality	F Perceived state of New Zealand's environment, average score on a 1–5 scale, where 1 is very good and 5 is very bad	Public perception of New Zealand's environment, Lincoln University survey

Domain	Indicator	Statistic	Data source
Health	Healthy life expectancy	F Number of years that a person under 1-year-old can expect to live in good health, taking into account mortality and disability	Global Burden of Disease, Institute for Health Metrics and Evaluation
	Health status	P Percentage of adults reporting good or very good health	New Zealand Health Survey, Ministry of Health
		International statistic: Percentage of adults reporting good or very good health	<i>How's Life?</i> OECD
	Mental health	P Percentage of adults with high levels of psychological distress	New Zealand Health Survey, Ministry of Health
	Suicide rate	F Deaths caused by intentional self-harm, age-standardised rate per 100,000 population	Mortality Collection, Ministry of Health
International statistic: Deaths caused by intentional self-harm, age-standardised rate per 100,000 people		OECD Health data, sourced from Stats NZ	
Housing	Household crowding	P Percentage of people living in a crowded house	Census, Stats NZ
		International statistic: Average number of rooms per person	<i>How's Life?</i> OECD
	Housing cost	P Proportion of households with housing cost greater than 30% of income	Household Incomes in New Zealand, Ministry of Social Development
		International statistic: Expenditure on housing as a percent of household gross adjusted disposable income	<i>How's Life?</i> OECD
Housing quality	P Percentage of adults reporting a need for immediate repairs and maintenance on the property they live in	New Zealand General Social Survey, Stats NZ	
Income and consumption	Disposable income	P Median real equivalised household incomes after taxes and transfers, and before housing costs	Household Incomes of New Zealand, Ministry of Social Development
		International statistic: Household net adjusted disposable income	<i>How's Life?</i> OECD
	Financial wellbeing	F Proportion of the population who report not enough money to meet everyday needs	New Zealand General Social Survey, Stats NZ
	Consumption	F Average real weekly household expenditure	Household Economic Survey, Stats NZ

Domain	Indicator		Statistic	Data source
Jobs and earnings	Unemployment rate	P	Percentage of labour force who are unemployed	Household Labour Force Survey, Stats NZ
			International statistic: Percentage of the labour force aged 15–64 who are unemployed	Employment database, OECD
	Employment rate	P	Percentage of adults (aged 15+) who are employed	Household Labour Force Survey, Stats NZ
			International statistic: Percentage of adults aged 15–64 who are employed	Employment database, OECD
	Hourly earnings	P	Median hourly earnings for wage and salary employees (aged 15+)	Household Labour Force Survey, Stats NZ
	Knowledge and skills	Educational attainment (tertiary)	P	Percentage of adults aged between 25 and 64 with a Bachelor's degree or higher qualification
Educational attainment (upper secondary)		P	Percentage of adults aged between 25 and 64 with at least an upper secondary education (equivalent to NCEA Level 2)	Treasury analysis of the Household Labour Force Survey, Stats NZ
			International indicator: Percentage of adults aged between 25 and 64 with at least an upper secondary education	<i>How's Life?</i> OECD
Cognitive skills at age 15		P	Programme for International Student Assessment (PISA) mean score for reading, mathematics and science	PISA, Ministry of Education
			International statistic: Programme for International Student Assessment (PISA) mean score for reading, mathematics and science	PISA, OECD
Safety		Intentional homicide rate	P	Deaths caused by assault, age-standardised rate per 100,000 people
			International statistic: Deaths caused by assault, age-standardised rate per 100,000 people	<i>How's Life?</i> OECD
	Domestic violence	F	Percentage of adults who were victims of family violence	Crime and Safety Survey, Ministry of Justice
	Workplace accident rate	P	Number of work-related injury claims per 1,000 full-time equivalent employees (FTEs)	Accident Compensation Corporation (ACC) claims data reported by Stats NZ
	Feeling safe	P	Percentage of adults who feel safe when walking alone in their neighbourhood after dark	New Zealand General Social Survey, Stats NZ

Domain	Indicator		Statistic	Data source
			International statistic: Percentage of adults who feel safe when walking alone at night in the city or area where they live	<i>How's Life?</i> OECD
Social connections	Social network support	P	Percentage of adults who had face-to-face contact with friends who do not live with them at least once a week	New Zealand General Social Survey, Stats NZ
			International statistic: Percentage of adults who report that they have friends or relatives they can count on in times of trouble	<i>How's life?</i> OECD
	Loneliness	P	Percentage of adults who felt lonely at least some of the time in the past four weeks	New Zealand General Social Survey, Stats NZ
	Discrimination	F	Percentage of adults who experienced discrimination against them in the past 12 months in New Zealand	New Zealand General Social Survey, Stats NZ
	Māori connection to marae	F	Percentage of Māori adults who feel strongly or very strongly connected with their ancestral marae	Te Kupenga 2013, Stats NZ
Subjective wellbeing	General life satisfaction	P	Average adult score for life satisfaction, on a scale from 0 (not at all satisfied) to 10 (completely satisfied)	New Zealand General Social Survey, Stats NZ
			International statistic: Average adult score for life satisfaction, on a scale from 0 (not at all satisfied) to 10 (completely satisfied)	<i>How's Life?</i> OECD
	Sense of purpose in one's life	F	Average adult score for feeling that life is worthwhile, on a scale from 0 (not at all worthwhile) to 10 (completely worthwhile)	New Zealand General Social Survey, Stats NZ
Time use	Leisure and personal care	P	Average hours per day devoted to free time and personal care (eg, sleeping, eating, personal hygiene and grooming by people aged 12 and over)	Time Use Survey, Stats NZ
			International statistic: Average hours per day devoted to leisure and personal care by people in full-time employment	<i>How's Life?</i> OECD
	Paid work	F	Average actual weekly hours worked by employed adults	Household Labour Force Survey, Stats NZ
			International statistic: Average usual number of hours worked each week on the main job by employed adults	Labour Force statistics, OECD
	Unpaid work	F	Average hours per day spent doing unpaid work (for own household, other household or an organisation)	Time Use Survey, Stats NZ

Our future

Indicators of sustainable, intergenerational wellbeing

Table A2.3: Our future capital indicators

Note: *P* denotes where the indicator was recommended in Smith's (2018) *Proposal for a Living Standards Dashboard*. Indicators in this table may differ from those in the proposal due to data availability and further discussion. *F* indicates where indicators were chosen based on feedback received (see Appendix 3).

Capital	Indicator	Statistic	Data source
Natural capital	Natural hazard regulation	F Wetlands as a percentage of land cover	Landcare Research
	Climate regulation	Carbon stored in forest and soil biomass	New Zealand Greenhouse Gas Inventory 1990 to 2016
	Sustainable food production	F Percentage of tested sites within targets for at least six of the seven types of soil test	Ministry for the Environment
	Drinking water	F Proportion of the population served with drinking water that met all standards	Annual Report on Drinking-water Quality, Ministry of Health
	Biodiversity and genetic resources	F Number of threatened species likely to benefit from ecosystem management in at least one site	Department of Conservation
	Waste management	F Kilograms of waste, per capita	Review of the effectiveness of the waste disposal levy, Ministry for the Environment
Financial and physical capital	Total net fixed assets	P Net fixed assets, per capita	National accounts, Stats NZ
	Net intangible fixed assets	F Net intangible fixed assets, per capita	National accounts, Stats NZ
	Household net worth	P Average household net worth	Annual balance sheet, Stats NZ
		International statistic: Average household net worth	<i>How's Life?</i> OECD
	Multifactor productivity (MFP) growth	F Annual percentage growth in multifactor productivity (MFP), (measured sector)	Stats NZ
	Net international investment position	F Net international investment position, as a percentage of GDP	Annual balance sheet, Stats NZ
	Total Crown net worth	F Total Crown net worth, as a percentage of GDP	Financial Statements of the Government, the Treasury

Capital	Indicator	Statistic	Data source
Human capital	Educational attainment (tertiary)	P Percentage of adults aged between 25 and 64 with a Bachelor's degree or higher qualification	Treasury analysis of the Household Labour Force Survey, Stats NZ
	Educational attainment (upper secondary)	P Percentage of adults aged between 25 and 64 with at least an upper secondary education (equivalent to NCEA Level 2)	Treasury analysis of the Household Labour Force Survey, Stats NZ
		International statistic: Percentage of adults aged between 25 and 64 with at least an upper secondary education	<i>How's Life?</i> OECD
	Expected educational attainment	P Average number of years in education that a child aged 5 can expect to undertake (before age 39)	<i>How's Life?</i> OECD
	Non-communicable diseases	F Health loss caused by non-communicable diseases, measured in disability-adjusted life years (DALYs) per 100,000 people	Global Burden of Disease, Institute for Health Metrics and Evaluation
	Cognitive skills at age 15	F Programme for International Student Assessment (PISA) mean score for reading, mathematics and science	PISA, Ministry of Education
		International statistic: Programme for International Student Assessment (PISA) mean score for reading, mathematics and science	PISA, OECD
Life expectancy	F Life expectancy at birth	Sub-national period life tables, Stats NZ	
	International statistic: Life expectancy at birth	<i>How's Life?</i> OECD	

Capital	Indicator	Statistic	Data source
Social capital	Trust held in others	P Average score for trust in most people in New Zealand on a 0–10 scale, where 0 is not trusted at all and 10 is trusted completely	New Zealand General Social Survey, Stats NZ
	Perceived corruption	P Corruption perception index score on a scale of 0 (highly corrupt) to 100 (very clean)	Corruption perceptions index, Transparency International
	Discrimination	F Percentage of adults who experienced discrimination against them in the past 12 months in New Zealand	New Zealand General Social Survey, Stats NZ
	Trust in government institutions	P Percentage of adults aged 18 and over who, overall, trust the public service	Kiwis Count Survey, State Services Commission
	Sense of belonging	F Average adult score for sense of belonging to New Zealand, on a scale from 0 (no sense of belonging) to 10 (very strong sense of belonging)	New Zealand General Social Survey, Stats NZ



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Appendix 3 – Summary of feedback
on the Treasury's LSF and its Dashboard

Feedback on the Treasury's LSF and its Dashboard

The development of the LSF and its Dashboard has been informed by feedback from a range of channels including surveys and submissions, discussion papers and a Challenge Group set up by the Treasury.

This appendix summarises the main themes of that feedback and outlines how feedback was incorporated into this version of the LSF and its Dashboard, or will be incorporated into future versions.

The feedback includes approximately 500 survey responses and 60 submissions on the *Proposal for a Living Standards Dashboard* (Smith, 2018), received from a range of organisations and individuals. Feedback was also received during and following the publication of discussion papers published on [the Treasury website](#). The discussion papers explored the four capitals, the relationship between the LSF and the United Nations Sustainable Development Goals; Te Ao Māori, Pasifika and Asian perspectives of wellbeing and resilience and future wellbeing.

Finally, a Challenge was established by the Treasury to critique the LSF and its dashboard Group, it consisted of academic researchers, independent economists and experts on various aspects of wellbeing.

The feedback is grouped by topic and organised, in the order of:

- cross-cutting themes
- feedback relating to proposed current wellbeing domains and indicators
- feedback relating to proposed future wellbeing capitals and indicators

General cross-cutting themes

The Treasury also received a range of general feedback on the LSF and the LSF Dashboard, particularly from the submissions and the Challenge Group.

Support for the LSF and its Dashboard

The majority of feedback expressed support for the LSF and its Dashboard.

Te Ao Māori and other worldviews

A large amount of feedback expressed concern that the LSF proposal lacked Te Ao Māori perspectives on wellbeing and urged the incorporation of these perspectives into the LSF. The Treasury has identified this as an area for further work and we plan to work with Te Ao Māori experts, within and external to government, to ensure this role is undertaken with integrity.

Feedback, particularly from the Challenge Group, expressed concerns that a number of elements pertinent to Pasifika and Asian New Zealanders were not well articulated within the

LSF. The Treasury largely agrees with this feedback. Within the Dashboard, where possible, data have been disaggregated to show wellbeing outcomes for these groups.

Child wellbeing

A significant amount of feedback expressed concerns that the proposed LSF Dashboard does not adequately represent children's wellbeing. As discussed in Section 4, the Treasury plans to work with relevant New Zealand agencies to strengthen the representation of children's wellbeing in future versions of the LSF Dashboard.

Disaggregation of data

A large amount of feedback highlighted the importance of disaggregating the data, particularly by gender, regions and income levels. Where possible, the data in the LSF Dashboard is disaggregated by sex¹², region and income.

Feedback relating to proposed current wellbeing domains and indicators

Feedback on the domains varied and covered an array of topics. An inequality domain was suggested in feedback. However this was not included because many domains can incorporate aspects of inequality. Where possible, income distribution has been provided within indicators as well as breakdowns by ethnicity, age, sex, region and family type.

Civic engagement

Indicators of volunteering, trust and engagement in the political system and community engagement were emphasised. The LSF Dashboard includes measures of trust and engagement in the political system. However, a measure of volunteering was not included owing to current issues with the definition of volunteering and uncertainty about interpretation of the information in terms of wellbeing. Community engagement was also not included owing to data limitations.

Cultural identity

Indicators relating to cultural identity, in particular to express and connect with one's culture, were suggested. An indicator of the ability to express identity has been included as a measure within the cultural identity domain. Owing to data limitations, connection with one's cultural identity has not been included.

Education/Knowledge and skills

Inclusion of a domain related to education with appropriate indicators was supported. The knowledge and skills domain incorporates education and all three indicators measure different aspects of education.

Personal knowledge and skill indicators were also suggested. The indicator cognitive skills at age 15 measures skills and knowledge related to reading, mathematics and science. However, the Treasury intends to include a measure of non-literacy and numeracy-based skills and knowledge in future versions of the LSF Dashboard.

¹² The use of the word "sex" is consistent with the term used by Stats NZ in the General Social Survey.

Environment

There was support for an environmental domain which had a particular focus on connection with the environment. A quantitative indicator of water quality and an indicator of biodiversity were also suggested.

An environment domain is included, with indicators relating to access to the natural environment and swimmability of rivers, which are two aspects of environmental connection. Swimmability also provides a quantitative indicator of water quality. Further water quality and biodiversity indicators are included in natural capital.

Health

Inclusion of a health domain was supported, with emphasis placed on the need to include mental health adequately. Two indicators in particular were proposed – suicide rates and non-communicable diseases.

Two out of the four indicators in the health domain relate to mental health, including a suicide rate indicator. An indicator for non-communicable diseases (measured in DALYs, see appendix 2) is included in human capital.

Accessibility to healthcare was also proposed as an indicator for the health domain. This is an input-based measure, and generally only outcome-based measures that include current health of a person or population are considered in the Dashboard.

Housing

The quality and affordability of houses were emphasised in feedback. In particular, “square metre per person” was given as an alternative indicator to the suggested “number of rooms per person”. Household crowding is instead defined as appearing to require one or more additional bedrooms, based on the Canadian National Occupancy Standard (CNOS). The full definition of the CNOS is available through [Stats NZ](#).

Homelessness and accessibility to housing were also suggested as indicators. Generally, outcome-based measures are used in the Dashboard, therefore accessibility to housing is not considered. A homelessness indicator is intended to be included in future versions of the LSF Dashboard. However, at this point, issues around the definition of homelessness and data still need to be addressed.

Jobs and earnings

There was a desire to include measures of employment, unemployment, unpaid work, underemployment and job security. Underemployment and job security are not included in this version of the Dashboard owing to data limitations and difficulties in definition.

Employment, unemployment and unpaid work are measured in the LSF Dashboard; unpaid work is included in the time use domain.

Safety

Measures of safety and violence were suggested. Two measures of violence, namely homicide rates and domestic violence, have been included.

Feedback relating to proposed future wellbeing capitals and indicators

Feedback on the capitals was minimal. However, many expressed confusion about the difference between the current wellbeing domains and the capitals. Four capitals are included within the LSF. There were suggestions in the feedback that culture should be included as a capital in itself. Culture is cross-cutting with respect to all the domains and capitals. Cultural identity is included separately within the domains of current wellbeing. Among the four capitals, social capital and human capital include a number of aspects of culture as it relates to the way in which culture is expressed.

Natural capital

Feedback on natural capital and the proposed indicators varied substantially. However, much feedback suggested including quantitative water quality measures. Two quantitative water quality measures have been included – drinking water and water quality (swimmability).

Human capital

Feedback from the surveys strongly recommended including measures of inequality, particularly around gender and income in human capital. Inequality indicators were not included because the distribution breakdown on the LSF Dashboard will be able to depict sex¹³ and income inequality.

Feedback from many sources suggested including suicide rates as a mental health indicator and an indicator of non-communicable diseases. There was also a strong desire to include an indicator of participation in the workforce. Suicide rates, non-communicable diseases (measured in DALYs) and employment rates have all been included in the LSF Dashboard.

Financial and physical capital

There was minimal feedback on financial and physical capital and few proposed indicators. However, of the feedback provided, net fixed assets and a measure of income was suggested. Net fixed assets and income measure are included in the capital and in the income and consumption domain.

Social capital

Feedback also suggested including generalised trust and safety. Trust in others and trust in government institutions have been included in the LSF Dashboard, as well as a measure of safety.

¹³ The use of the word “sex” is consistent with the term used by Stats NZ in the General Social Survey.